



ACR 2017 SAN DIEGO

Association for Consumer Research

Volume XLV

ADVANCES IN CONSUMER
RESEARCH

Editors

Ayelet Gneezy

Vladas Griskevicius

Patti Williams



Association for Consumer Research

**Volume XLV
PROCEEDINGS**

Editors

Ayelet Gneezy

Vladas Griskevicius

Patti Williams

Advances in Consumer Research, Volume 45

Ayelet Gneezy, Vidas Griskevicius, Patti Williams

2017 Copyright © ASSOCIATION FOR CONSUMER RESEARCH

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the publisher.

International Standard Book Number (ISBN): 978-0-915552-77-1

Association for Consumer Research
Labovitz School of Business & Economics
University of Minnesota Duluth
11 East Superior Street, Suite 210
Duluth, MN 55802

www.acrwebsite.org

Preface

Ayelet Gneezy
University of California San Diego, Rady School of Management

Vlad Griskevicius
University of Minnesota, Carlson School of Management

Patti Williams
University of Pennsylvania, Wharton School

The 48th Annual Conference of the Association for Consumer Research (ACR) was held at the Manchester Grand Hyatt Hotel in San Diego, California, October 26-29, 2017. This volume reports the presentations made in special sessions, competitive paper sessions, working paper sessions, forums and videography track.

The conference attracted over 1300 participants and an all-time record of 700 acceptances from 1132: 104 special session (62.5% accepted), 557 competitive papers (46.3% accepted), 444 working papers (80% accepted), 9 forums (100% accepted) and 13 films.

We thank our generous sponsors: The Wharton Marketing Department, The Carlson School of Management at the University of Minnesota, The Rady School of Management at the University of California San Diego, Baruch College, Schulich School of Business at York University, Journal of Consumer Research, Journal of Consumer Psychology, Journal of the Association for Consumer Research, Qualtrics, the Marketing Science Institute, the Wharton Risk Management and Decision Process Center, and the Wharton Baker Retailing Center.

Many wonderful people worked tirelessly to help us. We thank our Program Committee, Competitive Paper Reviewers, Working Paper Reviewers, and Videography Track Reviewers. Special thanks to Andy Gershoff and Maura Scott (Working Paper Chairs), Lisa Cavanaugh and Keith Wilcox (Forums Chairs), Marylouise Caldwell and Joonas Rokka (Videography Track Chairs), Lauren Block and Markus Giesler (Doctoral Symposium Chairs), and Jennifer Argo and Derek Rucker (Early Career Mentoring Workshop). Many thanks also to our excellent Associate Editors: Keisha Cutright, Giana Eckhardt, Amber Epp, Jennifer Escalas, Jeff Galak, Ashlee Humphreys, Selin Malkoc, Brent McFerran, Cassie Mogilner-Homes, Karen Page Winterich, Hilke Plassmann, Aner Sela, Suzanne Shu, Zakary Tormala, and Bram Van den Bergh.

Special thanks to ACR Executive Director Rajiv Vaidyanathan, Conference Manager Paula Rigling, conference administrative assistant Mikhala Stutzman, website guru Aleksey Cherfas, and ACR Executive Assistant Brenda Monahan.

Last but not least, thank you Margaret Campbell, ACR President 2017, for offering us the opportunity to organize the ACR conference and for all the help and support she provided throughout the process.

Ayelet Gneezy, University of California San Diego, Rady School of Management

Vlad Griskevicius, University of Minnesota, Carlson School of Management

Patti Williams, University of Pennsylvania, Wharton School

2017 Conference Co-Chairs

Conference Committees & Reviewers

PRESIDENT

Margaret C. Campbell, University of Colorado, Boulder, USA

CONFERENCE CHAIRS

Ayelet Gneezy, University of California San Diego, USA
Vlad Griskevicius, University of Minnesota, USA
Patti Williams, University of Pennsylvania, USA

ASSOCIATE EDITORS

Keisha Cutright, Duke University, USA
Giana Eckhardt, Royal Holloway University of
London
Amber Epp, University of Wisconsin - Madison,
USA
Jennifer Escalas, Vanderbilt University, USA
Jeff Galak, Carnegie Mellon University, USA

Ashlee Humphreys, Northwestern University, USA
Selin Malkoc, The Ohio State University, USA
Brent McFerran, Simon Fraser University, Canada
Cassie Mogilner-Homes, University of California
Los Angeles, USA
Karen Page Winterich, Pennsylvania State
University, USA

Hilke Plassmann, INSEAD, France
Aner Sela, University of Florida, USA
Suzanne Shu, University of California Los Angeles,
USA
Zakary Tormala, Stanford University, USA
Bram Van den Bergh, Erasmus University
Rotterdam, The Netherlands

FORUMS (PERSPECTIVES, ROUNDTABLES, & WORKSHOPS) CHAIRS

Lisa Cavanaugh, University of British Columbia, Canada

Keith Wilcox, Columbia University, USA

WORKING PAPER CHAIRS

Andrew Gershoff, University of Texas at Austin, USA

Maura Scott, Florida State University, USA

DOCTORAL SYMPOSIUM CHAIRS

Lauren Block, Baruch College, USA

Markus Giesler, York University, Canada

MID-CAREER MENTORSHIP PROGRAM CHAIRS

Jennifer Argo, University of Alberta, Canada

Derek Rucker, Northwestern University, USA

VIDEOGRAPHY CHAIRS

Marylouise Caldwell, University of Sydney, Australia

Joonas Rokka, Emlyon Business School, France

PROGRAM COMMITTEE

Pankaj Aggarwal, University of Toronto, Canada
On Amir, University of California San Diego, USA
Eduardo Andrade, Fundação Getulio Vargas Rio de
Janeiro, Brazil
Zeynep Arsel, Concordia, USA
Rajesh Bagchi, Virginia Tech, USA
Alexandra Barasch, New York University, USA
Dan Bartells, University of Chicago, USA
Julia Bayuk, University of Delaware, USA
Russell Belk, York University, UK
Silvia Bellaza, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA
Jonathan Berman, London Business School, UK
Jim Bettman, Duke University, USA
Amit Bhattacharjee, Erasmus University Rotterdam,
The Netherlands
Barbara Bickart, Boston University, USA
Lisa Bolton, Pennsylvania State University, USA
Simona Botti, London Business School, UK
Miguel Brendl, Northwestern University, USA
Susan Broniarczyk, University of Texas at Austin,
USA
Katherine Burson, University of Michigan, USA
Daylian Cain, Yale University, USA
Iana Castro, San Diego State University, USA
Cindy Chan, University of Toronto, Canada
Elise Chandon Ince, University of South Carolina,
USA

Gert Cornelissen, Pompeu Fabra University, Spain
Cynthia Cryder, University of Washington, St.
Louis, USA
Marcus Cunha Jr., University of Georgia, USA
Amy Dalton, Hong Kong University of Science and
Technology, Hong Kong, China
Jason Dana, Yale University, USA
Bart De Langhe, University of Colorado, USA
Fabrizio Di Muro, The University of Winnipeg,
Canada
Kristin Diehl, University of Southern California, USA
Claudiu Dimofte, San Diego State, USA
David DoBois, INSEAD, France
Aimee Drolet, University of California Los Angeles,
USA
Rod Duclos, University of Western Ontario, Canada
Adam Duhachek, Indiana University, USA
Lea Dunn, University of Washington, USA
Kristina Durante, Rutgers University, USA
Jordan Etkin, Duke University, USA
David Faro, London Business School, UK
Philip Fernbach, University of Colorado, USA
Rosellina Ferraro, University of Maryland, USA
Mark Forehand, University of Washington, USA
David Gal, University of Illinois at Chicago, USA
Kelly Goldsmith, Northwestern University, USA
Joe Goodman, The Ohio State University, USA
Ronnie Goodstein, Georgetown University, USA

Rebecca Hamilton, Georgetown University, USA
Ryan Hamilton, Emory University, USA
Gerald Haubl, University of Alberta, Canada
Kelly Haws, Vanderbilt University, USA
Bill Hedgecock, Iowa University, USA
Hal Hershfield, University of California Los
Angeles, USA
Joey Hoegg, University of British Columbia, Canada
Szu-Chi Huang, Stanford University, USA
Yanliu Huang, Drexel University, USA
Alex Imas, Carnegie Mellon University, USA
Jeff Inman, University of Pittsburgh, USA
Julie Irwin, The University of Texas at Austin, USA
Uma Karmarkar, University of California San
Diego, USA
Liz Keenan, Harvard University, USA
Anat Keinan, Harvard University, USA
Uzma Khan, Miami, USA
Tina Kiesler, California State University,
Northridge, USA
Rob Kozinets, University of Southern California,
USA
Thomas Kramer, University of California Riverside,
USA
Kirk Kristofferson, Arizona State University, USA
Ellie Kyung, Dartmouth College, USA
Aparna Labroo, Northwestern University, USA
Cait Lambertson, University of Pittsburg, USA

SPECIAL SESSION REVIEWERS

Pankaj Aggarwal, University of Toronto, Canada
On Amir, University of California San Diego, USA
Eduardo Andrade, Fundação Getulio Vargas Rio de Janeiro, Rio de Janeiro, Brazil
Zeynep Arsel, Concordia University, Canada
Rajesh Bagchi, Virginia Tech, USA
Alixandra Barasch, New York University, USA
Daniel M. Bartels, University of Chicago, USA
Julia Bayuk, University of Delaware, USA
Russell Belk, York University, Canada
Jonah Berger, University of Pennsylvania, USA
Jonathan Berman, London Business School, UK
Jim Bettman, Duke University, USA
Amit Bhattacharjee, Erasmus University Rotterdam, The Netherlands
Barbara Bickart, Boston University
Lisa E. Bolton, Pennsylvania State University, USA
Simona Botti, London Business School, UK
Katherine Burson, University of Michigan, USA
Daylian Cain, Yale University, USA
Iana Castro, San Diego State University, USA
Cindy Chan, University of Toronto, Canada
Elise Chandon Ince, University of South Carolina, USA
Gert Cornelissen, Pompeu Fabra University, Spain
Cynthia Cryder, Washington University, USA
Marcus Cunha Jr., University of Georgia, USA
Amy N. Dalton, Hong Kong University of Science and Technology, Hong Kong, China
Jason Dana, Yale University, USA
Bart De Langhe, ESADE, Spain
Fabrizio Di Muro, The University of Winnipeg
Kristin Diehl, University of Southern California, USA
Claudiu Dimofte, San Diego State, USA
David Dubois, INSEAD, France
Rod Duclos, University of Western Ontario, Canada
Lea Dunn, University of Washington, USA
Kristina Durante, Rutgers University, USA
Jordan Etkin, Duke University, USA
David Faro, London Business School, UK
Philip Fernbach, University of Colorado, USA
Rosellina Ferraro, University of Maryland, USA
Mark Forehand, University of Washington, USA
David Gal, University of Illinois at Chicago, USA
Kelly Goldsmith, Northwestern University, USA
Joseph Goodman, The Ohio State University, USA
Ronald Goodstein, Georgetown University, USA
Rebecca Hamilton, Georgetown University, USA
Ryan Hamilton, Emory University, USA
Gerald Häubl, University of Alberta, Canada
Kelly Haws, Vanderbilt University, USA

William Hedgcock, University of Iowa, USA
Hal Hershfield, University of California Los Angeles, USA
JoAndrea Hoegg, University of British Columbia, Canada
Szu-chi Huang, Stanford University, USA
Yangliu Huang, Drexel University, USA
Alex Imas, Carnegie Mellon University, USA
Uma Karmarkar, University of California San Diego, USA
Elizabeth Keenan, Harvard University, USA
Anat Keinan, Harvard University, USA
Uzma Khan, University of Miami, USA
Tina Kiesler, California State University, Northridge, USA
Robert Kozinets, University of Southern California, USA
Thomas Kramer, University of California Riverside, USA
Kirk Kristofferson, Arizona State University, USA
Ellie Kyung, Dartmouth College, USA
Aparna Labroo, Northwestern University, USA
Juliano Laran, University of Miami, USA
Robyn LeBoeuf, Washington University, USA
Leonard Lee, National University of Singapore, Singapore
Jonathan Levav, Stanford University, USA
Wendy Liu, University of California San Diego, USA
Tina Lowrey, HEC Paris, France
Marius K. Luedicke, City University London, UK
Sam Maglio, University of Toronto, Canada
Prashant Malaviya, Georgetown University, USA
Naomi Mandel, Arizona State University, USA
Pragya Mathur, Baruch College, USA
Nicole Mead, University of Melbourne, Australia
Tom Meyvis, New York University, USA
Elizabeth Miller, University of Massachusetts Amherst, USA
Chiraag Mittal, Texas A&M University, USA
Daniel Mochon, Tulane University, USA
Ashwani Monga, Rutgers University, USA
Andrea Morales, Arizona State University, USA
Milica Mormann, Southern Methodist University, USA
Maureen Morrin, Temple University, USA
Gergana Nenkov, Boston College, USA
Michael Norton, Harvard University, USA
Nathan Novemsky, Yale University, USA
Thomas O'Guinn, University of Wisconsin-Madison, USA
Nailya Ordabayeva, Boston College, USA

Mario Pandelaere, Virginia Tech, USA
Vanessa Patrick, University of Houston, USA
Andrew W. Perkins, Washington State University, USA
Steve Posavac, Vanderbilt University, USA
Priya Raghurib, New York University, USA
Raj Raghunathan, University of Texas at Austin, USA
Ryan Rahinel, University of Cincinnati, USA
Suresh Ramanathan, Texas A&M University, USA
Rebecca Walker Recek, The Ohio State University, USA
Joseph Redden, University of Minnesota, USA
Christine Ringler, University of Alabama, USA
Silvia Saccardo, Carnegie Mellon University, USA
Linda Court Salisbury, Boston College, USA
Adriana Samper, Arizona State University, USA
Daiane Scaraboto, Pontificia Universidad Católica de Chile, Chile
Ann Schlosser, University of Washington, USA
Rom Schrifft, University of Pennsylvania, USA
Sankar Sen, Baruch College, USA
Jaideep Sengupta, Hong Kong University of Science and Technology, China
Avni Shah, University of Toronto, Canada
Eesha Sharma, Dartmouth College, USA
Stephen Spiller, University of California Los Angeles, USA
Yael Steinhart, Tel Aviv University, Israel
Abigail B. Sussman, University of Chicago, USA
Steven Sweldens, Erasmus University Rotterdam, The Netherlands
Carlos Torelli, University of Illinois at Urbana-Champaign, USA
Claire Tsai, University of Toronto, Canada
Oleg Urminsky, University of Chicago, USA
Nicole Verrochi Coleman, University of Pittsburgh, USA
Joachim Vosgerau, Bocconi University, Italy
Yajin Wang, University of Maryland, USA
Morgan Ward, Emory University, USA
Caleb Warren, University of Arizona, USA
Christian Wheeler, Stanford University, USA
Katherine White, University of British Columbia, Canada
Lawrence Williams, University of Colorado, USA
David Wooten, University of Michigan, USA
Eugenia Wu, University of Pittsburgh, USA
Alison Jing Xu, University of Minnesota, USA
Carolyn Yoon, University of Michigan, USA
Eric Yorkston, Texas Christian University, USA

COMPETITIVE PAPER REVIEWERS

Rashmi Adaval, Hong Kong University of Science and Technology, Hong Kong
Nidhi Agrawal, University of Washington, USA
David Alexander, University of St. Thomas, USA
Alexis Allen, University of Kentucky, USA
Adam Alter, New York University, USA
Nelson Amaral, American University, USA
Justin Angle, University of Montana, USA
Lalin Anik, University of Virginia, USA
Catherine Armstrong Soule, Western Washington University, USA
Laurence Ashworth, Queen's University, Canada
Soren Askegaard, University of Southern Denmark, Denmark
Sohyun Bae, Hong Kong Baptist University, Hong Kong

Charan Bagga, University of Calgary, Canada
Paul W. Ballantine, University of Canterbury, New Zealand
Michelle Barnhart, Oregon State University, USA
Michael Barone, University of Louisville, USA
Ernest Baskin, Saint Joseph's University, USA
Wilson Bastos, Universidade Catolica Portuguesa, Portugal
Hanna Berg, Stockholm School of Economics, Sweden
Rajesh Bhargave, Imperial College London, UK
Baler Bilgin, Koç University, Turkey
Darron Billeter, Brigham Young University, USA
Alessandro Biraglia, University of Leeds, UK
Tim Boettger, University of St. Gallen, Switzerland
Daniel Boller, University of St. Gallen, Switzerland

Samuel Bond, Georgia Tech, USA
Andrea Bonezzi, New York University, USA
Sylvie Borau, Toulouse Business School, France
Keith Botner, Lehigh University, USA
Tonya Williams Bradford, University of Notre Dame, USA
S. Adam Brasel, Boston College, USA
Danielle J. Brick, University of New Hampshire, USA
Neil Brigden, Miami University, USA
Aaron R. Brough, Utah State University, USA
Eva Buechel, University of South Carolina, USA
Olya Bullard, University of Winnipeg, Canada
Marylouise Caldwell, University of Sydney, Australia
Adrian Camilleri, RMIT University, Australia

COMPETITIVE PAPER REVIEWERS *(continued)*

- Jesse Catlin, California State University, Sacramento, USA
- Ludovica Cesareo, University of Pennsylvania, USA
- Elise Chandon Ince, University of South Carolina, USA
- Hannah Chang, Singapore Management University, Singapore
- Lan Chaplin, University of Illinois at Chicago, USA
- Subimal Chatterjee, SUNY Binghamton, USA
- Amitava Chattopadhyay, INSEAD, Singapore
- Rocky Peng Chen, Hong Kong Baptist University, Hong Kong
- Cecile Cho, Korea University, South Korea
- HaeEun Helen Chun, Cornell University, USA
- Bart Claus, Lille Catholic University, France
- Irene Consiglio, NOVA, Portugal
- Yann Cornil, University of British Columbia, Canada
- Ryan Corser, Vanderbilt University, USA
- June Cotte, Western University, Canada
- Kirsten Cowan, NEOMA Business School, France
- Elizabeth Cowley, University of Sydney, Australia
- David Crockett, University of South Carolina, USA
- Maria L. Cronley, Ohio Northern University, USA
- Sandor Czellar, University of Lausanne, Switzerland
- Sokiente Dagogo-Jack, Boston College, USA
- Ahmad Daryanto, Lancaster University, UK
- Derick Davis, University of Virginia, USA
- Matteo De Angelis, LUISS University, Italy
- Emanuel de Bellis, University of St. Gallen, Switzerland
- Xiaoyan Deng, The Ohio State University, USA
- Siegfried Dewitte, Katholieke University Leuven, Belgium
- Leigh Donovan, Illinois State University, USA
- Ryan Eanes, Washington College, USA
- Jane Ebert, Brandeis University, USA
- Julie A Edell, Duke University, USA
- Danit Ein-Gar, Tel Aviv University, Israel
- Isabelle Engeler, University of Navarra, Spain
- Zachary Estes, Bocconi University, Italy
- Ioannis Evangelidis, Bocconi University, Italy
- Alexander (Sasha) Fedorikhin, Indiana University, USA
- Bob Fennis, University of Groningen, The Netherlands
- Daniel Fernandes, Catholic University of Portugal, Portugal
- Ayelet Fishbach, University of Chicago, USA
- Lura Forcum, Indiana University, USA
- Huachao Gao, University of Victoria, Canada
- Leilei Gao, Chinese University of Hong Kong, Hong Kong, China
- Ellen Garbarino, University of Sydney, Australia
- Nitika Garg, University of New South Wales, Australia
- Aaron Garvey, University of Kentucky, USA
- Kelly Geyskens, Maastricht University, The Netherlands
- Mary C. Gilly, University of California at Irvine, USA
- Dan Goldstein, Microsoft Research, USA
- Miranda Goode, Western University, Canada
- Adam Eric Greenberg, University of California Los Angeles, USA
- Bianca Grohmann, Concordia University, Canada
- Young Won Ha, Sogang University, South Korea
- Liat Hadar, Interdisciplinary Center Herzliya, Israel
- Rhonda Hadi, University of Oxford, UK
- Linda Hagen, University of Southern California, USA
- Henrik Hagtvedt, Boston College, USA
- Anne Hamby, Hofstra University, USA
- Eunjoon Han, Auckland University of Technology, New Zealand
- Xiaoqi Han, University of Alaska Fairbanks, USA
- Haiming Hang, University of Bath, UK
- Sara Hanson, University of Richmond, USA
- David Hardisty, University of British Columbia, Canada
- Kelly B. Herd, Indiana University, USA
- Michal Herzenstein, University of Delaware, USA
- Nico Heuvinck, Lille Catholic University, France
- Krista Hill, Babson College, USA
- Margaret Hogg, Lancaster University, UK
- Jiewen Hong, Hong Kong University of Science and Technology, Hong Kong, China
- Mehdi Hossain, Southern Connecticut State University, USA
- Meng-Hua Hsieh, Pennsylvania State University-Harrisburg
- Ming Hsu, University of California Berkeley, USA
- Yu Hu, Salem State University, USA
- Young Eun Huh, Korea Advanced Institute of Science and Technology (KAIST), South Korea
- Iris Hung, Fudan University, China
- Christopher Hydock, Georgetown University, USA
- Jamie Hyodo, University of Nebraska - Lincoln, USA
- Dawn Iacobucci, Vanderbilt University, USA
- Mathew S. Isaac, Seattle University, USA
- Shailendra Jain, University of Washington, USA
- Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
- Leslie John, Harvard University, USA
- Samuel Johnson, University of Bath, UK
- Chris Joiner, George Mason University, USA
- Minah Jung, New York University, USA
- Barbara Kahn, University of Pennsylvania, USA
- Andrew Kaikati, Saint Louis University, USA
- Bernadette Kamleitner, WU Vienna University of Economics and Business, Austria
- Heather Kappes, London School of Economics and Political Science, UK
- Christine Kim, Hong Kong University of Science and Technology, Hong Kong
- Eunice Kim, Pennsylvania State University, USA
- Hyeong-Min (Christian) Kim, Johns Hopkins USA
- Jung Kim, Singapore Management University, Singapore
- Jungkeun Kim, Auckland University of Technology, New Zealand
- Min Jung Kim, Manhattan College, USA
- Colleen Kirk, New York Institute of Technology, USA
- Dannie Kjeldgaard, University of Southern Denmark, Denmark
- Anne Klesse, Erasmus University Rotterdam, The Netherlands
- Michail Kokkoris, WU Vienna University of Economics and Business, Austria
- Elisa Konya-Baumbach, University of Mannheim, Germany
- Minjung Koo, Sungkyunkwan University, South Korea
- Steven Koppitsch, Bowling Green State University, USA
- Elika Kordrostami, Humboldt State University, USA
- Goedele Krekels, University of Lausanne, Switzerland
- Aradhna Krishna, University of Michigan, USA
- Shanker Krishnan, Indiana University, USA
- Ann Kronrod, University of Massachusetts, Lowell, USA
- Daniella Kupor, Boston University, USA
- Man Ching Kwan, Lingnan (University) College, Sun Yat-Sen University, China
- Jaehwan Kwon, Baylor University, USA
- Jessica Y. Y. Kwong, The Chinese University of Hong Kong, Hong Kong SAR
- Raphaëlle Lambert-Pandraud, ESCP Europe, France
- Jannine D. Lasaleta, Grenoble Ecole de Management, France
- Robert Latimer, University of Toronto, Canada
- Kathryn LaTour, Cornell University, USA
- Jaehoon Lee, Southern Illinois University, USA
- Saerom Lee, University of Texas at San Antonio, USA
- Donald Lehmann, Columbia University, USA
- Jessica Li, University of Kansas, USA
- Xingbo Li, University of Louisville, USA
- Xiuping Li, National University of Singapore, Singapore
- Yi Li, Lille Catholic University, France
- Chien-Wei Lin, State University of New York at Oneonta, USA
- Lily Lin, Simon Fraser University, Canada
- MengHsien (Jenny) Lin, CSUMB, USA
- Peggy Liu, University of Pittsburgh, USA
- Richie Liu, Oklahoma State University, USA
- Sara Loughran Dommer, Georgia Tech, USA
- Michael Luchs, The College of William and Mary, USA
- Renaud Lunardo, KEDGE Business School, France
- Richard Lutz, University of Florida, USA
- Ahream Maeng, University of Kansas, USA
- Michal Maimaran, Northwestern University, USA
- Kelley Main, University of Manitoba, Canada
- Igor Makienco, University of Nevada at Reno, USA
- Srikant Manchiraju, Florida State University, USA
- Marlys Mason, Oklahoma State University, USA
- Ted Matherly, Oklahoma State University, USA
- Daniele Mathras, Northeastern University, USA
- A. Peter McGraw, University of Colorado, USA
- Shenel McLawrence, Bournemouth University, UK
- Ravi Mehta, University of Illinois at Urbana-Champaign, USA
- Margaret G. Meloy, Pennsylvania State University, USA
- Martin Mende, Florida State University, USA
- Claude Messner, University of Bern, Switzerland
- David Mick, University of Virginia, USA
- Sarah Mittal, Texas State University, USA
- Alokparna (Sonia) Monga, Rutgers University, USA
- Sarah Moore, University of Alberta, Canada
- Carey Morewedge, Boston University, USA
- Mehdi Mourali, University of Calgary, Canada
- James Mourey, DePaul University, USA
- Nira Munichor, Bar-Ilan University, Israel
- Gia Nardini, University of Denver, USA
- Noelle Nelson, University of Kansas, USA
- Kevin Newman, Providence College, USA
- Kathryn Newton, Ryerson University, Canada
- Binh Nguyen, New York Institute of Technology - Vancouver, Canada
- Jesper Nielsen, University of Arizona, USA
- Hristina Nikolova, Boston College, USA
- Ian Norris, Berea College, USA

COMPETITIVE PAPER REVIEWERS (continued)

- Erica Mina Okada, Hitotsubashi University, Japan
 Jenny Olson, Indiana University, USA
 Andrea Ordanini, Bocconi University, Italy
 Massimiliano Ostinelli, Winthrop University, USA
 Laura Oswald, Marketing Semiotics Inc., USA
 Cele Otmes, University of Illinois at Urbana-Champaign, USA
 Grant Packard, Wilfrid Laurier University, Canada
 Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands
 Jihye Park, Hankuk University of Foreign Studies, South Korea
 Jooyoung Park, Peking University, CHINA
 Jeffrey Parker, Georgia State University, USA
 Eyal Peer, Bar-Ilan University, Israel
 Alessandro Peluso, University of Salento, Italy
 Lisa Peñaloza, KEDGE Business School, Bordeaux, France and ITESM, Mexico
 Elfriede Penz, WU Vienna University of Economics and Business, Austria
 Andrew W. Perkins, Washington State University, USA
 Bruce E. Pfeiffer, University of New Hampshire, USA
 Michel Tuan Pham, Columbia University, USA
 Nguyen Pham, St. Bonaventure University, USA
 Matthew Philp, Université de Montréal, Canada
 Anastasiya Pocheptsova, University of South Carolina, USA
 Evan Polman, University of Wisconsin - Madison, USA
 Morgan Poor, University of San Diego, USA
 Deidre Popovich, Texas Tech University, USA
 Keiko Powers, Neustar, USA
 Sonja Prokopec, ESSEC Business School, France
 Nancy Puccinelli, Oxford University, UK
 Eleanor Putnam-Farr, Yale University, USA
 Marina Puzakova, Lehigh University, USA
 Martin Pyle, Ryerson University, Canada
 Priyali Rajagopal, University of South Carolina, USA
 Tracy Rank-Christman, University of Wisconsin - Milwaukee, USA
 Brian Ratchford, University of Texas at Dallas, USA
 Rebecca Ratner, University of Maryland, USA
 Crystal Reeck, Temple University, USA
 Taly Reich, Yale University, USA
 Martin Reimann, University of Arizona, USA
 Aric Rindfleisch, University of Illinois at Urbana-Champaign, USA
 Stefanie Robinson, North Carolina State University, USA
 Deborah Roedder John, University of Minnesota, USA
 Sara Rosengren, Stockholm School of Economics, Sweden
 Bill Ross, University of Connecticut, USA
 Caroline Roux, Concordia University, Canada
 J. Edward Russo, Cornell University, USA
 Christina Saenger, Youngstown State University, USA
 Ritesh Saini, University of Texas at Arlington, USA
 Anthony Salerno, University of Cincinnati, USA
 Sridhar Samu, Great Lakes Institute of Management, India
 Shelle Santana, Harvard University, USA
 Jennifer Savary, University of Arizona, USA
 Janet Schwartz, Tulane University, USA
 Irene Scopelliti, City University London, UK
 Anne-Laure Sellier, HEC Paris, France
 Julio Sevilla, University of Georgia, USA
 Edith Shalev, Technion, Israel
 Hao Shen, Chinese University of Hong Kong, Hong Kong, China
 Luxi Shen, Chinese University of Hong Kong, China
 Steven Shepherd, Oklahoma State University, USA
 L. J. Shrum, HEC Paris, France
 Itamar Simonson, Stanford University, USA
 Bonnie Simpson, Western University, Canada
 Nancy Sirianni, University of Alabama, USA
 Ale Smidts, Erasmus University Rotterdam, The Netherlands
 Nathalie Spielmann, NEOMA Business School, France
 Antonios Stamatogiannakis, IE University, Spain
 Randy Stein, Cal Poly Pomona, UAS
 Kristin Stewart, California State University San Marcos, USA
 Jacob Suher, Portland State University, USA
 Harish Sujjan, Tulane University, USA
 Kwanho Suk, Korea University, South Korea
 Nicolette Sullivan, Duke University, USA
 Christopher Summers, University of South Carolina, USA
 Debora V. Thompson, Georgetown University, USA
 Matthew Thomson, Western University, Canada
 Maryam Tofighi, California State University Los Angeles, USA
 Claudia Townsend, University of Miami, USA
 Remi Trudel, Boston University, USA
 Yanping Tu, University of Florida, USA
 Meltem Tugut, Saint Louis University, USA
 Mirjam Tuk, Imperial College Business School, UK
 Stephanie Tully, University of Southern California, USA
 Gulnur Tumbat, San Francisco State University, USA
 Meltem Ture, Skema Business School, France
 Ana Valenzuela, Baruch College, CUNY, USA & Ramon Llull University, Spain
 Anu Valtonen, University of Lapland, Finland
 Erica van Herpen, Wageningen University, The Netherlands
 Femke van Horen, VU University Amsterdam, The Netherlands
 Eric VanEpps, University of Pennsylvania, USA
 Marc Vanhuele, HEC Paris, France
 Alladi Venkatesh, University of California Irvine, USA
 Peeter Verlegh, Vrije University Amsterdam, The Netherlands
 Ricardo Villarreal, University of San Francisco, USA
 Monica Wadhwa, INSEAD, Singapore
 Melanie Wallendorf, University of Arizona, USA
 Echo Wen Wan, University of Hong Kong, Hong Kong, China
 Fang Wan, University of Manitoba, Canada
 Chen Wang, Drexel University, USA
 Jing (Alice) Wang, University of Iowa, USA
 Dee Warmath, University of Wisconsin - Madison, USA
 Elizabeth Webb, Columbia University, USA
 Bert Weijters, Ghent University, Belgium
 Liad Weiss, University of Wisconsin - Madison, USA
 Tiffany White, University of Illinois at Urbana-Champaign, USA
 Elanor Williams, Indiana University, USA
 Richard Yalch, University of Washington, USA
 Chun-Ming Yang, Ming Chuan University, Taiwan
 Linyun Yang, University of North Carolina, Charlotte, USA
 Xiaojing Yang, University of Wisconsin - Milwaukee, USA
 Zhiyong Yang, University of Texas at Arlington, USA
 Catherine Yeung, Chinese University of Hong Kong, China
 Hye Jin Yoon, Southern Methodist University, USA
 Ozge Yucel-Aybat, Pennsylvania State University-Harrisburg, USA
 Meng Zhang, Chinese University of Hong Kong, Hong Kong, China
 Yan Zhang, National University of Singapore, Singapore
 Min Zhao, Boston College, USA
 Rongrong Zhou, Hong Kong University of Science and Technology, Hong Kong, China
 Meng Zhu, Johns Hopkins University, USA
 Yonat Zwebner, University of Pennsylvania, USA

WORKING PAPER REVIEWERS

- Claire Kim, Indiana University, USA
 Ajay Abraham, Seattle University, USA
 Duygu Akdevelioglu, University of California, Irvine, USA
 Mehdi Akhgari, University of Winnipeg, Canada
 Tiercelin Alexandre, IUT Troyes, France
 Rafaela Almeida Cordeiro, Escola Superior de Propaganda e Marketing, Brazil
 Jiyeon An, University of Rhode Island, USA
 Zachary Arens, Oklahoma State University, USA
 Amin Attari, University of Kansas, USA
 Yana Avramova, University of Antwerp/Belgium
 Ana Babic Rosario, University of Denver, USA
 Chelsea Bailey, University of Warwick, UK
 Kate Barasz, University of Navarra, Spain
 Dovile Barauskaite, ISM University of Management and Economics, Lithuania
 Fleura Bardhi, City University London, UK
 Aaron Barnes, University of Illinois at Urbana-Champaign, USA
 Suzana Battistella-Lima, EAESP-FGV, Brazil
 Rabia BAYER, Koc University, Turkey
 Tino Bech-Larsen, Aarhus University/Denmark
 Stefan Berntritter, University of Amsterdam, The Netherlands
 Anoop Bhogal-Nair, De Montfort University, UK
 Nicola Bilstein, Catholic University Eichstaett-Ingolstadt, Germany
 Severin Bischof, University of St. Gallen, Switzerland
 Dipayan Biswas, University of South Florida, USA
 Delane Botelho, EAESP-FGV, Brazil
 Larissa Carine Braz Becker, University of Turku, Finland
 Christian Brock, University of Rostock, Germany
 Zafeirenia Brokalaki, King's College London, UK and University of Arkansas, USA
 Melanie Brucks, Stanford University, USA
 Mirja Bues, University of Muenster, Germany
 Denise Buhrau, Stony Book University, USA
 Fanny Cambier, Université catholique de Louvain, Belgium

WORKING PAPER REVIEWERS (continued)

- Marina Carnevale, Fordham University, USA
 Isabel Carrero, Universidad Pontificia Comillas, Spain
 Michal Carrington, University of Melbourne, Australia
 Melis Ceylan, Koc University, Turkey
 Chia-Chi Chang, National Chiao-Tung University, Taiwan
 Sophie Chaxel, Virginia Tech, USA
 Charlene Chen, Nanyang Technological University, Singapore
 Chen Chen, University College of Southeast Norway, Norway
 Ning Chen, European School of Management and Technology, Germany
 Pei-Chi Chen, National Sun Yat-Sen University, Taiwan
 Shijiao Chen, University of Otago, New Zealand
 Yu-Ping Chen, National Taiwan University, Taiwan
 Hsuan-Yi Chou, National Sun Yat-sen University, Taiwan
 HoEun Chung, Fayetteville State University, USA
 Martina Cossu, Bocconi University, Italy
 Katherine Crain, Duke University, USA
 Marielle Creusen, Delft University of Technology, The Netherlands
 Daniela Cristian, BI Norwegian Business School, Norway
 Angela Gracia B. Cruz, Monash University, Australia
 Steven Dallas, New York University, USA
 Nadia Danienta, University of Illinois at Urbana-Champaign, USA
 Jessica Darveau, Laval University, Canada
 Mark Davies, Teesside University, England
 Ramona De Luca, Fundação Getulio Vargas- Sao Paulo, Brazil
 Maheshan De Silva Kanakarathne, Bournemouth University, UK
 Rafael Demczuk, Federal University of Parana, Brazil
 Yoshiko DeMotta, Fairleigh Dickinson University, USA
 Alexander DePaoli, Northeastern University, USA
 Carlos Diaz Ruiz, KEDGE Business School, France
 Berkeley Dietvorst, The University of Chicago, USA
 Yu Ding, Columbia University, USA
 Elena Dinkevych, ESCP Europe, Berlin
 David Disatnik, Tel Aviv University, Israel
 Amina Djedidi, Université Paris-Est, IRG (EA 2354), France
 Pierre-Yann Dolbec, Concordia University, Canada
 Maja Dolinar, University of Ljubljana, Slovenia
 Ping Dong, Northwestern University, USA
 Jessie Rui Du, University of Hawaii, USA
 Christilene du Plessis, Erasmus University Rotterdam, The Netherlands
 Chris Dubelaar, Deakin University, Australia
 Riley Dugan, University of Dayton, USA
 Kristen Duke, University of California San Diego, USA
 Sumeyra Duman Kurt, Dokuz Eylul University, Turkey
 Yves Dupuis, Concordia University, Canada
 Kimberly Duval, Concordia University, Canada
 Mahdi Ebrahimi, University of Houston, USA
 Christian Eichert, City University of London, UK
 Akon Ekpo, Rutgers University, USA
 Hedia El Ourabi, Université du Québec à Trois-Rivières, Canada
 Renu Emile, O.P. Jindal Global University, India
 Antonia Erz, Copenhagen Business School, Denmark
 Dennis T. Esch, Cranfield University, UK
 Tatiana Fajardo, Florida State University, USA
 Ali Faraji-Rad, Nanyang Technological University, Singapore
 Ivan Fedorenko, Bentley University, USA
 Sven Feurer, Karlsruhe Institute of Technology (KIT), Germany
 Pei-wen Fu, National Sun Yat-sen University, Taiwan
 Elena Fumagalli, HEC Paris, France
 Rufina Gafeeva, University of Cologne, Germany
 Jessica Gamlin, Northwestern University, USA
 Ximena Garcia-Rada, Harvard University, USA
 Meryl Gardner, University of Delaware, USA
 Agata Gąsiorowska, SWPS University of Social Sciences and Humanities, Poland
 Marilyn Giroux, Auckland University of Technology, New Zealand
 Alexei Gloukhovtsev, Aalto University School of Business, Finland
 Shreyans Goenka, Cornell University, USA
 Xiushuang Gong, Renmin University of China, China
 Laura Goodyear, Concordia University, Canada
 Indranil Goswami, University at Buffalo, USA
 Lauren Grewal, University of Pittsburgh, USA
 Simone E. Griesser, University of Warwick, UK
 Alicja Grochowska, University of Social Sciences and Humanities, Poland
 Michaela Groesch, University of Erlangen-Nuremberg, Germany
 Barbara Gross, California State University, Northridge, USA
 Manissa Gunadi, Erasmus University Rotterdam, The Netherlands
 Aditya Gupta, University of Nebraska - Lincoln, USA
 Tanvi Gupta, Indian Institute of Management Bangalore, India
 Michael Hair, Southern Illinois University Edwardsville, USA
 Matthew Hall, University of Nebraska - Lincoln, USA
 Kendra Hart, Mount Royal University, Canada
 Silvia Heideker, University of Erlangen-Nuremberg, Germany
 Wibke Heidig, Albstadt-Sigmaringen University, Germany
 Jose Mauro Hernandez, Centro Universitário da FEI, Brazil
 Sean T. Hingston, York University, Canada
 Nurit Hod, Bar-Ilan University, Israel
 Brady Hodges, Texas A&M University, USA
 Erik Hoelzl, University of Cologne, Germany
 Jens Hogreve, Catholic University Eichstaett-Ingolstadt, Germany
 Min Hou, Zhejiang Gongshang University, China
 Bingyan Hu, University of Iowa, USA
 Guei-hua Huang, National Sun Yat-sen University, Taiwan
 Lei Huang, State University of New York at Fredonia, USA
 Li Huang, Hofstra University, USA
 Zhongqiang (Tak) Huang, University of Hong Kong, Hong Kong
 Jane Hudson, Plymouth University, UK
 Aimee Huff, Oregon State University, USA
 Iina-Maija Ikonen, VU University Amsterdam, The Netherlands
 Caglar Irmak, University of Miami, USA
 Anil Isisag, University of Wisconsin-Madison, USA
 Jorge Jacob, Brazilian School of Public and Business Administration, Brazil
 Steffen Jahn, University of Goettingen, Germany
 Esther Jaspers, Tilburg University, The Netherlands
 David A. Jaud, Massey University, New Zealand
 Haeyoung Jeong, Drexel University, USA
 Lei Jia, The Ohio State University, USA
 Miaolei Jia, National University of Singapore, Singapore
 Yun Jie, Woosung University, South Korea
 Alex Kaju, University of Toronto, Canada
 In-Hye Kang, University of Maryland, USA
 Selcan Kara, University of Massachusetts, USA
 Cansu Karaduman, UNIL, Switzerland
 Mustafa Karatas, Koc University, Turkey
 Matthias Keller, University of Basel, Switzerland
 Corinne Kelley, Florida State University, USA
 Joonkyung Kim, University of Toronto, Canada
 Junghan Kim, Singapore Management University, Singapore
 Junghyun Kim, Virginia Tech, USA
 Kacy Kim, Elon University, USA
 Kaeun Kim, University of Massachusetts, USA
 Soohee Kim, Stanford University, USA
 Soyoung Kim, University of Alberta, Canada
 Jürgen Kirsch, University of Erlangen-Nuremberg, Germany
 Janet Kleber, WU Vienna University of Economics and Business, Austria
 Ingeborg Kleppe, Norwegian School of Economics, Norway
 Jan Koch, University of Groningen, The Netherlands
 Joerg Koenigstorfer, Technische Universität München, Germany
 Clara Koetz, ESC Rennes School Business, France
 Shruti Koley, Texas A&M University, USA
 Dejie Kong, Plymouth University, UK
 Sofia Kousi, Athens University of Economics and Business, Greece
 Aleksandra Kovacheva, University at Albany, Suny, USA
 Caspar Krampe, Heinrich-Heine-Universität Düsseldorf, Germany
 Liezl-Marie Kruger, University of Pretoria, South Africa
 Masha Ksendzova, Boston University, USA
 Erika Kuever, University of Southern Denmark, Denmark
 Atul Kulkarni, University of Missouri, USA
 Katina Kulow, University of Louisville, USA
 Tzu-Yin Kuo, Nanyang Technological University, Singapore
 Mathieu Lajante, Laval University, Canada
 Kristen Lane, University of Arizona, USA
 Even J. Lanseng, BI Norwegian Business School, Norway
 Raymond Lavoie, University of Manitoba, Canada
 Nhat Quang Le, Norwegian School of Economics, Norway
 Bret Leary, University of Nevada, Reno, USA
 Marina Leban, ESCP Europe, France
 Hsiao-Ching Lee, National Kaohsiung University of Applied Sciences, Taiwan
 Hsin-Hsuan Meg Lee, ESCP Europe, France
 Hyojin Lee, San Jose State University, USA

WORKING PAPER REVIEWERS (continued)

- Jennifer K. Lee, University of Southern California, USA
- Youseok Lee, Seoul National University, South Korea
- SU Lei, Hong Kong Baptist University, Hong Kong
- Marijke C. Leliveld, University of Groningen, The Netherlands
- Christophe Lembregts, Erasmus University Rotterdam, The Netherlands
- Eric Lennartz, University of Cologne, Germany
- Liat Levontin, Technion, Israel Institute of Technology, Israel
- Ye Li, University of California Riverside, USA
- Yina Li, Nankai University, China
- Chia-Wei (Joy) Lin, University of Texas at San Antonio, USA
- Kristina Lindsey Hall, The University of Alabama, USA
- Christopher Ling, University of South Carolina, USA
- Chihling Liu, Lancaster University, UK
- Maggie Wenjing Liu, Tsinghua University, China
- Xuefeng Liu, Loyola University Maryland, USA
- Cristina Longo, Université de Lille, France
- Nuno Jose Lopes, University of Navarra, Spain
- Lama Lteif, Baruch College, USA
- Fang-Chi Lu, Korea University, South Korea
- Ruxandra Luca, University of Sussex, UK
- Adriana Madzharov, Stevens Institute of Technology, USA
- Emma Mäenpää, Aalto University, Finland
- Elisa Maira, Erasmus University Rotterdam, The Netherlands
- Kateryna Maltseva, BI Norwegian Business School, Norway
- Alexandra Mantau, University of Stuttgart, Germany
- Olga Martin, University of Washington, USA
- Veronica Martin Ruiz, Iowa State University, USA
- Beal Mathieu, University Jean Moulin Lyon 3, France, and Goethe-University Frankfurt, Germany
- Lauren Mayor, LIU Post, USA
- Martin Meissner, University of Southern Denmark, Denmark
- Shiri Melumad, Columbia University, USA
- Sarah Memmi, Duke University, USA
- Hua Meng, Longwood University, USA
- Matthew D. Meng, Boston University, USA
- Ezgi Merdin-Uygur, Kadir Has University, Turkey
- Uwe Messer, University of Bamberg, Germany
- Frederike Monika Budiner Mette, ESPM-Sul, Brazil
- Laetitia Mimoun, HEC Paris, France
- Bora Min, University of Southern California, USA
- Robert Mislavsky, University of Pennsylvania, USA
- Alex Mitchell, Queen's University, Canada
- Erik Modig, Stockholm School of Economics, Sweden
- Oscar Moreno, Rutgers University, USA
- Joshua Morris, Stanford University, USA
- Coby Morvinski, Ben Gurion University, Israel
- Ashesh Mukherjee, McGill University, Canada
- Lana Mulier, Ghent University, Belgium
- Anish Nagpal, The University of Melbourne, Australia
- Leonardo Nicolao, Universidade Federal do Rio Grande do Sul, Brazil
- Luke Nowlan, University of Miami, USA
- Michael O'Donnell, University of California, Berkeley, USA
- Ga-Eun (Grace) Oh, Hong Kong University of Science and Technology, Hong Kong
- Hyewon Oh, University of Illinois at Urbana-Champaign, USA
- Nicholas Olson, University of Minnesota, USA
- Jacob Ostberg, Stockholm University, Sweden
- Julia Over, Technical University Munich, Germany
- Neeru Paharia, Georgetown University, USA
- Felipe Pantoja, Lille Catholic University, France
- Hanyong Park, University of Texas at San Antonio, USA
- Sungjun (Steven) Park, Korea Advanced Institute of Science and Technology (KAIST), South Korea
- Cristina Maria de Aguiar Pastore, Pontifical Catholic University of Paraná, Brazil
- Michael Paul, University of Augsburg, Germany
- Corina Pelau, Bucharest University of Economic Studies, Romania
- Sara Penner, University of Manitoba, Canada
- Beatriz Pereira, Iowa State University, USA
- Anne Odile Peschel, Aarhus University, Denmark
- Olivia Petit, INSEEC Business School, France
- Giovanni Pino, University of Salento, Italy
- Alexandra Polyakova, University of Sussex, UK
- Athanasios Polyportis, Athens University of Economics & Business, Greece
- anissa Pomies, Concordia University, Canada
- Nicolas Pontes, Queensland University of Technology, Australia
- Monica Popa, University of Saskatchewan, Canada
- Amanda Pruski Yamim, Grenoble École de Management, France
- Rebecca Rabino, Texas Tech University, USA
- Margot Racat, IDRAC Business School, France
- Hoori Rafieian, Drexel University, USA
- Sibel Raif, University of Illinois at Chicago, USA
- Sekar Raju, Iowa State University, USA
- Timothy Reilly, University of Minnesota Duluth, USA
- Julia Reinhard, University of Cologne, Germany
- Jacqueline Rifkin, Duke University, USA
- Alejandra Rodriguez, Oklahoma State University, USA
- Rajat Roy, Curtin University, Australia
- Bowen Ruan, University of Wisconsin - Madison, USA
- Cecilia Ruvalcaba, University of the Pacific, USA
- Ayalla Ruvio, Michigan State University, USA
- Maria Saaksjarvi, Delft University of Technology, The Netherlands
- Sebastian Sadowski, University of Groningen, The Netherlands
- Natalya Saldanha, RMIT University, Australia
- Geetanjali Saluja, University of Technology Sydney, Australia
- Kevin L. Sample, University of Georgia, USA
- Siddhartha Sarkar, Indian Institute of Technology Bombay, India
- Prakash Satyavageswaran, Indian School of Business, India
- Ana Seekic, HEC Paris, France
- Dorothea Schaffner, Lucerne University of Applied Sciences, Switzerland
- Anja Schanbacher, London Business School, UK
- Benedikt Schnurr, University of Innsbruck, Austria
- Nadine Schreiner, Heinrich-Heine-University Düsseldorf, Germany
- Ainslie Schultz, University of Arizona, USA
- Anika Schumacher, Maastricht University, The Netherlands
- Elisa Schweiger, University of Bath, UK
- Tejvir Sekhon, Western Washington University, USA
- Junhee Seok, Seoul National University, South Korea
- Irine Shaker, Misr International University, Cairo, Egypt
- Poja Shams, Karlstads University, Sweden
- Ilana Shanks, Florida State University, USA
- Marissa Sharif, University of California Los Angeles, USA
- Varun Sharma, Bocconi University, Italy
- Olivier Sibai, Birkbeck, University of London, UK
- Rafay Siddiqui, Hong Kong Polytechnic University, Hong Kong
- Yveta Simonyan, University of Bath, UK
- Amit Singh, The Ohio State University, USA
- Carrie Skinner Absher, Florida State University, USA
- Robert Smith, Ohio State University, USA
- Rosanna Smith, University of Georgia, USA
- Jane So, University of Washington, USA
- Anirban Som, Indian Institute of Management, Trichy, India
- Sujin Song, Korea University, South Korea
- Elin Brandi Sørensen, University of Southern Denmark, Denmark
- Gerri Spassova, Monash University, Australia
- Susan Spiggle, University of Connecticut, USA
- Ashley Stadler Blank, University of St. Thomas, USA
- Sumire Stanislawski, Tokyo International University, Japan
- Thomas Steiner, Private University Seeburg Castle, Austria
- Maximilian Stieler, University of Bayreuth, Germany
- Jennifer L. Stoner, University of North Dakota, USA
- Rusty Stough, University of Wisconsin, USA
- Sophie Suessenbach, WU Vienna University of Economics and Business, Austria
- Sijie Sun, University of Texas at Arlington, USA
- Courtney Szocs, Portland State University, USA
- Jennifer Takhar, Novancia Business School, Paris, France
- Teck Ming Tan, University of Oulu, Finland
- Derek Theriault, Concordia University, Canada
- Tabitha Thomas, University of Otago, New Zealand
- Veronica Thomas, Towson University, USA
- Ariel Tikotsky, Bar-Ilan University, Israel
- Rita To, University of Houston, USA
- mai khanh tran, University of Birmingham, UK
- Emily Treen, Simon Fraser University, Canada
- Lez Trujillo, University of Illinois at Chicago, USA
- Natalie Truong, Nanyang Technological University, Singapore
- Ke (Christy) Tu, NEOMA Business School, France
- Arianna Uhalde, University of Southern California, USA
- Bryan Usrey, University of Leeds, UK
- Rajiv Vaidyanathan, University of Minnesota Duluth, USA
- Veronica Valli, University of Mannheim, Germany
- Carmen Valor, Universidad Pontificia Comillas, Spain
- Francesca Valsesia, University of Southern California, USA
- Martine van der Heide, University of Groningen, The Netherlands
- Noah VanBergen, University of Cincinnati, USA
- Daniel Villanova, Virginia Tech, USA

WORKING PAPER REVIEWERS (continued)

Anna Vredevelde, Berry College, USA
Tiffany Vu, University of Michigan, USA
Scott Wallace, Duke University, USA
Darlene Walsh, Concordia University, Canada
Jing Wan, University of Groningen, The Netherlands
Jessie Wang, Miami University, USA
Wangshuai Wang, Shanghai Jiao Tong University,
China
Xin Wang, Nanjing University, China
yiru wang, Kent State University, USA
Sarah Wei, University of Alberta, Canada
Evan Weingarten, University of California San
Diego, USA

Carolina Werle, Grenoble Ecole de Management,
France
Sarah Whitley, Boston University, USA
Robert Wilken, ESCP Europe, Germany
Sara Williamson, Saint Joseph's University, USA
Chunyan Xie, Western Norway University of
Applied Sciences, Norway
Ji (Jill) Xiong, National University of Singapore,
Singapore
Adelle X. Yang, National University of Singapore,
Singapore
Amy Yau, Cardiff University, UK
Ning Ye, Temple University, USA

Sunghwan Yi, University of Guelph, Canada
Yanfen You, University of Wisconsin - Milwaukee,
USA
Mujde Yuksel, Suffolk University, USA
Daniel M. Zane, The Ohio State University, USA
Xianfang Zeng, University of Calgary, Canada
Chun Zhang, Concordia University, Canada
Shirley Zhang, University of Chicago, USA
Yuli Zhang, Drexel University, USA
Zhe Zhang, University of Houston, USA
Rui (Juliet) Zhu, CKGSB, China
Laura Zimmermann, London School of Economics,
UK

VIDEOGRAPHY REVIEWERS

Damien Arthur, Zayed University, United Arab
Emirates
Marat Bakpayev, University of Minnesota Duluth,
USA
Cléret Baptiste, University of Rouen, France
Russell Belk, York University, Canada
Alain Decrop, University of Namur, Belgium
Giana Eckhardt, Royal Holloway University of
London, UK
Seth Ellis, University of San Diego, USA
João Fleck, Universidade Federal do Rio Grande do
Sul, Brazil

Kathy Hamilton, University of Strathclyde, UK
Paul Henry, University of Sydney, Australia
Jacob Hiler, The Ohio University, USA
Finola Kerrigan, University of Birmingham, UK
Robert Kozinets, University of Southern California,
USA
Eric Li, University of British Columbia, Canada
Pauline Maclaran, Royal Holloway University of
London, UK
Julie Masset, University of Namur, Belgium
Stephen O'Sullivan, University College Cork,
Ireland

Laura Oswald, Marketing Semiotics Inc., USA
Claudia Quintanilla, ITESM, Mexico
Gulnur Tumbat, San Francisco State University,
USA
Alexandra Vignolles, INSEEC Business School,
France
Luciana Walther, UFSJ Federal University of Sao
Joao del-Rei, Brazil
Yue Wang, SIM University, Singapore
Roel Wijland, University of Otago, New Zealand

Table of Contents

Preface	iii
Conference Committees & Reviewers	iv

2017 ACR Presidential Address

Consumer Research Contribution: Love It or Leave It	1
<i>Margaret C. Campbell, University of Colorado, Boulder, USA</i>	

2017 ACR Fellow Addresses

Consumer Research in the Age of Neoliberal Discontinuities: Incitements to Intellectual Edgework	6
<i>Craig J. Thompson, University of Wisconsin, USA</i>	
The Future History of Consumer Research: Will the Discipline Rise to the Opportunity?	17
<i>Jagdish Sheth, Emory University, USA</i>	
Our Collective Journey	21
<i>Debbie MacInnis, University of Southern California, USA</i>	

Special Session Summaries

It's Not About What You Do, But How You Do It: The Impact of Technology-Enabled Modalities	25
<i>Chair: Melanie S. Brucks, Stanford University, USA</i>	
Paper #1: When Touch Interfaces Boost Consumer Confidence: The Role of Instrumental Need for Touch	
<i>Johannes Hattula, Imperial College Business School, UK</i>	
<i>Walter Herzog, WHU-Otto Beisheim School of Management, Germany</i>	
<i>Ravi Dhar, Yale University, USA</i>	
Paper #2: How the Kinesthetic Properties of a Response Scale Affect Judgment	
<i>Melanie S. Brucks, Stanford University, USA</i>	
<i>Jonathan Levav, Stanford University, USA</i>	
Paper #3: Understanding the Psychology of Smartphone Usage: The Adult Pacifier Hypothesis	
<i>Shiri Melumad, Columbia University, USA</i>	
<i>Michel T. Pham, Columbia University, USA</i>	
Paper #4: When Speech Reflects Mind: Natural Paralinguistic Cues in Voice Convey Presence of Mind	
<i>Juliana Schroeder, University of California, USA</i>	
<i>Alicea J. Lieberman, University of California, USA</i>	

To Be, or Not to Be (Me)? Role of Identity in Creating Custom Products	31
<i>Chair: Jennifer K. Lee, University of Southern California, USA</i>	
Paper #1: Making Meaning: How Consumers Build Their Identity Into Their Own Creative Outcomes	
<i>Kelly B. Herd, University of Connecticut, USA</i>	
<i>Page Moreau, University of Wisconsin, USA</i>	
Paper #2: Being Unique Makes Us Similar: How Example Designs and Their Creators Influence How We Customize	
<i>Jennifer K. Lee, University of Southern California, USA</i>	
<i>Kristin Diehl, University of Southern California, USA</i>	
<i>Lisa A. Cavanaugh, University of British Columbia, Canada</i>	
Paper #3: When “Valentino” Gets Personal: Is Customization the New Luxury?	
<i>Silke Hieke, WU Vienna University of Economics and Business, Austria</i>	
<i>Page Moreau, University of Wisconsin, USA</i>	
<i>Martin Schreier, WU Vienna University of Economics and Business, Austria</i>	
Paper #4: How Cultural Identity Drives the Effectiveness of Mass Customization	
<i>Emanuel de Bellis, University of St. Gallen, Switzerland</i>	
<i>Christian Hildebrand, University of Geneva, Switzerland</i>	
<i>Kenichi Ito, Nanyang Technological University, Singapore</i>	
<i>Andreas Herrmann, University of St. Gallen, Switzerland</i>	
<i>Bernd Schmitt, Columbia University, USA</i>	
Risk Perception and Control in Consumer Healthcare Decisions	36
<i>Chair: Yimin Cheng, Monash University, Australia</i>	
Paper #1: Stigmatized Risk Factors in Health Messages: The Defensive Influence of Moral Identity	
<i>Chethana Achar, University of Washington, USA</i>	
<i>Lea Dunn, University of Washington, USA</i>	
<i>Nidhi Agrawal, University of Washington, USA</i>	
Paper #2: The Burden of Social Proof	
<i>Preyas Desai, Duke University, USA</i>	
<i>Mary Frances Luce, Duke University, USA</i>	
<i>Janet Schwartz, Tulane University, USA</i>	
Paper #3: The Protestant Work Ethic and Preference for Natural Healthcare	
<i>Yimin Cheng, Monash University, Australia</i>	
<i>Anirban Mukhopadhyay, HKUST, Hong Kong</i>	
Paper #4: Unbiased Presentation of Options in Preference-based Medical Decisions	
<i>Tatiana Barakshina, University of Illinois at Chicago, USA</i>	
<i>Alan Malter, University of Illinois at Chicago, USA</i>	
<i>Dimitrios Mastrogiannis, MD, University of Illinois at Chicago, USA</i>	
The Ups and Downs of Uncertainty:	
Novel Antecedents and Consequences of Uncertainty in Consumer Judgment and Choice	42
<i>Chair: M. Yavuz Acikalin, Stanford University, USA</i>	
Paper #1: Guilt-Free Indulgence at the Cost of Certainty	
<i>M. Yavuz Acikalin, Stanford University, USA</i>	
<i>Uzma Khan, University of Miami, USA</i>	
<i>Baba Shiv, Stanford University, USA</i>	
Paper #2: Know Thyself Financially: How Financial Self-Awareness Benefits Consumers	
<i>Nivriti Chowdhry, Rice University, USA</i>	
<i>Utpal Dholakia, Rice University, USA</i>	
Paper #3: The Persuasive Advantage of Change	
<i>Daniella Kupor, Boston University, USA</i>	
<i>Jayson S. Jia, University of Hong Kong, Hong Kong</i>	
<i>Zakary L. Tormala, Stanford University, USA</i>	
Paper #4: How does risk sound? The Fit Between Harsh (Soft) Names and Uncertainty (Certainty)	
<i>Keith Botner, Lehigh University, USA</i>	
<i>Arul Mishra, University of Utah, USA</i>	
<i>Himanshu Mishra, University of Utah, USA</i>	

Impacts of Language on Consumer Behavior 47
Chairs: Ernest Baskin, Saint Joseph's University, USA
Peggy Liu, University of Pittsburgh, USA
Paper #1: The Unexpected Implications of Product Descriptors on Product Perceptions
Ernest Baskin, St. Joseph's University, USA
Peggy Liu, University of Pittsburgh, USA
Paper #2: Make Your Tweety Bird Tweet: Use of Textual Paralanguage in Brand and Spokescharacter Online Communications
Andrea Webb Luangrath, University of Iowa, USA
Joann Peck, University of Wisconsin – Madison, USA
Victor A. Barger, University of Wisconsin – Whitewater, USA
Paper #3: Do you e-care? Analyzing the Impact of Dialogue Dynamics in Online Service Resolutions
Francisco Villarroel Ordenes, University of Massachusetts-Amherst, USA
Dhruv Grewal, Babson, USA
Paper #4: Asymmetry in Emotion Language Is Consequential For Evaluative Judgments
Chiara Longoni, Boston University, USA
Geeta Menon, New York University, USA

Wisdom from Words 52
Chairs: Jonah Berger, University of Pennsylvania, USA
Grant Packard, Wilfrid Laurier University, Canada
Paper #1: Differentiation and Cultural Success
Jonah Berger, University of Pennsylvania, USA
Grant Packard, Wilfrid Laurier University, Canada
Paper #2: How do Authenticity Meanings Evolve? A Longitudinal Analysis of Music Album Reviews
Matteo Corciolani, University of Pisa, Italy
Kent Grayson, Northwestern University, USA
Ashlee Humphreys, Northwestern University, USA
Paper #3: When Words Sweat: Identifying Signals for Loan Default in the Text of Loan Applications
Oded Netzer, Columbia University, USA
Alain Lemaire, Columbia University, USA
Michal Herzenstein, University of Delaware, USA
Paper #4: Make America Tweet Again: A Dynamic Analysis of Micro-blogging During the 2016 U.S. Republican Primary Debates
Ron Berman, University of Pennsylvania, USA
Colman Humphrey, University of Pennsylvania, USA
Shiri Melumad, Columbia University, USA
Robert Meyer, University of Pennsylvania, USA

Brand Journeys: Exploring the Boundaries of Consumer-Brand Relationships 57
Chair: Ignacio Luri, University of Arizona, USA
Paper #1: The Game Day Experience: Consumers, Brands and Brand Celebrations
Tonya Williams Bradford, University of California, Irvine, USA
John F. Sherry, Jr., University of Notre Dame, USA
Paper #2: Follow the Code: The Impact of Linguistic Brand Codes on Brand Journeys
Ignacio Luri, University of Arizona, USA
Hope J. Schau, University of Arizona, USA
Paper #3: Disruptive Self-Brand Play: The Izikhothane Journey
Liezl-Marié Kruger, University of Pretoria, South Africa
Robing A. Coulter, University of Connecticut, USA
Kelly D. Martin, Colorado State University, USA
Paper #4: Where Do We Go From Here? Consumer-Brand Relationships After Brands do Bad
Luciana Velloso, York University, Canada
Eileen Fisher, York University, Canada

Improving Consumer Well-Being Through Meaning vs Happiness	63
<i>Chair: Rhia Catapano, Stanford University, USA</i>	
Paper #1: Meaningful Consumption Provides Long Lasting Benefits at a High Cost	
<i>Erin Percival Carter, University of Colorado Boulder, USA</i>	
<i>Lawrence Williams, University of Colorado Boulder, USA</i>	
Paper #2: Buying Time Promotes Happiness	
<i>Ashley Whillans, Harvard University, USA</i>	
<i>Elizabeth Dunn, University of British Columbia, Canada</i>	
<i>Michael Norton, Harvard University, USA</i>	
Paper #3: Moments that Last: Meaningfulness Slows Happiness Decay	
<i>Rhia Catapano, Stanford University, USA</i>	
<i>David Hardisty, University of British Columbia, Canada</i>	
<i>Jennifer Aaker, Stanford University, USA</i>	
Paper #4: Taking Vacation Increases Meaning at Work	
<i>Colin West, UCLA, USA</i>	
<i>Cassie Mogilner, UCLA, USA</i>	
<i>Sanford DeVoe, UCLA, USA</i>	
Intended and Unintended Signals from Conspicuous Actions	68
<i>Chair: Adelle Yang, National University of Singapore, Singapore</i>	
Paper #1: Prosocial Consequences of Counterfeits: Using Counterfeit Luxury Goods Can Lead to Prosocial Behavior	
<i>Jinjie Chen, University of Minnesota, USA</i>	
<i>Deborah Roedder John, University of Minnesota, USA</i>	
<i>Yajin Wang, University of Maryland, USA</i>	
<i>Courtney A. Carufel, UnitedHealthcare, USA</i>	
Paper #2: When Modesty Pays	
<i>Shalena Srna, University of Pennsylvania, USA</i>	
<i>Alixandra Barasch, New York University, USA</i>	
<i>Deborah Small, University of Pennsylvania, USA</i>	
Paper #3: Promoting Conspicuous Generosity: Justifying the “Brag” by Removing the Choice	
<i>Adelle X. Yang, National University of Singapore, Singapore</i>	
<i>Christopher K. Hsee, University of Chicago, USA</i>	
Paper #4: Prosocial Referral Rewards	
<i>Rachel Gershon, Washington University in St. Louis, USA</i>	
<i>Cynthia Cryder, Washington University in St. Louis, USA</i>	
<i>Leslie John, Harvard University, USA</i>	
A New Look into Intrinsic and Extrinsic Motivations of Variety-seeking.	74
<i>Chairs: Nicole Y. Kim, University of Maryland, USA</i>	
<i>Liang Huang, University of Arizona, USA</i>	
Paper #1: When Variety Isn’t Life’s Spice: The Impact of Implicit Self-theories and Preference Forecasting on Anticipated Consumption Variety	
<i>Joshua J. Clarkson, University of Cincinnati, USA</i>	
<i>Joshua T. Beck, University of Oregon, USA</i>	
<i>Mary C. Murphy, Indiana University, USA</i>	
Paper #2: The Impact of Pain of Payment on Variety Seeking Behavior	
<i>Liang Huang, University of Arizona, USA</i>	
<i>Rafay Siddiqui, The Hong Kong Polytechnic University, Hong Kong</i>	
<i>Anastasiya Pocheptsova Ghosh, University of Arizona, USA</i>	
Paper #3: When Experience is Costly: How Choice Variety Signals Expertise and Status	
<i>Nicole Y. Kim, University of Maryland, USA</i>	
<i>Yajin Wang, University of Maryland, USA</i>	
Paper #4: Assortment Variety and Perceived Expertise	
<i>Aner Sela, University of Florida, USA</i>	
<i>Siân Morgan, University of Florida, USA</i>	
<i>Michal Maimaran, Northwestern University, USA</i>	

Spending and Construing Time to Enhance Well-Being	79
<i>Chair: Jordan Etkin, Duke University, USA</i>	
Paper #1: Goal Conflict Encourages Work and Discourages Leisure	
<i>Jordan Etkin, Duke University, USA</i>	
<i>Aimee Chabot, Duke University, USA</i>	
Paper #2: Control over Time Predicts Greater Life Satisfaction among Millionaires	
<i>Ashley Whillans, Harvard University, USA</i>	
<i>Paul Smeets, Maastricht University, The Netherlands</i>	
<i>Rene Bekkers, VU Amsterdam, The Netherlands</i>	
<i>Michael Norton, Harvard University, USA</i>	
Paper #3: To Thrive or to Suffer at the Hand of Busyness: How Lay Theories of Busyness Influence Psychological Empowerment and Volunteering	
<i>Mahdi Ebrahimi, University of Houston, USA</i>	
<i>Melanie Rudd, University of Houston, USA</i>	
<i>Vanessa M. Patrick, University of Houston, USA</i>	
Paper #4: Rethinking Time for Well-Being	
<i>Hal E. Hershey, UCLA, USA</i>	
<i>Cassie Mogilner Holmes, UCLA, USA</i>	
<i>Jennifer Aaker, Stanford University, USA</i>	
Effects of Resource Scarcity on the Consumer Decision Making Process	85
<i>Chair: Linying (Sophie) Fan, Hong Kong Polytechnic University, Hong Kong</i>	
Paper #1: Resource Scarcity Spurs Effortful Pursuit of Rewards	
<i>Linying (Sophie) Fan, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Zhu Meng, Johns Hopkins University, USA</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
Paper #2: Childhood Resource Scarcity and Planning Fallacy	
<i>Chiraag Mittal, Texas A&M University, USA</i>	
<i>Juliano Laran, University of Miami, USA</i>	
<i>Vladas Griskevicius, University of Minnesota, USA</i>	
Paper #3: When Thoughts of “Having Less” Promote the Desire to Become One’s Best: Reminders of Resource Scarcity Increase the Desire for Self-Improvement	
<i>Kelly Goldsmith, Vanderbilt University, USA</i>	
<i>Ali Tezer, Université de Montréal, Canada</i>	
<i>Caroline Roux, Concordia University, Canada</i>	
Paper #4: Too Constrained to Converse: Financial Constraints Reduce Word-of-Mouth	
<i>Anna Paley, The Ohio State University, USA</i>	
<i>Stephanie M. Tully, University of Southern California, USA</i>	
<i>Eesha Sharma, Dartmouth College, USA</i>	
Willing and Wanting versus Impervious and Resisting: When Consumers Filter In and Out Motivational Cues	91
<i>Chair: Kathleen D. Vohs, University of Minnesota, USA</i>	
Paper #1: Motivated Construals: How Goals Implicitly Change Object Meaning	
<i>Melissa Ferguson, Cornell University, USA</i>	
<i>Szu-chi Huang, Stanford University, USA</i>	
<i>Ying Zhang, Peking University, USA</i>	
<i>Ayelet Fishbach, University of Chicago, USA</i>	
Paper #2: The Effect of Implicit Theories on Progress or Proficiency in Self-Learning	
<i>Lama Lteif, Baruch College, CUNY, USA</i>	
<i>Ozge Aybat, Penn State Harrisburg, USA</i>	
<i>Pragya Mathur, Baruch College, CUNY, USA</i>	
<i>Lauren Block, Baruch College, CUNY, USA</i>	
Paper #3: Images Change Implicit Attitudes More than Text: Evidence from Corrective Advertising Attempts	
<i>Olivier Trendel, Grenoble Ecole de Management, France</i>	
<i>Kathleen D. Vohs, University of Minnesota, USA</i>	
<i>Marc Mazodier, Nottingham University, China</i>	
Paper #4: When Less is More: Counter-Attitudinal Appeals are More Effective When They Are Ignored	
<i>Steven K. Dallas, New York University, USA</i>	
<i>Gavan J. Fitzsimons, Duke University, USA</i>	

Forward Looking Consumers and Firms: Biases and Economic Consequences 96
Chairs: Liz Friedman, Yale University, USA
Joy Lu, University of Pennsylvania, USA
Paper #1: Putting Duration in Durable Goods: Length of Ownership Neglect in Consumer Choice
Liz Friedman, Yale University, USA
Ravi Dhar, Yale University, USA
Shane Frederick, Yale University, USA
Paper #2: Planning to Binge: How Consumers Choose to Allocate Time to View Sequential Versus Independent Media Content
Joy Lu, University of Pennsylvania, USA
Uma R. Karmarkar, Harvard University, USA
Vinod Venkatraman, Temple University, USA
Paper #3: Don't Fear the Meter: How Time Limits Bias Employment Contract Choices
Indranil Goswami, University at Buffalo, USA
Oleg Urminsky, University of Chicago, USA
Paper #4: Variance Neglect in Consumer Search
Nicholas Reinholtz, University of Colorado Boulder, USA
Daniel M. Bartels, University of Chicago, USA
Jonathan Levav, Stanford University, USA
Oded Netzer, Columbia University, USA

New Insights into the Psychology of Product Assortments 101
Chairs: Sarah Wei, University of Alberta, Canada
Tao Tao, The Chinese University of Hong Kong, Hong Kong
Paper #1: Choice vs. Search Mindsets and Consumers' Assortment Size Preference
Benedict G.C. Dellaert, Erasmus University Rotterdam, The Netherlands
Gerald Häubl, University of Alberta, Canada
Sarah Wei, University of Alberta, Canada
Paper #2: The Role of Abundance Salience in Consumers' Assortment Preference
Yangjie Gu, HEC Paris, France
Yuechen Wu, University of Maryland, USA
Paper #3: The Influences of Randomly Displaying a Set of Products on Shopping Evaluations
Tao Tao, The Chinese University of Hong Kong, Hong Kong
Leilei Gao, The Chinese University of Hong Kong, Hong Kong
Paper #4: Global Context: Extremeness Aversion in a Dual Context Setting
Ryan Hamilton, Emory University, USA
Oleg Urminsky, University of Chicago, USA
Gülen Serial-Abi, University of Bocconi, Italy

Influences of Social Comparison on Consumer Judgment and Choice 107
Chairs: Chelsea Galoni, Northwestern University, USA
Aparna A. Labroo, Northwestern University, USA
Paper #1: When Consumer Rivalry Reduces Desire for Innovation
Chelsea Galoni, Northwestern University, USA
Aparna A. Labroo, Northwestern University, USA
Paper #2: News Consumption on Social Media Induces Distinctiveness Seeking
Jaeyeon Chung, Columbia University, USA
Gita V. Johar, Columbia University, USA
Paper #3: The Price of Faith: Religion's Role in the Endowment Effect
Vivian Qin, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA
Richard Staelin, Duke University, USA
Paper #4: Trickle-Round Signals: When Low Status Becomes High
Silvia Bellezza, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA

Givers and Recipients: When and Why They Don't See Eye-to-Eye	112
<i>Chair: Julian Givi, Carnegie Mellon University, USA</i>	
Paper #1: Sentimental Value And Gift Giving: Givers' Fears of Getting it Wrong Prevents Them From Getting it Right	
<i>Julian Givi, Carnegie Mellon University, USA</i>	
<i>Jeff Galak, Carnegie Mellon University, USA</i>	
Paper #2: Sometimes It's Okay to Give a Blender: Giver and Recipient Preferences for Hedonic and Utilitarian Gifts	
<i>Elanor F. Williams, Indiana University, USA</i>	
<i>Emily Rosenzweig, University of Tulane, USA</i>	
Paper #3: The Quality Versus Quantity Trade-Off: A Dual-Risk Account For How Choices For The Self Versus Others Differ	
<i>Peggy Liu, University of Pittsburgh, USA</i>	
<i>Ernest Baskin, St. Joseph's University, USA</i>	
Paper #4: When Giving Thanks Means More: The Impact of Publicly Versus Privately Sharing Gratitude in Gift-Giving	
<i>Lauren Grewal, University of Pittsburgh, USA</i>	
<i>Mary Steffel, Northeastern University, USA</i>	
<i>Dhruv Grewal, Babson College, USA</i>	
Human-Object Relationships:	
How Consumers Interact with Analog and Digital Things in Analog and Digital Worlds	117
<i>Chair: Donna L. Hoffman, George Washington University, USA</i>	
Paper #1: Ambiguity, Ambivalence and Fragility in Human-Object Relationships	
<i>D. Matthew Godfrey, University of Arizona, USA</i>	
<i>Linda L. Price, University of Oregon, USA</i>	
<i>Robert F. Lusch, University of Arizona, USA</i>	
Paper #2: Being Dumb in the Age of Smart: Analogue Object Entanglements	
<i>Mariam Humayun, York University, USA</i>	
<i>Russell Belk, York University, USA</i>	
Paper #3: Enhancing Wellness: Melding Humans and Objects with Common Purpose	
<i>Hope Jensen Schau, University of Arizona, USA</i>	
<i>Ignacio Luri, University of Arizona, USA</i>	
Paper #4: Consumer-Object Relationship Styles in the Internet of Things	
<i>Donna L. Hoffman, George Washington University, USA</i>	
<i>Thomas P. Novak, George Washington University, USA</i>	
The Time of Our Lives: Examining Utility from Experiential Consumption Over Time	123
<i>Chairs: Alixandra Barasch, New York University, USA</i>	
<i>Gabriela Tonietto, Washington University, USA</i>	
Paper #1: The Material-Experiential Asymmetry in Discounting: When Experiential Purchases Lead to More Impatience	
<i>Joseph K. Goodman, The Ohio State University, USA</i>	
<i>Selin A. Malkoc, The Ohio State University, USA</i>	
<i>Mosi Rosenboim, Ben-Gurion University of the Negev, Israel</i>	
Paper #2: Underappreciating the Thrill of the Familiar	
<i>Ed O'Brien, University of Chicago, USA</i>	
<i>Michael Kardas, University of Chicago, USA</i>	
Paper #3: The Influence of Creating Event Markers on Experienced Time and Enjoyment	
<i>Gabriela Tonietto, Washington University in St. Louis, USA</i>	
<i>Alixandra Barasch, New York University, USA</i>	
Paper #4: Compromised Experiences, Compromised Relationships	
<i>Ximena Garcia-Rada, Harvard University, USA</i>	
<i>Michael I. Norton, Harvard University, USA</i>	
<i>Rebecca Ratner, University of Maryland, USA</i>	

Eyes on the Prize: When Rewards Hurt vs. Help Motivation 129
Chairs: Kaitlin Woolley, Cornell University, USA
Ayelet Fishbach, University of Chicago, USA
Paper #1: How “Effort Balancing” Explains Dynamic Effects of Incentives on Motivation
Indranil Goswami, University of Buffalo, USA
Oleg Urminsky, University of Chicago, USA
Paper #2: Donate to Be a Hero: Social Power Moderates the Effect of Incentives on Donation
Zheshuai Yang, National University of Singapore, Singapore
Yan Zhang, National University of Singapore, Singapore
Yih Hwai Lee, National University of Singapore, Singapore
Paper #3: Immediate Rewards Render Activities More Intrinsically Motivating
Kaitlin Woolley, Cornell University, USA
Ayelet Fishbach, University of Chicago, USA
Paper #4: Journey Takes You Beyond the Destination: The Use of Linguistic Metaphor in Sustaining Post Goal-Attainment Motivation
Szu-chi Huang, Stanford University, USA
Jennifer Aaker, Stanford University, USA

Space and Consumption: Using Lefebvre to Examine an Interplay of Multi-Level Forces in the Consumptive Process of Space 135
Chair: Annetta Grant, Queen’s University, Canada
Paper #1: Home is Where the Tension Is? Examining the Cultural Complexity of Creating the Space of Home
Annetta Grant, Queen’s University, Canada
Jay M. Handelman, Queen’s University, Canada
Paper #2: Home, Contested Home à la Home Sweet Home: Understanding Legitimacy in a Midcentury Modern Taste Regime
Ankita Kumar, University of Wisconsin, USA
Craig J. Thompson, University of Wisconsin, USA
Paper #3: How Multiple Stakeholders Produce Branded Urban Spaces
Rodrigo B. Castilhos, Unisinos Business School, Brazil
Paper #4: Representations of Space: Methodological Tensions in Spatial Consumer Research
D. Matthew Godfrey, University of Arizona, USA
Melanie Wallendorf, University of Arizona, USA

What Makes for Impactful Reviews?
New Perspectives on Factors Driving the Influence of Online Reviews 140
Chairs: Hristina Nikolova, Boston College, USA
Alexander Bleier, Boston College, USA
Paper #1: In Mobile We Trust: How Mobile Reviews Influence Consumers’ Purchase Intentions
Lauren Grewal, University of Pittsburgh, USA
Andrew T. Stephen, University of Oxford, UK
Paper #2: Telling Both Sides of the Story: The Role of Risk in the Perceived Helpfulness of Online Reviews
Ann Schlosser, University of Washington, USA
Abhishek Borah, University of Washington, USA
Paper #3: How the Interplay of Consumption Mode and Time Delay Influences the Persuasiveness of Online Reviews
Hristina Nikolova, Boston College, USA
Alexander Bleier, Boston College, USA
Rebecca W. Hamilton, Georgetown University, USA
Paper #4: Relationship Norms in Response to Online Reviews in P2P Exchanges
Raji Srinivasan, University of Texas at Austin, USA
Nailya Ordabayeva, Boston College, USA
Wayne Hoyer, University of Texas at Austin, USA

The Social Context of Consumption 146

Chairs: Kelley Gullo, Duke University, USA

Peggy Liu, University of Pittsburgh, USA

Paper #1: Are My Dog's Treats Making Me Fat? The Effects of Choices Made for Others on Subsequent Choices for the Self

Kelley Gullo, Duke University, USA

Peggy Liu, University of Pittsburgh, USA

Lingrui Zhou, Duke University, USA

Gavan Fitzsimons, Duke University, USA

Paper #2: Mindful Mimicry of Food Choices: Vertically versus Horizontally Differentiated Attributes

Peggy Liu, University of Pittsburgh, USA

Brent McFerran, Simon Fraser University, Canada

Kelly Haws, Vanderbilt University, USA

Paper #3: The Social Path To Satiation: Satisfying Desire Vicariously via Other's Consumption

Yanping Tu, University of Florida, USA

Ayelet Fishbach, University of Chicago, USA

Paper #4: Suit Up and Shop: Social Confidence and the Influence of Consumer Attire on Purchasing Decisions

Keisha Cutright, Duke University, USA

Shalena Srna, University of Pennsylvania, USA

Adriana Samper, Arizona State University, USA

When Low Control and Uncertainty Do Good 152

Chair: Bora Min, University of Southern California, USA

Paper #1: I Can Do More with My Time, but Less with My Money: The Role of Control on Resource Efficacy Perceptions

Jerry Han, University of Texas at Austin, USA

Adriana Samper, Arizona State University, USA

Andrew Gershoff, University of Texas at Austin, USA

Paper #2: Novelty as Risk and Opportunity: Opposite Effects of Low Personal Control and Perceived Unpredictability on Novelty Seeking

Bora Min, University of Southern California, USA

Norbert Schwarz, University of Southern California, USA

Paper #3: The Surprising Effects of Attitude Certainty on Advocacy and Advocacy Receptivity

Lauren Cheatham, University of Hawaii, USA

Zakary Tormala, Stanford University, USA

Paper #4: Desire to Learn About the Category Sparks Preference for Authenticity

Sharlene He, Northwestern University, USA

Gregory S. Carpenter, Northwestern University, USA

Kent Grayson, Northwestern University, USA

How Can I Help You (or Not)?

Choice Architecture and Consumers' Decision Appraisal in Product Assortments 158

Chairs: Liz Friedman, Yale University, USA

Nahid Ibrahim, University of Alberta, Canada

Paper #1: The Dual Impact of Personalized Product Recommendations on Consumers' Subjective Appraisal of Their Product Choices

Gerald Häubl, University of Alberta, Canada

Benedict G. C. Dellaert, Erasmus University Rotterdam, The Netherlands

Murat Usta, Dalhousie University, Canada

Nahid Ibrahim, University of Alberta, Canada

Paper #2: Purchase Quantity Decisions and Default Effects in Assortments

Liz Friedman, Yale University, USA

Jennifer Savary, University of Arizona, USA

Ravi Dhar, Yale University, USA

Paper #3: Mixing It Up: The Influence of Unsystematic Product Arrangements on Assortment Processing, Exploratory Search, and Product Choice

Maik Walter, University of St. Gallen, Switzerland

Christian Hildebrand, University of Geneva, Switzerland

Gerald Häubl, University of Alberta, Canada

Andreas Herrmann, University of St. Gallen, Switzerland

Paper #4: Label Structure, Processing Disfluency, and Consumers' Responses to Credence-Labeled Foods

Jeffrey R. Parker, Georgia State University, USA

Omar Rodriguez-Vila, Georgia Institute of Technology, USA

Ryan Hamilton, Emory University, USA

Iman Paul, Georgia Institute of Technology, USA

Sundar Bharadwaj, University of Georgia, USA

How Do Humans Interact with Machines? Implications for Experience and Identity. 164

Chair: Eugina Leung, Erasmus University Rotterdam, The Netherlands

Paper #1: Object Experience and Object Consumers

Donna Hoffman, George Washington University, USA

Thomas Novak, George Washington University, USA

Paper #2: Automation and Identity

Eugina Leung, Erasmus University Rotterdam, The Netherlands

Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands

Stefano Puntoni, Erasmus University Rotterdam, The Netherlands

Paper #3: Touch-Sensitive Computing Interfaces as Drivers of Experiential Consumption

Christian Hildebrand, University of Geneva, Switzerland

Johnathan Levav, Stanford University, USA

Paper #4: The Soul and the Machine: Humanlike Machines and Machinelike Humans

Russell Belk, York University, USA

Consumer Financial Decision Making Research with Impact 170

Chairs: Quentin André, INSEAD Europe Campus, France

Nicholas Reinholtz, University of Colorado Boulder, USA

Paper #1: Does Access to FICO Scores Influence Financial Behavior? Evidence from a Field Experiment with Student Loan Borrowers

Tatiana Homonoff, New York University, USA

Rourke O'Brien, University of Wisconsin-Madison, USA

Abigail Sussman, University of Chicago, USA

Paper #2: Consumption Responses to Pay Frequency: Evidence from "Extra" Paychecks

Yiwei Zhang, University of Chicago, USA

Paper #3: Can Food Stamps Reduce Food Consumption? The Unintended Consequences of Restricted-Use Funds on Budgeting Decisions

Quentin André, INSEAD Europe Campus, France

Nicholas Reinholtz, University of Colorado-Boulder, USA

John G. Lynch Jr., University of Colorado-Boulder, USA

Paper #4: Shopping Behavior of Food Stamps Users: The Role of Decision Conflict

Dinesh Gauri, University of Arkansas, USA

Yu Ma, McGill University, Canada

Manoj Thomas, Cornell University, USA

Creativity Triggers: The Influence of Novel Antecedents on Creative Cognition.	175
<i>Chairs: Anoosha Izadi, University of Houston, USA</i>	
<i>Lidan Xu, University of Illinois at Urbana-Champaign, USA</i>	
Paper #1: Physically Short, Mentally Flexible? Exploring the Relationship between Stature and Creativity	
<i>Lei Jia, Ohio State University, USA</i>	
<i>Xiaojing Yang, University of Wisconsin-Milwaukee, USA</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
Paper #2: Can Busyness Influence Consumer Creativity?	
<i>Luke Nowlan, University of Miami, USA</i>	
<i>Juliano Laran, University of Miami, USA</i>	
Paper #3: The Way the Wind Blows: How Direction of Airflow Influences Creativity	
<i>Anoosha Izadi, University of Houston, USA</i>	
<i>Melanie Rudd, University of Houston, USA</i>	
<i>Vanessa M. Patrick, University of Houston, USA</i>	
Paper #4: Can Conspicuous Consumption Experience Affect Consumer Creativity?	
<i>Lidan Xu, University of Illinois at Urbana-Champaign, USA</i>	
<i>Ravi Mehta, University of Illinois at Urbana-Champaign, USA</i>	
<i>Jennifer Argo, University of Alberta, Canada</i>	
 360 Degrees of Social Influence:	
How Others' Presence, Attitudes, and Behaviors Change the Way We Think and Behave	181
<i>Chairs: Rachel Meng, Columbia University, USA</i>	
<i>Youjung Jun, Columbia University, USA</i>	
Paper #1: Perceived Social Presence Reduces Fact-Checking	
<i>Youjung Jun, Columbia University, USA</i>	
<i>Rachel Meng, Columbia University, USA</i>	
<i>Gita V. Johar Columbia University, USA</i>	
Paper #2: Seeing the World Through Others' Lens: When Shared Experience Boosts Novelty	
<i>Yanping Tu, University of Florida, USA</i>	
<i>Yang Yang, University of Florida, USA</i>	
<i>Ayelet Fishbach, University of Chicago, USA</i>	
Paper #3: When Moderation Fosters Persuasion: The Persuasive Power of Deviatory Reviews	
<i>Daniella Kupor, Boston University, USA</i>	
<i>Zakary Tormala, Stanford University, USA</i>	
Paper #4: Social Influence, Habits, and Disrupted Performance Environments	
<i>Dean Eckles, Massachusetts Institute of Technology, USA</i>	
<i>Christos Nicolaidis, Massachusetts Institute of Technology, USA</i>	
<i>Sinan Aral, Massachusetts Institute of Technology, USA</i>	
 Temporal Dynamics of Consumption Experiences	186
<i>Chairs: Sarah Wei, University of Alberta, Canada</i>	
<i>Masha Ksendzova, Boston University, USA</i>	
Paper #1: The Primacy of Experience: Comparing the Contributions of Anticipation, Experience, and Memory to Total Utility	
<i>Masha Ksendzova, Boston University, USA</i>	
<i>Michael I. Norton, Harvard University, USA</i>	
<i>Carey K. Morewedge, Boston University, USA</i>	
Paper #2: Consuming Regardless of Quality: Consumers Overestimate the Impact of Quality Differences on the Amount Consumed	
<i>Tom Meyvis, New York University, USA</i>	
<i>Heeyoung Yoon, New York University, USA</i>	
Paper #3: The Imminent-End Effect: How the Approaching End of an Experience Affects Enjoyment	
<i>Sarah Wei, University of Alberta, Canada</i>	
<i>Gerald Häubl, University of Alberta, Canada</i>	
Paper #4: The Role of Holistic Processing on Enjoyment During Simultaneous Consumption	
<i>Robert Smith, Ohio State University, USA</i>	
<i>Joseph P. Redden, University of Minnesota, USA</i>	

Prosociality With Impact: Examining and Overcoming Roadblocks to Effective Altruism	191
<i>Chairs: Masha Ksendzova, Boston University, USA</i>	
<i>Grant E. Donnelly, Harvard University, USA</i>	
Paper #1: “My Donation is More Helpful if I Benefit”: Personal Gains Signal Impact of Prosocial Spending	
<i>Masha Ksendzova, Boston University, USA</i>	
<i>Remi Trudel, Boston University, USA</i>	
Paper #2: Narrow Bracketing in Ethical Trade-Offs	
<i>Christopher Olivola, Carnegie Mellon University, USA</i>	
<i>Silvia Saccardo, Carnegie Mellon University, USA</i>	
Paper #3: Overcoming Overhead Aversion with Choice	
<i>Elizabeth A. Keenan, Harvard University, USA</i>	
<i>Silvia Saccardo, Carnegie Mellon University, USA</i>	
<i>Ayelet Gneezy, University of California San Diego, USA</i>	
Paper #4: Giving to Receive: Moral Self-Regard and Positive Affect Increase when Giving Time but not Money	
<i>Grant E. Donnelly, Harvard University, USA</i>	
<i>Oliver Hauser, Harvard University, USA</i>	
<i>Francesca Gino, Harvard University, USA</i>	
The Curious Case of Risk and Uncertainty	196
<i>Chairs: Luxi Shen, Chinese University of Hong Kong, Hong Kong</i>	
<i>Kristen Duke, University of California, San Diego, USA</i>	
Paper #1: Risks, Interrupted: The Effect of an Interruption on Decisions of Risk	
<i>Daniella Kupor, Boston University, USA</i>	
<i>Wendy Liu, University of California, San Diego, USA</i>	
<i>On Amir, University of California, San Diego, USA</i>	
Paper #2: Changing How Probability is Represented Attenuates the Reflection Effect	
<i>Kristen Duke, University of California, San Diego, USA</i>	
<i>Daniel Mochon, Tulane University, USA</i>	
<i>On Amir, University of California, San Diego, USA</i>	
Paper #3: Not All Money is Created Equal: Neural Signature of Mental Accounting	
<i>Feng Sheng, University of Pennsylvania, USA</i>	
<i>Ming Hsu, University of California, Berkeley, USA</i>	
<i>Baba Shiv, Stanford University, USA</i>	
Paper #4: Field Experiments on the Effectiveness of Uncertain Incentives	
<i>Luxi Shen, Chinese University of Hong Kong, Hong Kong</i>	
<i>Christopher K. Hsee, University of Chicago, USA</i>	
<i>Joachim Talloen, Carnegie Mellon University, USA</i>	
On the Unique Effects of Self-Connected Brands	200
<i>Chairs: Kristen Lane, University of Arizona, USA</i>	
<i>Jennifer Savary, University of Arizona, USA</i>	
Paper #1: When Ignorance is No Longer Bliss: Seeking Threatening Information About Self-Relevant Brands	
<i>Kristen Lane, University of Arizona, USA</i>	
<i>Jennifer Savary, University of Arizona, USA</i>	
<i>Jesper H. Nielsen, University of Arizona, USA</i>	
Paper #2: Brand Complexity’s Impact on Product Liking and Consumer’s Sense of Self	
<i>Maria A. Rodas, University of Minnesota, USA</i>	
<i>Carlos J. Torelli, University of Illinois at Urbana-Champaign, USA</i>	
Paper #3: The Influence of Incidental Tokenism on Attitudes Toward Stereotype-Typifying Products	
<i>Iman Paul, Georgia Institute of Technology, USA</i>	
<i>Jeffrey R. Parker, Georgia State University, USA</i>	
<i>Sara Loughran Dommer, Georgia Institute of Technology, USA</i>	
Paper #4: Brands as Mitigators of Physical Pain: The Mediating Role of Social Connectedness	
<i>Martin Reimann, University of Arizona, USA</i>	
<i>Sandra Nuñez, Tecnológico de Monterrey, Mexico</i>	
<i>Raquel Castaño, Tecnológico de Monterrey, Mexico</i>	

The Effect of Morality in the Marketplace	206
<i>Chairs: Corinne Kelley, Florida State University, USA</i>	
<i>Sara Baskentli, Baruch College, the City University of New York, USA</i>	
Paper #1: Reducing Peak-Hour Subway Crowding: Investigating the Effectiveness of Financial Disincentives	
<i>Leonard Lee, National University of Singapore, Singapore</i>	
<i>Xiuping Li, National University of Singapore, Singapore</i>	
<i>Catherine Yeung, Chinese University of Hong Kong, China</i>	
Paper #2: The Ambassador Effect: A Pre-Commitment Technique to Increase Consumer Prosocial Behavior and Loyalty	
<i>Corinne Kelley, Florida State University, USA</i>	
<i>Maura L. Scott, Florida State University, USA</i>	
<i>Martin Mende, Florida State University, USA</i>	
Paper #3: Consumer Reactions to CSR: Morality Based Differences	
<i>Sara Baskentli, Baruch College, the City University of New York, USA</i>	
<i>Shuili Du, University of New Hampshire, USA</i>	
<i>Sankar Sen, Baruch College, the City University of New York, USA</i>	
<i>CB Bhattacharya, European School of Management and Technology, Germany</i>	
Paper #4: How Beliefs about the Universal Potential for Ideal Body Weight Influence Fairness Perceptions of Price Discrimination	
<i>Shaobo Li, Nanyang Technological University, Singapore</i>	
<i>Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria</i>	
<i>Krishna Savani, Nanyang Technological University, Singapore</i>	
 Changing For The Better: When And Why People Fail (or Succeed) to Engage in Beneficial Behavior Change	 212
<i>Chair: Alicea J. Lieberman, University of California, San Diego, USA</i>	
Paper #1: The Mere Cost Effect	
<i>Alicea J. Lieberman, University of California, San Diego, USA</i>	
<i>On Amir, University of California, San Diego, USA</i>	
<i>Ziv Carmon, INSEAD, Singapore</i>	
Paper #2: Can NFL Players be Viewed as Victims? How Camera Angles Can Increase Sympathy Towards Athletes	
<i>Kirk Kristofferson, Arizona State University, USA</i>	
<i>Andrea C. Morales, Arizona State University, USA</i>	
<i>Brent McFerran, Simon Fraser University, USA</i>	
<i>Darren W. Dahl, University of British Columbia, Canada</i>	
Paper #3: Good People Don't Need Medication	
<i>Sydney E. Scott, University of Pennsylvania, USA</i>	
<i>Justin F. Landy, University of Chicago, USA</i>	
Paper #4: Sustaining Sustainable Hydration: The Importance of Aligning Information Cues to Motivate Long Term Consumer Behavior Change	
<i>Eleanor Putnam-Farr, Yale University, USA</i>	
<i>Rhavi Dhar, Yale University, USA</i>	
 Who's Looking Where? Social Comparisons and Consumer Behavior	 217
<i>Chair: Julian Givi, Carnegie Mellon University, USA</i>	
Paper #1: Experiential Purchases Trigger More Envy Than Material Purchases do	
<i>Ruoyun Lin, University Of Tübingen & Leibniz-Institut Für Wissensmedien, Germany</i>	
<i>Niels Van De Ven, Tilburg University, The Netherlands</i>	
<i>Sonja Utz, University Of Tübingen & Leibniz-Institut Für Wissensmedien, Germany</i>	
Paper #2: Two's Company, Three's a Crowd: Givers' Oversensitivity to Other Givers' Gifts	
<i>Julian Givi, Carnegie Mellon University, USA</i>	
<i>Jeff Galak, Carnegie Mellon University, USA</i>	
<i>Christopher Olivola, Carnegie Mellon University, USA</i>	
Paper #3: The Inequity Penalty: Consumers Show Heightened Sensitivity to Inequitable Treatment in The Context of Apology	
<i>Emily Rosenzweig, Tulane University, USA</i>	
<i>Clayton Critcher, University of California Berkeley, USA</i>	
Paper #4: How Comparison Standards Influence Tradeoffs Between Absolute And Relative Outcomes	
<i>Sokiente Dagogo-Jack, Boston College, USA</i>	
<i>Joshua Beck, University of Oregon, USA</i>	

You, Me, or We? Conceptualizing and Testing Consumer Choices for Others 222
Chairs: Eugenia Wu, University of Pittsburgh, USA
Sarah G. Moore, University of Alberta, Canada
Paper #1: A Conceptual Framework for Understanding Consumer Choices for Others
Peggy Liu, University of Pittsburgh, USA
Steven Dallas, New York University, USA
Gavan Fitzsimons, Duke University, USA
Paper #2: People Make More Informed Choices for Others
Evan Polman, University of Wisconsin-Madison, USA
Paper #3: The Spirit of Giving: Impure Altruism in Funeral Contracts
Ximena Garcia-Rada, Harvard University, USA
Sarah C. Whitley, Boston University, USA
Dan Ariely, Duke University, USA
Carey K. Morewedge, Boston University, USA
Paper #4: Wine for the Table: Self-Construal and Choosing for Large Versus Small Groups
Sarah G. Moore, University of Alberta, Canada
Eugenia Wu, University of Pittsburgh, USA
Gavan Fitzsimons, Duke University, USA

Possessions and Wellbeing: Increasing, Sustaining and Sharing Happiness 228
Chair: Jingshi (Joyce) Liu, HKUST, Hong Kong
Paper #1: My Favorite Thing: How Special Possessions can Increase Subjective Wellbeing
Jingshi (Joyce) Liu, HKUST, Hong Kong
Amy N. Dalton, HKUST, Hong Kong
Anirban Mukhopadhyay, HKUST, Hong Kong
Paper #2: Satisfying Inherent Preferences to Promote Sustainable Happiness
Yanping Tu, University of Florida, USA
Christopher Hsee, University of Chicago, USA
Xilin Li, University of Chicago, USA
Paper #3: When Consumers Prefer to Give Material Gifts instead of Experiences1: The Role of Social Distance
Joseph K. Goodman, The Ohio State University, USA
Sarah Lim, Cornell University, USA
Paper #4: Losing Our Most Special Possession: The Unexpected Positivity of Dying
Amelia Goranson, University of North Carolina at Chapel Hill, USA
Ryan Ritter, University of Illinois at Urbana-Champaign, USA
Adam Waytz, Northwestern University, USA
Michael I. Norton, Harvard University, USA
Kurt Gray, University of North Carolina at Chapel Hill, USA

This Looks, Feels, and Smells Healthy:
Multi-Sensory Tools to Encourage Healthy Consumption 233
Chair: Dipayan Biswas, University of South Florida, USA
Paper #1: The Primacy of “What” Over “How Much”: How Type and Quantity Shape Healthiness Perceptions of Food Portions
Peggy Liu, University of Pittsburgh, USA
Kelly Haws, Vanderbilt University, USA
Karen Scherr, Duke University, USA
Joseph Redden, University of Minnesota, USA
James Bettman, Duke University, USA
Gavan Fitzsimons, Duke University, USA
Paper #2: Some Like it Hot: The Effect of Serving Temperature on Perceived Caloric Content and Intent to Purchase Complementary Food
Sara Baskentli, Baruch College, CUNY, USA
Lauren Block, Baruch College, CUNY, USA
Maureen Morrin, Temple University, USA
Paper #3: Unpacking Self-Control: When More Categories Lead to Lower Calorie Budgets
Miaolei (Liam) Jia, National University of Singapore, Singapore
Aradhna Krishna, University of Michigan, USA
Xiuping Li, National University of Singapore, Singapore
Paper #4: The Smell of Healthy Choices: The Paradoxical Effects of Ambient Scent on Children’s and Adults’ Food Choices
Dipayan Biswas, University of South Florida, USA
Courtney Szocs, Portland State University, USA

The Darker Side of Giving:

Exploring Implicit Motives that Negatively Shape Prosocial Behavior 238

Chair: Coby Morvinski, Interdisciplinary Center Herzliya, Israel

Paper #1: Goal Proximity, Social Information, and Giving: When Norms Backfire

*Matt Lupoli, UC San Diego, USA
Coby Morvinski, Interdisciplinary Center Herzliya, Israel
On Amir, UC San Diego, USA*

Paper #2: Exalted Purchases or Tainted Donations? The Effects of Product Incentives on Charitable Giving

*Jennifer Savary, University of Arizona, USA
Charis Li, University of Florida, USA
and George E. Newman, Yale University, USA*

Paper #3: Opting In to Prosocial and Standard Incentives

*Daniel Schwartz, University of Chile, Chile
Elizabeth A. Keenan, Harvard University, USA
Alex Imas, Carnegie Mellon University, USA
and Ayelet Gneezy, UC San Diego, USA*

Paper #4: The Value of Sacrifice - Relative Evaluation of Prosocial Behavior

*Gil Peleg, Ben-Gurion University, Israel
Oded Lowengart, Ben-Gurion University, Israel
Danny Shapira, Ben-Gurion University, Israel*

Beyond the Negative Consequences of Crowding:

New Psychological Processes and Behavioral Outcomes 243

Chair: Ying Ding, Renmin University of China, China

Paper #1: The Influence of Social Crowding on Creativity

*Ahreum Maeng, University of Kansas, USA
Robin J. Tanner, University of Wisconsin Madison, USA
Kaiyang Wu, University of Wisconsin, Madison, USA*

Paper #2: The Upside of Social Crowding on Consumer Product Preference

*Ying Ding, Renmin University of China, China
Meng Zhu, Johns Hopkins University, USA
Echo Wen Wan, University of Hong Kong, China*

Paper #3: The Impact of Crowding on Calorie Consumption

*Stefan J. Hock, George Mason University, USA
Rajesh Bagchi, Virginia Tech, USA*

Paper #4: Social Crowding versus Spatial Crowding: Differential Influences on Customers' Preference for Anthropomorphized Self-Service Technologies

*Lili Wenli Zou, The Chinese University of Hong Kong, Shenzhen, China
Echo Wen Wan, University of Hong Kong, China
Chi Kin (Bennett) Yim, University of Hong Kong, China*

Illusions of Diagnosticity 248

Chair: Aner Sela, University of Florida, USA

Paper #1: Seeing the Self in Choices: How Intuition Creates Attitude Certainty

*Sam Maglio, University of Toronto, Canada
Taly Reich, Yale University, USA*

Paper #2: How Self-Control Shapes Inferences from Choice

*Aner Sela, University of Florida, USA
Jonah Berger, University of Pennsylvania, USA
Joshua Kim, University of Florida, USA*

Paper #3: Not All Bad Apples Spoil the Bunch: Order Effects on the Evaluation of Groups

*Janina Steinmetz, Utrecht University, The Netherlands
Maferima Toure-Tillery, Northwestern University, USA
Ayelet Fishbach, University of Chicago, USA*

Paper #4: What Two Wrongs Make Alright: Examining the Psychological Factors Underlying the Tendency to Temper Judgments of Intoxicated People

*Kelly Goldsmith, Northwestern University, USA
Hal E. Hershfield, UCLA, USA
Chelsea Galoni, Northwestern University, USA*

How Past, Present, and Expected Future Resource Scarcity Shapes Decision Making for One’s Present and Future Wellbeing. 253
Chairs: Danit Ein-Gar, Tel-Aviv University, Israel
Caroline Roux, Concordia University, Canada
Paper #1: Early-life Scarcity, Life Expectancy, and Decision-Making
Chiraag Mittal, Texas A&M University, USA
Vladas Griskevicius, University of Minnesota, USA
Paper #2: The Food Scarcity Heuristic: People Overestimate the Caloric Content of Scarce Foods
Julio Sevilla, University of Georgia, USA
Anthony Salerno, University of Cincinnati, USA
Paper #3: Acting on Information: Reminders of Resource Scarcity Promote Adaptive Behavior and Flexible Thinking
Kelly Goldsmith, Northwestern University, USA
Caroline Roux, Concordia University, Canada
Anne Wilson, Harvard University, USA
Paper #4: I Don’t Have Now, But I Will Make Sure I Have Later; Saving for the Future Under Resource Scarcity Mindset
Danit Ein-Gar, Tel-Aviv University, Israel
Liat Levontin, Israel Institute of Technology, Israel
Angela Y Lee, Northwestern University, USA

New Insights on the Role of Aesthetics in Consumer Behavior 258
Chairs: Martin Reimann, University of Arizona, USA
C. Clark Cao, University of Arizona, USA
Paper #1: Say It or Show It: Logo Aesthetics and Consumer-Brand Relationship Development
Samuel Carter Morgan, University of Miami, USA
Tatiana Fajardo, Florida State University, USA
Claudia Townsend, University of Miami, USA
Paper #2: Meaningfulness versus Happiness: The Psychological Impact of High and Low Art
Henrik Hagtvædt, Boston College, USA
Kathleen D. Vohs, University of Minnesota, USA
Paper #3: Muji versus Maharaja: When (and Why) Minimalist versus Maximalist Design Differentially Influence Consumer Self-Brand Connection
Ngoc (Rita) To, University of Houston, USA
Vanessa M. Patrick, University of Houston, USA
Paper #4: Beauty and Control in Collecting: How Desire for Control Drives the Aesthetic Pursuit of Complete Collections
C. Clark Cao, University of Arizona, USA
Merrie Brucks, University of Arizona, USA
Martin Reimann, University of Arizona, USA

The Role of Authenticity in Consumer Behavior 264
Chairs: Katherine M. Crain, Duke University, USA
Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria
Paper #1: The Entity-Referent Correspondence Framework of Authenticity
Julie Guidry Moulard, Louisiana Tech University, USA
Randle D. Raggio, University of Richmond, USA
Judith Anne Garretson Folse, Louisiana State University, USA
Paper #2: The Curse of the Original: When Product Change Undermines Authenticity
Rosanna K. Smith, University of Georgia, USA
George E. Newman, Yale University, USA
Ravi Dhar, Yale University, USA
Paper #3: Signal with Cost: When and Why Identity Signals Are Perceived to Be Authentic
Katherine M. Crain, Duke University, USA
James R. Bettman, Duke University, USA
Mary Frances Luce, Duke University, USA
Paper #4: Self-controlled but Not Myself: When Restraint versus Indulgence Undermines Consumers’ Authenticity and Decision Satisfaction
Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria
Erik Hoelzl, University of Cologne, Germany
Carlos Alós-Ferrer, University of Cologne, Germany

It is All in the Pitch: New Insights into How the Framing of a Charitable Appeal Influences Giving 270

Chair: Anthony Salerno, University of Cincinnati, USA

Paper #1: Charitable Giving to Teachers with the Same Name: An Implicit Egotism Field Experiment

*Kurt P. Munz, New York University, USA
Minah H. Jung, New York University, USA
Adam L. Alter, New York University, USA*

Paper #2: Giving to Versus on Behalf of: Charitable Gift Requests Lead to Less Generous Giving

*Adriana Samper, Arizona State University, USA
Cindy Chan, University of Toronto, Canada
Ryan Hamilton, Emory University, USA*

Paper #3: “You Saved a Life”: How Past Donation Use Increases Donor Reactivation via Impact and Warm Glow

*Edlira Shehu, University of Southern Denmark, Denmark
Michel Clement, Universität Hamburg, Germany
Karen P. Winterich, Pennsylvania State University, USA
Ann-Christin Langmaack, Universität Hamburg, Germany*

Paper #4: Prevention versus Treatment: How Negative Emotion and Charitable Appeal Affect Donation Behavior

*Tatiana Fajardo, Florida State University, USA
Anthony Salerno, University of Cincinnati, USA*

Depends on Your Frame of Mind:

The Wide-Ranging Effects of Framing on Judgments, Decisions, and Behaviors 276

Chairs: Michael O’Donnell, University of California, Berkeley, USA

Alice Moon, Disney Research, USA

Paper #1: Elicitation Dependent Preference Reversals Over Consumer Goods

*Michael O’Donnell, University of California, Berkeley, USA
Ellen R.K. Evers, University of California, Berkeley, USA*

Paper #2: Attribute Matching Increases Confidence

*Hannah Perfecto, Washington University in St. Louis, USA
Jeff Galak, Carnegie Mellon University, USA
Joseph P. Simmons, University of Pennsylvania, USA
Leif D. Nelson, University of California, Berkeley, USA*

Paper #3: Psychological Framing as an Effective Approach to Real-life Persuasive Communication

*Sandra Matz, University of Cambridge, USA
Michal Kosinski, Stanford University, USA
David Stillwell, University of Cambridge, USA
Gideon Nave, University of Pennsylvania, USA*

Paper #4: Choosing or Creating? Framing Choices as Design Processes Increases Perceived Customization of Products

*Alice Moon, Disney Research, USA
Maarten Bos, Disney Research, USA*

Your Money or Your Time: How Consumers Perceive and Respond to

Constraints and Tradeoffs in Money and Time 281

Chairs: Christopher Y. Olivola, Carnegie Mellon University, USA

John J. Han, Carnegie Mellon University, USA

Yana Litovsky, Carnegie Mellon University, USA

Paper #1: Consumers Overestimate Others’ Willingness to Pay AND Wait for Goods: New Findings and Insights Concerning the “X-Effect” Bias

*Christopher Y. Olivola, Carnegie Mellon University, USA
John J. Han, Carnegie Mellon University, USA*

Paper #2: Subjective Resource Deprivation: Consumers Feel More Constrained For Spare Resources Than Similar Others

*Jonathan Z. Berman, London Business School, UK
Nazli Gurdamar, London Business School, UK*

Paper #3: The Resource Focus Effect Nudging Consumer Preferences in Time-Money Tradeoffs

*Yana Litovsky, Carnegie Mellon University, USA
Christopher Y. Olivola, Carnegie Mellon University, USA*

Paper #4: How Do Wealth and Time Horizon Affect Investors’ Risk Tolerance? Evidence from the Field

Ethan Pew, Stony Brook University, USA

Nonconscious Attention and Imagery: Impact on Perception and Preference 286
Chairs: Zachary Estes, Bocconi University, Italy
Aradhna Krishna, University of Michigan, USA
Paper #1: Rapid Evidence Accumulation during Brand Choice: An Eye-tracking Analysis
Rik Pieters, Tilburg University, The Netherlands
Tulin Erdem, New York University, USA
Ana Martinovici, Tilburg University, The Netherlands
Paper #2: Eye Buy: Attentional Scope Affects Product Choice via Visual Exploration
Mathias Streicher, University of Innsbruck, Austria
Oliver Büttner, University of Duisburg-Essen, Germany
Zachary Estes, Bocconi University, Italy
Paper #3: Communicating a Promise of Change: Visual Steps Enhance Process Imagery
Luca Cian, University of Virginia, USA
Aradhna Krishna, University of Michigan, USA
Chiara Longoni, Boston University, USA
Paper #4: The Effect of Visual Cues on the Sense of Completeness
Miaolei (Liam) Jia, National University of Singapore, Singapore
Aradhna Krishna, University of Michigan, USA
Xiuping Li, National University of Singapore, Singapore

Me, Myself, and My Variety: Exploring the Relationship Between Variety and the Self 291
Chairs: Kelley Gullo, Duke University, USA
Jacqueline Rifkin, Duke University, USA
Paper #1: How Variety in Self-Expression Undermines Self-Continuity
Jacqueline Rifkin, Duke University, USA
Jordan Etkin, Duke University, USA
Paper #2: Variety Counts: How Variety is Perceived in the Presence of Self-Regulatory Goals
Hoori Rafieian, Drexel University, USA
Yanliu Huang, Drexel University, USA
Barbara E. Kahn, University of Pennsylvania, USA
Paper #3: Get on My Level: Power and Differential Patterns of Attribute-Level Variety Seeking
Jillian Hmurovic, University of Pittsburgh, USA
J. Jeffrey Inman, University of Pittsburgh, USA
Paper #4: Does Variety-Seeking Vary by Time of Day?
Kelley Gullo, Duke University, USA
Jonah Berger, University of Pennsylvania, USA
Jordan Etkin, Duke University, USA
Bryan Bollinger, Duke University, USA

Salience and Consumer Decision-Making 297
Chairs: Milica Mormann, Southern Methodist University, USA
Evan Weingarten, University of Pennsylvania, USA
Paper #1: The Influence of Number Format on Consumer Attention
Marisabel Romero, Colorado State University, USA
Adam W. Craig, University of Kentucky, USA
Anand Kumar, University of South Florida, USA
Milica Mormann, Southern Methodist University, USA
Paper #2: Perceptual and Cognitive Salience and their Effects on Product Valuations
Evan Weingarten, University of Pennsylvania, USA
J. Wesley Hutchinson, University of Pennsylvania, USA
Paper #3: Promotion Emotion: The Salience of Restrictions vs. Rewards in Framing a Deal
Priya Raghurir, New York University, USA
Jeff Inman, University of Pittsburgh, USA
Kirk Wakefield, Baylor University, USA
Paper #4: How Tradeoff Framing Impacts Attribute Focus and Shifts Choices
Minzhe Xu, University of Florida, USA
Oleg Urminsky, University of Chicago, USA

Understanding the Use of Online Reviews and Recommendations in Consumer Judgment and Decision-Making	302
<i>Chair: Elizabeth C. Webb, Columbia University, USA</i>	
Paper #1: The Drivers and Downstream Consequences of the J-Shaped Distribution of Consumer Online Reviews	
<i>Verena Schoenmueller, Columbia University, USA</i>	
<i>Oded Netzer, Columbia University, USA</i>	
<i>Florian Stahl, University of Mannheim, Germany</i>	
Paper #2: Using Reviews to Determine Preferences: How Variance in Customer-Generated Reviews Affects Choice	
<i>Elizabeth C. Webb, Columbia University, USA</i>	
<i>Itamar Simonson, Stanford University, USA</i>	
Paper #3: “Don’t Tell Me What to Do!” Shoppers Rely Less on Consumer Reviews for Experiential than Material Purchases	
<i>Hengchen Dai, Washington University in St. Louis, USA</i>	
<i>Cindy Chan, University of Toronto, Canada</i>	
<i>Cassie Mogilner, UCLA, USA</i>	
Paper #4: Consumers and Managers Reject (Superior) Algorithms Because They Fail to Compare Them to the (Inferior) Alternative	
<i>Berkeley J. Dietvorst, University of Chicago, USA</i>	
When Modern Consumers Face Moral Violations	307
<i>Chair: Stephanie Lin, Singapore Management University, Singapore</i>	
Paper #1: Explaining Moralized Opposition to Genetically Modified Food in the U.S. and Europe	
<i>Sydney Scott, Washington University in St. Louis, USA</i>	
<i>Yoel Inbar, University of Toronto, Canada</i>	
<i>Paul Rozin, University of Pennsylvania, USA</i>	
Paper #2: The First-Mover Authentic Advantage: How Order of Entry Signals the Purity of Motives	
<i>Brooke Kelly, University of Pennsylvania, USA</i>	
<i>Deborah Small, University of Pennsylvania, USA</i>	
Paper #3: When Feeling Good Feels “Wrong”: Avoiding Hedonic Consumption When It Reflects Immoral Character	
<i>Stephanie Lin, Singapore Management University, Singapore</i>	
<i>Taly Reich, Yale University, USA</i>	
<i>Tamar A. Kreps, University of Utah, USA</i>	
Paper #4: Witnessing Moral Violations Increases Conformity in Consumption	
<i>Ping Dong, Northwestern University, USA</i>	
<i>Chen-Bo Zhong, University of Toronto, Canada</i>	
A Bouquet of Scents: Olfactory Effects on Product Evaluation & Consumption.	313
<i>Chairs: Zachary Estes, Bocconi University, Italy</i>	
<i>Varun Sharma, Bocconi University, Italy</i>	
Paper #1: Seeing is Smelling: Visual Images can Induce Olfactory Imagery and Improve Product Evaluations	
<i>Varun Sharma, Bocconi University, Italy</i>	
<i>Zachary Estes, Bocconi University, Italy</i>	
Paper #2: I smell it as if it were here: Can scented advertising boost product appeal?	
<i>Ruta Ruzeviciute, Vienna University of Economics and Business, Austria</i>	
<i>Bernadette Kamleitner, Vienna University of Economics and Business, Austria</i>	
<i>Dipayan Biswas, University of South Florida, USA</i>	
Paper #3: Follow Your Nose When it Sounds Right: How Brand Names Moderate the Influence of Olfactory Cues on Consumer Preferences	
<i>Marina Carnevale, Fordham University, USA</i>	
<i>Rhonda Hadi, University of Oxford, UK</i>	
<i>Ruth Pogacar, University of Cincinnati, USA</i>	
<i>David Luna, City University of New York, USA</i>	
Paper #4: The Effects of Warm versus Cool Ambient Scents on Calorie Consumption	
<i>Sarah Lefebvre, Murray State University, USA</i>	
<i>Dipayan Biswas, University of South Florida, USA</i>	

Choosing How to Choose: New Perspectives on Information Avoidance and Disclosure for Consumer Decision Making	319
<i>Chairs: Kaitlin Woolley, Cornell University, USA</i>	
<i>Jane L. Risen, University of Chicago, USA</i>	
Paper #1: Delegating Decisions: Recruiting Others to Make Choices We Might Regret	
<i>Mary Steffel, Northeastern University, USA</i>	
<i>Elanor F. Williams, Indiana University, USA</i>	
Paper #2: Avoiding Information to Protect a Strong Intuitive Preference	
<i>Kaitlin Woolley, University of Chicago, USA</i>	
<i>Jane L. Risen, University of Chicago, USA</i>	
Paper #3: Disclosure and the Dog That Didn't Bark: Consumers Are Too Forgiving of Missing Information	
<i>Sunita Sah, Cornell University, USA</i>	
<i>Daniel Read, University of Warwick, UK</i>	
<i>Krishna Savani, Nanyang Technological University, Singapore</i>	
Paper #4: Graphic Warning Labels Curb Purchasing of Sugar-Sweetened Beverages	
<i>Grant E. Donnelly, Harvard University, USA</i>	
<i>Laura Y. Zatz, Harvard University, USA</i>	
<i>Daniel A. Svirsky, Harvard University, USA</i>	
<i>Leslie K. John, Harvard University, USA</i>	
The Interplay between Power and Lay Theories in Influencing Consumer Behavior	324
<i>Chairs: Alison Jing Xu, University of Minnesota, USA</i>	
<i>Sharon Shavitt, University of Illinois, USA</i>	
Paper #1: Too Nice to Be Dominant: How Warmth Impacts an Embodiment of Power in Brands	
<i>Jennifer L. Stoner, University of North Dakota, USA</i>	
<i>Carlos J. Torelli, University of Illinois, USA</i>	
Paper #2: Turning a Blind Eye: When Views of Power Differentials Increase Deal Attractiveness	
<i>Michael J. Barone, University of Louisville, USA</i>	
<i>Xingbo Li, University of Louisville, USA</i>	
<i>Keith B. Lyle, University of Louisville, USA</i>	
<i>Karen P. Winterich, Pennsylvania State University, USA</i>	
Paper #3: The Effects of Power on Emotional Responses to Self-Failure and Self-Success	
<i>Claire Heeryung Kim, McGill University, Canada</i>	
<i>DaHee Han, McGill University, Canada</i>	
<i>Derek D. Rucker, Northwestern University, USA</i>	
<i>Adam Duhachek, Indiana University, USA</i>	
Paper #4: Captivated by Change: A Motivational Consequence of Being Powerless	
<i>Alison Jing Xu, University of Minnesota, USA</i>	
<i>Sharon Shavitt, University of Illinois, USA</i>	
<i>Derek D. Rucker, Northwestern University, USA</i>	
Viewing Social Exclusion with a Broader Scope: Contemporary Consequences of Social Exclusion	330
<i>Chairs: Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Lei Su, Hong Kong Baptist University, Hong Kong</i>	
Paper #1: How The Experience of Social Exclusion Influences Visual Density Preference	
<i>Lei Su, Hong Kong Baptist University, Hong Kong</i>	
<i>Echo Wen Wan, University of Hong Kong, Hong Kong</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
Paper #2: The Impact of Social Exclusion on Consumers' Attitudes Toward Probabilistic Selling	
<i>Linying (Sophie) Fan, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
Paper #3: The Broken Bargain: Social Exclusion Reduces Willingness to Incur Personal Costs for the Sake of Society	
<i>Iman Naderi, Fairfield University, USA</i>	
<i>Nicole L. Mead, University of Melbourne, Australia</i>	
Paper #4: Is it Still Important to be a Moral Person When You are Lonely?	
<i>Jinfeng (Jenny) Jiao, SUNY Binghamton University, USA</i>	
<i>Jing (Alice) Wang, University of Iowa, USA</i>	

Challenging Intuitions on Intuitive Statistics	336
<i>Chairs: Quentin André, INSEAD Europe Campus, France</i>	
<i>Nicholas Reinhardt, University of Colorado Boulder, USA</i>	
<i>Bart de Langhe, University of Colorado Boulder, USA</i>	
Paper #1: High Chances and Close Margins: How Different Forecast Formats Shape Beliefs	
<i>Oleg Urminsky, University of Chicago, USA</i>	
<i>Sondre Skarsten, University of Chicago, USA</i>	
<i>Luxi Shen, The Chinese University of Hong-Kong, China</i>	
Paper #2: It's Absolutely Relative: On the Processing of Absolute and Relative Differences	
<i>Dan R. Schley, Erasmus University, The Netherlands</i>	
Paper #3: Variance Spillover in Intuitive Statistical Judgments	
<i>Quentin André, INSEAD Europe Campus, France</i>	
<i>Nicholas Reinhardt, University of Colorado-Boulder, USA</i>	
<i>Bart de Langhe, Ramon Llull University, Spain</i>	
Paper #4: Combining Estimates of Epistemic and Aleatory Uncertainty to Reduce Overprecision	
<i>Daniel G. Goldstein, Microsoft Research, USA</i>	
<i>David Rothschild, Microsoft Research, USA</i>	
It's A Brave New World -	
The Consequences of Consumers' Self-Disclosure in Online Settings	341
<i>Chairs: Francesca Valsesia, University of Southern California, USA</i>	
<i>Kristin Diehl, University of Southern California, USA</i>	
Paper #1: See What I Did or See What I Have: Impression Management Using Experiences Versus Material Goods	
<i>Francesca Valsesia, University of Southern California, USA</i>	
<i>Kristin Diehl, University of Southern California, USA</i>	
Paper #2: Temporary Sharing, Enduring Impressions: Self-Presentation in the Digital Age	
<i>Roland Ruppell, Università della Svizzera Italiana, Switzerland</i>	
<i>Reto Hofstetter, Università della Svizzera Italiana, Switzerland</i>	
<i>Leslie K. John, Harvard University, USA</i>	
Paper #3: Bragging through an Intermediary	
<i>Irene Scopelliti, City University London, UK</i>	
<i>Joachim Vosgerau, Bocconi University, Italy</i>	
<i>George Loewenstein, Carnegie Mellon University, USA</i>	
Paper #4: How Audience Engagement (in the Form of Likes vs. Comments) on Social Media Posts Influences Subsequent Self-Disclosure	
<i>Yuheng Hu, University of Illinois at Chicago, USA</i>	
<i>David Gal, University of Illinois at Chicago, USA</i>	
New Perspectives on Reference Points and Consumer Motivation	346
<i>Chair: Scott Wallace, Duke University, USA</i>	
Paper #1: Goal Specificity and the Dynamics of Consumer Motivation: The Role of Reference Point Focus	
<i>Scott Wallace, Duke University, USA</i>	
<i>Jordan Etkin, Duke University, USA</i>	
Paper #2: Multiple Goals as Reference Points	
<i>Evan Weingarten, University of Pennsylvania, USA</i>	
<i>Sudeep Bhatia, University of Pennsylvania, USA</i>	
<i>Barbara Mellers, University of Pennsylvania, USA</i>	
Paper #3: Why Do Goals Cause Cheating? Unpacking the Confounding Effects of Mere Goals, Social Comparisons, and Pay	
<i>Matthew Chao, Williams College, USA</i>	
<i>Ian Larkin, University of California, Los Angeles, USA</i>	
Paper #4: Anchors or Targets? An Examination of Credit Card Statements	
<i>Daniel M. Bartels, The University of Chicago, USA</i>	
<i>Abigail B. Sussman, The University of Chicago, USA</i>	

New Perspectives on Anthropomorphism: Examining the Role of Anthropomorphism in Financial Decision-Making and Consumer Welfare 350

Chair: Eric Levy, University of Cambridge, UK

Paper #1: Is Money Worth Saving? Money Anthropomorphism Increases Saving Behavior

*Lili Wang, Zhejiang University, China
Sara Kim, University of Hong Kong, Hong Kong
Xinyue Zhou, Zhejiang University, China*

Paper #2: Beauty (Value) Is in the Eye of the Beholder: How Anthropomorphism Affects the Pricing of Used Products

*Junhee Kim, Drexel University, USA
Marina Puzakova, Lehigh University, USA
Hyokjin Kwak, Drexel University, USA
Haeyoung Jeong, Drexel University, USA*

Paper #3: Moral Identity and Brand Anthropomorphism

*Eric Levy, University of Cambridge, UK
Sara Kim, University of Hong Kong, Hong Kong
Americus Reed II, University of Pennsylvania, USA*

Paper #4: The Influence of Anthropomorphism on Choosing Multiple Products from an Assortment

*Rocky Peng Chen, Hong Kong Baptist University, Hong Kong
Echo Wen Wan, University of Hong Kong, Hong Kong*

Why Aren't We Intrinsically Motivated Enough? Novel Insights into the Origination and Expression of Intrinsic Motivation 356

Chairs: Yuechen Wu, University of Maryland, USA

Meng Zhu, Johns Hopkins University, USA

Paper #1: Scarcity and the Intrinsic Motivation to Learn

*Yuechen Wu, University of Maryland, USA
Meng Zhu, Johns Hopkins University, USA*

Paper #2: The Dual Effect of Subjective Busyness on Consumer Motivation

*Keith Wilcox, Columbia University, USA
Juliano Laran, University of Miami, USA*

Paper #3: Process versus Outcome: How Envy and Goal Framing Affect Motivation

*Anthony Salerno, University of Cincinnati, USA
Juliano Laran, University of Miami, USA
Chris Janiszewski, University of Florida, USA*

Paper #4: Underestimating the Importance of Expressing Intrinsic Motivation in Job Interviews

*Kaitlin Woolley, University of Chicago, USA
Ayelet Fishbach, University of Chicago, USA*

Come and Have Fun with Us: Social Influences and Social Perception in Leisure Activities 362

Chairs: Yuechen Wu, University of Maryland, USA

Rebecca K. Ratner, University of Maryland, USA

Paper #1: The Decision to Share: From the Joy of Self-Possession to the Joy of Shared Consumption

*Adelle X. Yang, National University of Singapore, Singapore
Ann McGill, University of Chicago, USA*

Paper #2: Getting the Most from Shared Experiences: The Undervalued Impact of Clear Objectives

*Yuechen Wu, University of Maryland, USA
Nicole Y. Kim, University of Maryland, USA
Rebecca K. Ratner, University of Maryland, USA
Rebecca W. Hamilton, Georgetown University, USA*

Paper #3: Celebrations and Social Support

*Danielle J. Brick, University of New Hampshire, USA
Kelley Gullo, Duke University, USA
James R. Bettman, Duke University, USA
Tanya L. Chartrand, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA*

Paper #4: Wasting Time and Money? How Consumers Evaluate Others' Resource (Mis)Management

*Jenny G. Olson, Indiana University, USA
Brent McFerran, Simon Fraser University, Canada
Andrea C. Morales, Arizona State University, USA
Darren W. Dahl, University of British Columbia, Canada*

Age-related Changes in Decision Preferences: From Mechanisms to Interventions	367
<i>Chair: Vinod Venkatraman, Temple University, USA</i>	
Paper #1: Affective Forecasting Improves Across the Life Span	
<i>Lisa Zaval, Columbia University, USA</i>	
<i>Ye Li, University of California, Riverside, USA</i>	
<i>Eric J. Johnson, Columbia University, USA</i>	
Paper #2: Loss Framing Attenuates Delay Discounting in Older Adults	
<i>William Hampton, Temple University, USA</i>	
<i>Vinod Venkatraman, Temple University, USA</i>	
Paper #3: Taking the Best and Worst First: Age Differences in Preferences for Monetary and Hedonic Sequences	
<i>JoNell Strough, West Virginia University, USA</i>	
<i>Wändi Bruine de Bruin, University of Leeds, UK and Carnegie Mellon University, USA</i>	
<i>Andrew M. Parker, RAND Corporation, USA</i>	
Paper #4: Individual Differences in Skewed Financial Risk Taking Across the Adult Life Span	
<i>Kendra Seaman, Yale University, USA</i>	
<i>Josiah K. Leong, Stanford University, USA</i>	
<i>Charlene C. Wu, Stanford University, USA</i>	
<i>Brian Knutson, Stanford University, USA</i>	
<i>Greg Samanez-Larkin, Yale University, USA</i>	
It's Not What You Say, It's How You Say It:	
New Effects of Choice Elicitation Modes on Decision Outcomes.	373
<i>Chair: Gia Nardini, University of Denver, USA</i>	
Paper #1: Choosing vs. Ranking: Elicitation Modes and Their Impact on Consumers' Subjective Experience of Difficulty	
<i>Yonat Zwebner, University of Pennsylvania, USA</i>	
<i>Rom Y. Schrift, University of Pennsylvania, USA</i>	
Paper #2: When Simplified Choices Backfire: The Role of a Maximizing Mindset	
<i>Gia Nardini, University of Denver, USA</i>	
<i>Aner Sela, University of Florida, USA</i>	
Paper #3: The Effect of Stated Preference on Subsequent Revealed Preference	
<i>Coby Morvinski, IDC Herzliya, USA</i>	
<i>Silvia Saccardo, Carnegie Mellon University, USA</i>	
<i>On Amir, University of California San Diego, USA</i>	
Paper #4: Drivers of Sequential Shortlist Decisions	
<i>Wendy Liu, University of California San Diego, USA</i>	
<i>Itamar Simonson, Stanford University, USA</i>	
Competitive Papers—Full	
Tailoring Elderly Patients' Identities through Healthcare Service Relationships:	
Toward a Guardian Conception of Vulnerable Publics' Identities.	379
<i>Abdelmajid Amine, Université Paris-Est, France</i>	
<i>Audrey Bonnemaizon, Université Paris-Est, France</i>	
<i>Margaret Josion-Portail, Université Paris-Est, France</i>	
Few and Far Between: Identifying Measures of Advertising Visuals that	
Correlate with Neural Engagement and Sales	383
<i>Samuel B. Barnett, Northwestern University, USA</i>	
<i>Moran Cerf, Northwestern University, USA</i>	
Turkish Consumers' Response to Westernised Ethical Consumption Culture:	
An Acculturation Theory Approach	387
<i>Gaye Bebek, Coventry University, United Kingdom</i>	
Ephemeral Consumerism: Crossing Territories of the Indian Female Body	394
<i>Anoop Bhogal-Nair, De Montfort University, United Kingdom</i>	
<i>Andrew M. Lindridge, Newcastle University, United Kingdom</i>	

Is Sweaty Betty a Hollister Follower? Parsing the Poetics of Branding	397
<i>Stephen Brown, Ulster University, Northern Ireland</i>	
<i>Pauline Maclaran, University of London, UK</i>	
<i>Sharon Ponsonby-McCabe, Ulster University, Northern Ireland</i>	
<i>Lorna Stevens, University of Westminster, UK</i>	
<i>Roel Wijland, Otago University, New Zealand</i>	
Extensions, Intensities and the Convergent Advertisement	401
<i>Hélène de Burgh-Woodman, University of Notre Dame, Australia</i>	
Global Local Dialectical Relationship in a Mediterranean Context	406
<i>Amina Djedidi, Université Paris-Est, France</i>	
<i>Nacima Ourahmoune, KEDGE Business School, France</i>	
<i>Daniele Dalli, Università di Pisa, Italy</i>	
Gender as a Softly Assembled Performance: Interrogating the Tenuous Possession-Self Link	
When Women Don't Want Pink and Men Don't Want Blue	410
<i>Carly Drake, University of Calgary, Canada</i>	
<i>Scott Radford, University of Calgary, Canada</i>	
Web 2.0: Online Communities or Bla-Bla Land?	415
<i>Natalia Drozdova, Norwegian School of Economics, Norway</i>	
<i>Denis Utochkin, Norwegian School of Economics, Norway</i>	
<i>Ingeborg A. Kleppe, Norwegian School of Economics, Norway</i>	
Sustaining Behavioural Change: The Power of Positive Emotions	419
<i>H.P. Samantha Gallage, Nottingham University, UK</i>	
<i>Teresa Heath, Nottingham University, UK</i>	
<i>Caroline Tynan, Nottingham University, UK</i>	
“Mirror Mirror on the Wall, Who is Real of Them All?” – The Role of Augmented Self, Expertise	
and Personalisation in the Experience with Augmented Reality Mirror	423
<i>Ana Javornik, Newcastle University, UK</i>	
<i>Marta Pizzetti, Università della Svizzera italiana, Switzerland</i>	
Not Every Talk Follows A Walk: The Importance of	
Considering SR Investors Over General Population When Analyzing SRI Behavior	428
<i>Fatima Yaqub Khan, Minerva School at KGI, USA</i>	
<i>Sadia Yaqub Khan, The College of Saint Rose, USA</i>	
Why Don't Parents Walk Their Talk?	
Exploring Parental Deviant Food Socialization Behaviors within the Family	433
<i>Tanyatip Kharuhayothin, University of Manchester, UK</i>	
<i>Ben Kerrane, Lancaster University, UK</i>	
Guilt and Loathing in the Kitchen. Why Sustainable Consumers Waste Food	438
<i>Karolina Kraus, Bauhaus-University of Weimar, Germany</i>	
<i>Julie Emontspool, University of Southern Denmark, Denmark</i>	
The Art of Solo Dining: A Rhythmanalysis of Restaurant Spaces	443
<i>Ai-Ling Lai, University of Leicester, UK</i>	
<i>Ming Lim, University of Liverpool, UK</i>	
Repositioning via Abstraction	449
<i>Jonathan Lee, University of La Verne, USA</i>	
<i>Heungsun Hwang, McGill University, Canada</i>	
<i>An Tran, University of La Verne, USA</i>	
In Pursuit of Happiness: Phenomenological Study of The KonMari Decluttering Method	454
<i>Hsin-Hsuan Meg Lee, ESCP Europe, UK</i>	
When the Two of Us Care Too Much for Each Other:	
Subversive Effects of Altruism in Joint Dyadic Decisions	458
<i>Hristina Nikolova, Boston College, USA</i>	
<i>Sara Dommer, Georgia Tech, USA</i>	
<i>Chadwick Miller, Washington State University, USA</i>	
<i>Michael Lowe, Georgia Tech, USA</i>	

Tra il Dire e il Fare c'è di mezzo il Mare*: An Investigation into the Ethical Purchasing Gap
***Italian Proverb: Between Saying and Doing is half a Sea** 461
Andreas Plank, University of Innsbruck, Austria

Men will be Men, Women will be Women: The Case of Cross-Gender Brand Extensions. 465
Aravind Reghunathan, Indian Institute of Management Kozhikode, India
Joshy Joseph, Indian Institute of Management Kozhikode, India

A Cultural View on Healthcare Access: Considering the Hispanic Perspective 469
Sharon Schembri, University of Texas Rio Grande Valley, USA
Suad Ghaddar, University of Texas Rio Grande Valley, USA

**Brand-Mediated Ideological Edgework:
Negotiating the Aestheticized Human Body on Instagram - The Case of American Apparel** 474
Jonathan D. Schöps, University of Innsbruck, Austria
Philipp K. Wegerer, University of Innsbruck, Austria
Andrea Hemetsberger, University of Innsbruck, Austria

Impact of Numerosity on Allocation Behavior 479
Sunaina Shrivastava, University of Iowa, USA
Gaurav Jain, University of Iowa, USA
Dhananjay Nayakankuppam, University of Iowa, USA
Gary J Gaeth, University of Iowa, USA
Irwin P Levin, University of Iowa, USA

The Effect of Temporal Distance on Self-Presentation by Brand 481
Teck Ming Tan, University of Oulu, Finland
Jari Salo, University of Helsinki, Finland
Jouni Juntunen, University of Oulu, Finland
Ashish Kumar, Aalto University, Finland

Constructing a Narrative Identity of Los Angeles Through a Gastronomic Adventure 486
Mine Üçok Hughes, California State University Los Angeles, USA
Tony Stovall, Towson University, USA
Rossen Ventsislavov, Woodbury University, USA

Corporate Branding as a Source for Employees' Moral Identity Work. 489
Philipp Wegerer, University of Innsbruck, Austria

Competitive Papers—Extended Abstracts

**When Doing Healthy is Scary: The Case of Detection
versus Prevention Health Messages** 493
Chethana Achar, University of Washington, USA
Meng-Hua Hsieh, Pennsylvania State University-Harrisburg, USA
Nidhi Agrawal, University of Washington, USA

Consumer-Brand Relationships in Conspiratorial Narratives. 496
Mathieu Alemany-Oliver, Toulouse Business School, France

**Unsustainable Luxury and Negative Word-Of-Mouth:
The Role of Shame and Consumers' Cultural Orientation.** 498
Cesare Amatulli, University of Bari, Italy
Matteo De Angelis, LUISS Guido Carli University, Italy
Giovanni Pino, University of Salento, Italy
Gianluigi Guido, University of Salento, Italy

The Belonging Process: Elements and Enactment within a Consumption Context 500
Robert Arias, University of Illinois at Urbana-Champaign, USA
Cele Otnes, University of Illinois at Urbana-Champaign, USA

**Catching the Health Wagon: Consumers' Strategies of Control
in Healthy Food Consumption** 503
S. Sinem Atakan, Ozyegin University, Turkey
Meltem Ture, Université de Lille, France

It Happens Because I'm Watching It: The Effect of Observing an Uncertain Event on Probability Estimation	507
<i>Amin Attari, University of Kansas, USA</i>	
<i>Promothesh Chatterjee, University of Kansas, USA</i>	
<i>Frank Cabano, University of Kansas, USA</i>	
Authenticity Under Threat: When Social Media Influencers Need To Go Beyond Passion	509
<i>Alice Audrezet, Institut Supérieur de Gestion, Paris, France</i>	
<i>Gwarlann Caffier de Kerviler, Lille Catholic University, France</i>	
<i>Julie Guidry Moulard, Louisiana Tech University, USA</i>	
WeChat Brands: Communal Interaction and Brand Publicity in Chinese Social Media	511
<i>Yuxin Bai, Lancaster University, UK</i>	
<i>Xin Zhao, Lancaster University, UK</i>	
<i>Hayley Cocker, Lancaster University, UK</i>	
What You Are Getting and What You Will Be Getting: Testing Whether Verb Tense Affects Intertemporal Choices	512
<i>Akshina Banerjee, University of Minnesota, USA</i>	
<i>Oleg Urminsky, University of Chicago, USA</i>	
Pain of Payment and the Moral Tax: the Neural Basis of the Credit Card Effect	514
<i>Sachin Banker, University of Utah, USA</i>	
<i>Derek Dunfield, Massachusetts Institute of Technology, USA</i>	
<i>Alex Huang, Massachusetts Institute of Technology, USA</i>	
<i>Drazen Prelec, Massachusetts Institute of Technology, USA</i>	
I Don't Care if You're Committed, But "We" Do: How Group Brand Connections Affect Access-Based Brand Extension Evaluations	515
<i>Aaron J. Barnes, University of Illinois at Urbana-Champaign, USA</i>	
<i>Tiffany White, University of Illinois at Urbana-Champaign, USA</i>	
When Words Hurt – Emotional Contagion in a Company's Facebook Apology	518
<i>Madeline Barth, University of Mannheim, Germany</i>	
<i>Elisa Konya-Baumbach, University of Mannheim, Germany</i>	
Are Dark and Frightening Story Worlds Inspirational? An Analysis of the Narrative Persuasion Process	520
<i>Kerstin Barth-Strieder, Johannes Gutenberg University, Germany</i>	
<i>Frank Huber, Johannes Gutenberg University, Germany</i>	
\$100 a month or \$1,200 a year: Impact of Regulatory Focus on the Evaluation of Temporally Framed Attributes	525
<i>Shankha Basu, University of Leeds, UK</i>	
<i>Sharon Ng, Nanyang Technological University, Singapore</i>	
I've Got the Power: Investigating Dynamic Brand Logos	527
<i>Stacey Baxter, University of Newcastle, Australia</i>	
<i>Jasmina Ilicic, Monash University, Australia</i>	
Special Memories Require Special Protection.	530
<i>Kara Bentley, Chapman University, USA</i>	
<i>Priyali Rajagopal, University of South Carolina, USA</i>	
The Implications of Self-regulation Difference Between Heavy Versus Light Media Multitaskers For Advertising Effectiveness.	532
<i>Emma Beuckels, Ghent University, Belgium</i>	
<i>Snezhanka Kazakova, Ghent University, Belgium</i>	
<i>Verolien Cauberghe, Ghent University, Belgium</i>	
<i>Liselot Hudders, Ghent University, Belgium</i>	
<i>Patrick De Pelsmacker, University of Antwerp, Belgium</i>	
Can Concern for the Disadvantaged Promote Disadvantage? Neglecting the Benefits of Exploitation	534
<i>Amit Bhattacharjee, Erasmus University Rotterdam, The Netherlands</i>	
<i>Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands</i>	

Consuming the Streets: Story of a Street Peddler	537
<i>Ayşe Binay Kurultay, Kadir Has University, Turkey</i>	
Sneakers Made of Used Plastic? How Consumers’ Implicit Theories Affect Buying Recycled Products	539
<i>Alessandro Biraglia, University of Leeds, UK</i>	
<i>J Joško Brakus, University of Leeds, UK</i>	
<i>Ambra Brizi, Sapienza University of Rome, Italy</i>	
<i>Lucia Mannetti, Sapienza University of Rome, Italy</i>	
Putting on a Show or Showing My True Self? Exploring Consumers’ Desire to Signal Accurate versus Enhanced Identities	540
<i>Daniel Brannon, University of Northern Colorado, USA</i>	
<i>Naomi Mandel, Arizona State University, USA</i>	
Trendy or Timeless? The Effect of Need for Uniqueness and Pressure on Choice	545
<i>Susan Calderon, IE University, Spain</i>	
<i>Antonios Stamatogiannakis, IE University, Spain</i>	
<i>Dilney Gonçalves, IE University, Spain</i>	
The Mortgage Illusion	547
<i>Nelson Camanho, Católica-Lisbon School of Business and Economics, Portugal</i>	
<i>Daniel Fernandes, Católica-Lisbon School of Business and Economics, Portugal</i>	
Rightist Resistance To The Market	549
<i>Marine Cambefort, Université de Strasbourg, France</i>	
<i>Fabien Pecot, University of York, UK</i>	
Non-Participants and Brands’ Communication of Co-Creational Efforts: A Matter of Trust	551
<i>Fanny Cambier, Université catholique de Louvain (UCL), Belgium</i>	
<i>Ingrid Poncin, Université catholique de Louvain (UCL), Belgium</i>	
Consumer Underestimation of Energy Use and Greenhouse Gas Emissions Associated with Food	553
<i>Adrian R. Camilleri, RMIT University, Australia</i>	
<i>Richard P. Larrick, Duke University, USA</i>	
<i>Shajuti Hossain, Duke University, USA</i>	
<i>Dalia Patino-Echeverri, Duke University, USA</i>	
The Unexpected Consequences of Beautiful Products: Sacredness, Awe and Forgiveness	555
<i>Ludovica Cesaro, University of Pennsylvania, USA</i>	
<i>Patti Williams, University of Pennsylvania, USA</i>	
<i>Eugenia Wu, University of Pittsburgh, USA</i>	
<i>Keisha Cutright, Duke University, USA</i>	
I Am a Fashionista and I (think) I Know It: The Role of Fashion Knowledge in Preferences for Counterfeits	558
<i>Ludovica Cesaro, University of Pennsylvania, USA</i>	
<i>Silvia Bellezza, Columbia University, USA</i>	
The Price is Right: Perceptions of Control Influence How Consumers Use Price In Judging Product Quality	561
<i>Boyoun (Grace) Chae, Temple University, USA</i>	
<i>JoAndrea Hoegg, University of British Columbia, Canada</i>	
<i>Keisha Cutright, Duke University, USA</i>	
Can Sexy Images Drag You Down? How Gender and Self-construal Impact Subsequent Indulgent Consumption	563
<i>Chun-Tuan Chang, National Sun Yat-sen University, Taiwan</i>	
<i>Xing-Yu Chu, National Sun Yat-sen University, Taiwan</i>	
<i>Shr-Chi Wang, National Sun Yat-sen University, Taiwan</i>	
<i>Dickson Tok, National Sun Yat-sen University, Taiwan</i>	

Does Bigger Equal Better? How Product-Model Size Ratio and Brand's Social Role Impact Ad Effectiveness	565
<i>Chun-Tuan Chang, National Sun Yat-sen University, Taiwan</i>	
<i>Xing-Yu Chu, National Sun Yat-sen University, Taiwan</i>	
<i>Hsin-Yi Wang, National Sun Yat-sen University, Taiwan</i>	
<i>Dickson Tok, National Sun Yat-sen University, Taiwan</i>	
Unbearable Lightness of Shaky Inferences: When Misused Product Inference is Detrimental to Verified Product Hypotheses	567
<i>Rui Chen, University of Georgia, USA</i>	
<i>Marcus Cunha Jr., University of Georgia, USA</i>	
Consumer Trust Erosion During an Industry-Wide Crisis: The Central Role of Legitimacy Judgment	569
<i>Shijiao Chen, University of Otago, New Zealand</i>	
<i>Hongzhi Gao, Victoria University, New Zealand</i>	
<i>Damien Mather, University of Otago, New Zealand</i>	
<i>John Knight, University of Otago, New Zealand</i>	
Color Lightness Shapes Hierarchy: When Darker Comes First	571
<i>Myungjin Chung, University of Texas at Arlington, USA</i>	
<i>Ritesh Saini, University of Texas at Arlington, USA</i>	
Obesity and Sensitivity of Food Perceptions and Preferences to Marketing Actions	572
<i>Yann Cornil, University of British Columbia, Canada</i>	
<i>Pierre Chandon, INSEAD, France</i>	
<i>Hilke Plassmann, INSEAD, France</i>	
<i>Liane Schmidt, INSEAD, France</i>	
<i>Judith Aron-Wisniewsky, IHU-ICAN - Hopital Pitié-Salpêtrière, France</i>	
<i>Karine Clément, IHU-ICAN - Hopital Pitié-Salpêtrière, France</i>	
Sensory or Nutrition Menu Labeling? A Field Experiment in Aligning Public Health and Restaurant Business Goals	574
<i>Yann Cornil, University of British Columbia, Canada</i>	
<i>Pierre Chandon, INSEAD, France</i>	
Don't Count Calorie Labeling Out: Calorie Counts on the Left Side of Menu Items Lead to Lower Calorie Food Choices	576
<i>Steven Dallas, New York University, USA</i>	
<i>Peggy Liu, University of Pittsburgh, USA</i>	
<i>Peter Ubel, Duke University, USA</i>	
How Consumption Experience Valence and Perceived Assortment Size Interact to Shape Word-of-Mouth Sharing.	578
<i>Matteo De Angelis, Luiss University, Italy</i>	
<i>Gregory S. Carpenter, Northwestern University, USA</i>	
<i>David Dubois, INSEAD, France</i>	
<i>Michele Costabile, Luiss University, Italy</i>	
Intrusive Advertisements in the Online Context: A Meta-Analysis of the Antecedents and Consequent Constructs	580
<i>Fernando de Oliveira Santini, Unisinos, Brazil</i>	
<i>Frederike Monika Budiner Mette, ESPM Sul, Brazil</i>	
<i>Valesca Persch Reichelt, ESPM Sul, Brazil</i>	
<i>Wagner Junior Ladeira, Unisinos, Brazil</i>	
<i>Claudio Hoffmann Sampaio, PUC RS, Brazil</i>	
Why Privacy is Only Salient When not Making Actual Decisions: How Congruency Drives the Privacy Paradox	582
<i>Joris Demmers, University of Amsterdam, The Netherlands</i>	
<i>Alfred F. Zerres, University of Amsterdam, The Netherlands</i>	
<i>Willemijn M. van Dolen, University of Amsterdam, The Netherlands</i>	

Reason-Product (In)compatibility:	
Affective and Cognitive Factors in Consumer Reasoning	583
<i>Alexander DePaoli, Stanford University, USA</i>	
<i>Uzma Khan, University of Miami, USA</i>	
<i>Itamar Simonson, Stanford University, USA</i>	
Psychological Consequences of Exposure to Variability	585
<i>Yu Ding, Columbia University, USA</i>	
<i>Krishna Savani, Nanyang Technological University, Singapore</i>	
Consumer Value Co-creation in Frontline Healthcare Services	588
<i>Sarah Dodds, Massey University, New Zealand</i>	
<i>Sandy Bulmer, Massey University, New Zealand</i>	
<i>Andrew Murphy, Massey University, New Zealand</i>	
Tasteful Work: The Emergence of an Aesthetic Category	590
<i>Pierre-Yann Dolbec, Concordia University, Canada</i>	
Alcohol Consumption and Risk-Taking Behavior:	
An Analysis of 17-Year Data on Fatal Traffic Accidents	593
<i>Ioannis Evangelidis, Bocconi University, Italy</i>	
Changing Brand Attitudes Using Relevant Affective Cues:	
An Investigation of Relational Processing in Evaluative Conditioning	595
<i>Xiaomeng Fan, Northwestern University, USA</i>	
<i>Galen Bodenhausen, Northwestern University, USA</i>	
The Rise of the Impulsive Shopper: The Case of the Amazon Dash Button	596
<i>Maya Farah, Lebanese American University, Lebanon</i>	
<i>Zahy Ramadan, Lebanese American University, Lebanon</i>	
Moved by Fear:	
Exploring Affect as a Driver of Narrative Transportation	598
<i>Matthew Farmer, University of Arizona, USA</i>	
<i>Jesper Nielsen, University of Arizona, USA</i>	
Behavioral Disinhibition: A Unitary Framework to Account for Self-Licensing and	
Consistency Effects in Goal Accessibility and Consumer Choice	600
<i>Bob M. Fennis, University of Groningen, The Netherlands</i>	
<i>Justina Gineikiene, ISM University of Management and Economics, Lithuania</i>	
The “Weight” of Product Claims and Vertical Location:	
Health Goes up and Taste Goes Down	602
<i>Alexandra Festila, Aarhus University, Denmark</i>	
<i>Polymeros Chrysochou, Aarhus University, Denmark</i>	
Minds that Don’t Matter: Online Interaction with	
Brands Decreases Empathy for People	603
<i>Lura Forcum, Clemson University, USA</i>	
Pathogen Fear and the Familiar	605
<i>Chelsea Galoni, Northwestern University, USA</i>	
<i>Gregory S. Carpenter, Northwestern University, USA</i>	
<i>Hayagreeva Rao, Stanford University, USA</i>	
Engineered Essence and Authenticity	607
<i>Chelsea Galoni, Northwestern University, USA</i>	
<i>Brendan Strejcek, Northwestern University, USA</i>	
<i>Kent Grayson, Northwestern University, USA</i>	
Redesigning the Market for Volunteers: A Donor Registry	609
<i>Ellen Garbarino, University of Sydney, Australia</i>	
<i>Stephanie Heger, University of Sydney, Australia</i>	
<i>Robert Slonim, University of Sydney, Australia</i>	
<i>Carmen Wang, Harvard University, USA</i>	
<i>Daniel Waller, Australian Red Cross Blood Service, Australia</i>	

The Consumption Consequences of Couples Pooling Financial Resources	612
<i>Emily N. Garbinsky, University of Notre Dame, USA</i> <i>Joe J. Gladstone, University College London, UK</i>	
When Moral Mindsets Increase Unethical Consumption: The Influence of Religion and Moral Emotions on Luxury Consumption	614
<i>Stephanie Geiger-Oneto, University of Wyoming, USA</i> <i>Elizabeth Minton, University of Wyoming, USA</i>	
Cultural Capital and Taste Distinctions in Urban India	618
<i>Tanuka Ghoshal, Indian School of Business, India</i> <i>Rishtee Batra, Indian School of Business, India</i> <i>Russell Belk, York University, Canada</i>	
Activating Multiple Facets of the Self: How Self-Concept and Brand Personality Can Influence Self-Brand Connections	620
<i>Marilyn Giroux, Auckland University of Technology, New Zealand</i> <i>Bianca Grohmann, Concordia University, Canada</i>	
Certainty of Popularity: Extending Naive Theories of Popularity with Uncertainty Reduction	622
<i>Robert P.G. Goedegebure, Wageningen University, The Netherlands</i> <i>Erica van Herpen, Wageningen University, The Netherlands</i> <i>Hans C.M. van Trijp, Wageningen University, The Netherlands</i>	
Opening the Black Boxes of Consumer Misbehaviors: Insights from Studying Online Trolling	624
<i>Maja Golf-Papez, University of Canterbury, New Zealand</i> <i>Ekant Veer, University of Canterbury, New Zealand</i>	
“That’s embarrassing!” Effects of Brand Anthropomorphism on Intimate Disclosure	626
<i>Anais Gretry, Radboud University Nijmegen, The Netherlands</i> <i>Csilla Horvath, Radboud University Nijmegen, The Netherlands</i> <i>Nina Belei, Radboud University Nijmegen, The Netherlands</i>	
How Tweet Readability and Brand Hedonism Affect Consumer Engagement.	629
<i>Anais Gretry, Radboud University Nijmegen, The Netherlands</i> <i>Scott W. Davis, University of Houston - Downtown, USA</i> <i>Csilla Horvath, Radboud University Nijmegen, The Netherlands</i> <i>Nina Belei, Radboud University Nijmegen, The Netherlands</i>	
Choosing Unhealthy to Appear Warm: How Consumers Signal Personality Traits via Food Choice.	634
<i>Marija Grishin, University of Kansas, USA</i> <i>Yexin Jessica Li, University of Kansas, USA</i> <i>Jenny G. Olson, University of Kansas, USA</i> <i>Surendra N. Singh, University of Kansas, USA</i>	
Reducing the Social Desirability Bias of Self- Reported Value Orientation by Measuring Values via a Picture-Based Scale.	636
<i>Andrea Groeppel-Klein, Saarland University, Germany</i> <i>Sarah Kobel, Saarland University, Germany</i>	
Awareness and Relevance of Health Claims at the Point-of-Sale	640
<i>Andrea Groeppel-Klein, Saarland University, Germany</i> <i>Stephanie Kliebenstein, Saarland University, Germany</i> <i>Markus Freichel, Saarland University, Germany</i>	
Heirlooms as a Passage Mechanism for Achievement-Based Values	641
<i>Daniel Grossman, University of Cincinnati, USA</i> <i>Ryan Rahinel, University of Cincinnati, USA</i>	
Brand Hypocrisy from a Consumer Perspective: Scale Development and Validation	642
<i>Amélie Guèvremont, Université du Québec à Montréal, Canada</i>	

Processing Moving Numbers: How Update Frequency Influences Magnitude Judgments	644
<i>Manissa P. Gunadi, Erasmus University Rotterdam, The Netherlands</i>	
<i>Christophe Lembregts, Erasmus University Rotterdam, The Netherlands</i>	
Less Choosing, More Doing! Procedural Control Inoculates Against the Allure of More Choice.	645
<i>Linda Hagen, University of Southern California, USA</i>	
<i>Katherine Burson, University of Michigan, USA</i>	
Online Chameleons: The effects of Stylistic Mimicry of Nonverbal Cues on Consumer-Brand Interactions Online.	648
<i>Fatima M. Hajjat, Ithaca College, USA</i>	
<i>Elizabeth G. Miller, University of Massachusetts, Amherst, USA</i>	
Is My Failure Your Problem? Examining Carryover Effects of Prior Consumer Failure on Customer Satisfaction	650
<i>Matthew J. Hall, University of Nebraska-Lincoln, USA</i>	
<i>Jamie D. Hyodo, University of Nebraska-Lincoln, USA</i>	
Going with the Flow-ency: The Role of Perceived Control on Fluency Effects	652
<i>Jerry Han, University of Texas at Austin, USA</i>	
<i>Claire Tsai, University of Toronto, Canada</i>	
A Carbon Price by Another Name May Seem Sweeter: Consumers Prefer Upstream Offsets to Equivalent Downstream Taxes.	654
<i>David Hardisty, University of British Columbia, Canada</i>	
<i>Alec Beal, University of British Columbia, Canada</i>	
<i>Ruben Lubowski, Environmental Defense Fund, USA</i>	
<i>Annie Petsonk, Environmental Defense Fund, USA</i>	
<i>Rainer Romero-Canyas, Environmental Defense Fund, USA</i>	
Presenting Health Information: The Influence of Attribute and Numerical Framing on Health Risk Perception	655
<i>Silvia Heideker, University of Erlangen-Nuremberg, Germany</i>	
<i>Martina Steul-Fischer, University of Erlangen-Nuremberg, Germany</i>	
Experiences and Material Purchases Differently Evoke Envious Reactions	657
<i>Katarina Hellén, University of Vaasa, Finland</i>	
<i>Maria Sääksjärvi, Delft University of Technology, The Netherlands</i>	
Why Consumers Don't See the Benefits of GMOs, and What Marketers Can Do About It	659
<i>Sean T. Hingston, York University, Canada</i>	
<i>Theodore J. Noseworthy, York University, Canada</i>	
Does Repeating Prompt Retreating? How the Structure of Initial Charitable Contributions Impacts the Magnitude of Subsequent Support.	661
<i>Jillian Hmurovic, University of Pittsburgh, USA</i>	
<i>Cait Lambertson, University of Pittsburgh, USA</i>	
Untangling the Effects of Self-Regulation Impairment and the Bright Side of Self-regulation Exertion: The Role of Construal Level	663
<i>Cony M. Ho, University of Cincinnati, USA</i>	
<i>Szu-Han (Joanna) Lin, University of Massachusetts, USA</i>	
<i>Russell E. Johnson, Michigan State University, USA</i>	
A Case for Low Power: Self versus Response Efficacy in Health Persuasion	665
<i>Meng-Hua Hsieh, Pennsylvania State University-Harrisburg, USA</i>	
<i>Chethana Achar, University of Washington, USA</i>	
<i>Nidhi Agrawal, University of Washington, USA</i>	
Improving Predictions of Prosocial Behavior Using Models of Person Perception.	667
<i>Ming Hsu, University of California Berkeley, USA</i>	
<i>Adrianna Jenkins, University of California Berkeley, USA</i>	

One More Unit to Increase Wanting: The Minimal Sharpness Effect	669
<i>Yunhui Huang, Nanjing University, China</i> <i>Han Gong, Nanjing University, China</i>	
The Effect of Lucky Feeling on Preference for Effort-Related Products and Activities	671
<i>Feifei Huang, The Chinese University of Hong Kong, Hong Kong</i> <i>Meng Zhang, The Chinese University of Hong Kong, Hong Kong</i> <i>Yuwei Jiang, The Hong Kong Polytechnic University, Hong Kong</i>	
Is Technology a Dangerous Dependency? The Effects of Anthropomorphism on Sharing Consumer Memories	673
<i>Li Huang, Hofstra University, USA</i> <i>Priyali Rajagopal, University of South Carolina, USA</i>	
Consumers' Assemblages of Fear and Safety with Firearms: Obstacles to Addressing Gun Violence in an Armed America	675
<i>Aimee Huff, Oregon State University, USA</i> <i>Michelle Barnhart, Oregon State University, USA</i> <i>Brandon McAlexander, University of Arkansas, USA</i> <i>Jim McAlexander, Oregon State University, USA</i>	
In Ones and Zeroes We Trust?: Money, Religion & Bitcoin	677
<i>Mariam Humayun, York University, Canada</i> <i>Russell Belk, York University, Canada</i>	
Satisfaction-Driven Nonresponse Bias in Consumer Feedback Surveys: Venting, Reciprocation and Exiting	679
<i>Chris Hydock, Georgetown University, USA</i> <i>Kurt Carlson, College of William & Mary, USA</i>	
How Health Claims Lead to Indulgence	683
<i>Steffen Jahn, University of Goettingen, Germany</i> <i>Till Dannewald, Wiesbaden Business School, Germany</i> <i>Yasemin Boztug, University of Goettingen, Germany</i>	
Value of Weighty Products: The Influence of Haptic Weight on Product Evaluations	685
<i>Ata Jami, University of Central Florida, USA</i> <i>Maryam Kouchaki, Northwestern University, USA</i>	
The Divergent Effects of Social Power on Consumers' Reactions to Waiting	687
<i>Yanli Jia, Xiamen University, China</i> <i>Robert S. Wyer, Jr., The Chinese University of Hong Kong, China</i> <i>Hao Shen, The Chinese University of Hong Kong, China</i>	
Prepayment as a Self-Commitment Device to Improve Eating Habits	689
<i>Joseph Yun Jie, Woosung University, South Korea</i>	
How Power States Influence the Persuasiveness of Top-dog versus Underdog Appeal	692
<i>Liyin Jin, Fudan University, China</i> <i>Yunhui Huang, HKUST, China</i>	
Buyers Are More Impatient Than Sellers: Why Preferences for the Timing of Peaks Diverge in Experiential Purchases	694
<i>Zhenyu Jin, University of Wisconsin - Milwaukee, USA</i> <i>Wei Lu, Shanghai Jiao Tong University, China</i> <i>Xiaojing Yang, University of Wisconsin - Milwaukee, USA</i> <i>Meng Duan, Shanghai Jiao Tong University, China</i> <i>Jin Luo, Shanghai Jiao Tong University, China</i>	
R U Close? Txt me: Psychological Distance, Urgency, and Message Format	698
<i>Alex Kaju, University of Toronto, Canada</i> <i>Sam J. Maglio, University of Toronto, Canada</i>	
The Lure of a Product's Origin: How Upcycling attracts Consumers	699
<i>Bernadette Kamleitner, Wirtschafis University, Austria</i> <i>Carina Thürridl, Wirtschafis University, Austria</i> <i>Brett A.S. Martin, Queensland University of Technology, Australia</i>	

Please Do Interrupt, But Nicely! The Effect of Positive and Negative Interruptions on Product Evaluation and Choice	701
<i>Ankur Kapoor, Indian Institute of Management, Ahmedabad, India</i>	
<i>Arvind Sahay, Indian Institute of Management, Ahmedabad, India</i>	
Differential Impacts of God and Religion on Prosocial Intentions	703
<i>Mustafa Karatas, Koc University, Turkey</i>	
<i>Zeynep Gürhan-Canli, Koc University, Turkey</i>	
Navigating Symbolic Pollution Through Symbolic Boundary Work – Shaping a Sense of Home and Family in Family Assemblages	705
<i>Carol Kelleher, University College Cork, Ireland</i>	
<i>Deirdre M. O’Loughlin, University of Limerick, Ireland</i>	
Birds of a Feather <i>Feel</i> Together: Emotional Ability Similarity in Consumer Interactions	707
<i>Blair Kidwell, University of North Texas, USA</i>	
<i>Christopher Blocker, Colorado State University, USA</i>	
<i>Virginie Lopez Kidwell, University of North Texas, USA</i>	
<i>Erick Mas, University of North Texas, USA</i>	
When and How Consumers Defend Their Psychological Possessions	712
<i>Colleen P. Kirk, New York Institute of Technology, USA</i>	
<i>Joann Peck, University of Wisconsin – Madison, USA</i>	
<i>Scott D. Swain, Clemson University, USA</i>	
Giving More or More Giving: Comparing the Appeal to Make a Difference versus Express Support in Charitable Giving	714
<i>Minjung Koo, SKK GSB, Sungkyunkwan University, Korea</i>	
<i>Ayelet Fishbach, University of Chicago, USA</i>	
<i>Hye Kyung Park, Community Chest of Korea, Korea</i>	
It’s Mine, But I’ll Help You: How Ownership Salience Increases Prosocial Behavior	716
<i>Maryam Kouchaki, Northwestern University, USA</i>	
<i>Ata Jami, University of Central Florida, USA</i>	
<i>Francesca Gino, Harvard University, USA</i>	
It’s Your Experience: Investigating the Effect of Asymmetric Resource Investments on the Enjoyment of Group Consumption Experiences	718
<i>Aleksandra Kovacheva, SUNY - Albany, USA</i>	
<i>Cait Lambertson, University of Pittsburgh, USA</i>	
<i>Eugenia Wu, University of Pittsburgh, USA</i>	
Religious Shoppers Spend Less Money	720
<i>Didem Kurt, Boston University, USA</i>	
<i>J. Jeffrey Inman, University of Pittsburgh, USA</i>	
<i>Francesca Gino, Harvard University, USA</i>	
The Effects of Perspective on Prosocial Emotions and Intentions	723
<i>Canice M. C. Kwan, Lingnan (University) College, Sun Yat-Sen University, China</i>	
<i>Robert S. Wyer, The Chinese University of Hong Kong, Hong Kong</i>	
<i>Xianchi Dai, The Chinese University of Hong Kong, Hong Kong</i>	
The Effect of Societal Nostalgia on Future Optimism and Public Policy Endorsement	725
<i>Canice M C Kwan, Lingnan (University) College, Sun Yat-sen University, China</i>	
<i>Shirley Y Y Cheng, Hong Kong Baptist University, Hong Kong</i>	
<i>Alex S L Tsang, Hong Kong Baptist University, Hong Kong</i>	
Your Lay Beliefs about Your Personality Predict Your Political Ideology	727
<i>JaeHwan Kwon, Baylor University, USA</i>	
<i>Claire Heeryung Kim, Indiana University, USA</i>	
<i>Dhananjay Nayakankuppam, University of Iowa, USA</i>	
<i>Adam Duhachek, Indiana University, USA</i>	

The Moral Nature of Stigmatization: Mitigating the Negative Effects of Stigma on Helping	729
<i>Katherine C. Lafreniere, University of Alberta, Canada</i> <i>Robert J. Fisher, University of Alberta, Canada</i>	
Regret-Free Trials:	
Asymmetric Effects of Price Promotions on New Product Trial	731
<i>Chang-Yuan Lee, Boston University, USA</i> <i>Carey K. Morewedge, Boston University, USA</i> <i>Dan Ariely, Duke University, USA</i>	
Does the Organic Label Increase Consumption? How Food Type and Health Locus of Control Turn the Label Into a Double-Edged Sword	732
<i>Hsiao-Ching Lee, National Kaohsiung University of Applied Sciences, Taiwan</i> <i>Chun-Tuan Chang, National Sun Yat-sen University, Taiwan</i> <i>Zhao-Hong Cheng, Chang Jung Christian University, Taiwan</i> <i>Yen-Ting Chen, Taichung Commercial Bank Co., Ltd., Taiwan</i>	
Close the Deal Now or Later?: The Impact of Power Distance Belief on Choice Deferral	734
<i>Hyejin Lee, Indiana University, USA</i> <i>Ashok Lalwani, Indiana University, USA</i>	
I Can Find a Better Deal: The Effect of Power Distance Belief on Price Sensitivity	736
<i>Hyejin Lee, Indiana University, USA</i> <i>Ashok Lalwani, Indiana University, USA</i>	
A Consumer-Based Model of Physical Activity and Nutrition (PAN) Practices: The Case in a Northeastern U.S. Community	738
<i>Ada Leung, Pennsylvania State University at Berks, USA</i> <i>Huimin Xu, The Sage Colleges, USA</i> <i>Gavin Jiayun Wu, Savannah State University, USA</i> <i>James Shankweiler, Pennsylvania State University at Berks, USA</i> <i>Lisa Weaver, AmeriCorps VISTA, USA</i>	
The Diverging Effects of Cuteness on Risk Preference: Moderating Role of Gender	740
<i>Yuan Li, University of Texas at San Antonio, USA</i> <i>Dengfeng Yan, University of Texas at San Antonio, USA</i>	
Interpersonal Prosocial Incentives	742
<i>Ye Li, University of California Riverside, USA</i> <i>Margaret Lee, London Business School, UK</i>	
The Influence of Virtual versus Actual Identity on Impulsive Consumption	743
<i>Chia-Wei Joy Lin, University of Tennessee at Chattanooga, USA</i> <i>Yinlong Zhang, University of Texas at San Antonio, USA</i> <i>Lawrence Feick, University of Pittsburgh, USA</i>	
Work with Me or for Me: The Effect of Implicit Self-theories and Role of Brands on Product Preference	747
<i>Chien-Wei (Wilson) Lin, State University of New York at Oneonta, USA</i> <i>Dipankar Rai, Le Moyne College, USA</i>	
When and With Whom to Ally? The Influence of CM Strategic Alliances on Consumer Purchase Behavior	749
<i>Chien-Wei (Wilson) Lin, State University of New York at Oneonta, USA</i> <i>Qi Wang, State University of New York at Binghamton, USA</i>	
The Effect of Social Exclusion on Consumer Shoplifting	751
<i>Christopher Ling, University of South Carolina, USA</i> <i>Thomas Kramer, University of California, Riverside, USA</i>	
The Effect of Facial Resemblance on Product Purchase: The Moderating Role of Mental Construal	753
<i>Fan Liu, Adelphi University, USA</i> <i>Xin He, University of Central Florida, USA</i> <i>Ze Wang, University of Central Florida, USA</i>	

Fevered Pitch: Anxiety and Risk Avoidance in Response to Low-Pitch Ambient Sounds	755
<i>Michael Lowe, Georgia Institute of Technology, USA</i>	
<i>Katherine E. Loveland, Xavier University, USA</i>	
<i>Aradhna Krishna, University of Michigan, USA</i>	
Increasing Incentive Effectiveness by Linking the Incentive to a Source the Consumer Paid Into	756
<i>Zoe Y. Lu, University of Wisconsin - Madison, USA</i>	
<i>Robin Tanner, University of Wisconsin - Madison, USA</i>	
<i>Kurt Carlson, College of William and Mary, USA</i>	
The Risk of Autonomy: A Dual-Process Model of How Autonomy Makes the Experience Pleasurable Depending on Risk Perception	758
<i>Renaud Lunardo, KEDGE Business School, France</i>	
<i>Camille Saintives, INSEEC Business School, France</i>	
I Speak Starbucks, do You? Distinction and Inclusion on Linguistic Brand Codes	762
<i>Ignacio Luri, University of Arizona, USA</i>	
<i>Hope Schau, University of Arizona, USA</i>	
Increasing PSA Effectiveness: Two Routes from Self-Threat to Message Acceptance	764
<i>Jingjing Ma, Peking University, China</i>	
<i>Kent Grayson, Northwestern University, USA</i>	
<i>David Gal, University of Illinois at Chicago, USA</i>	
Towards a New Framework of Eco-Food Consumption: The Importance of Contextual Drivers	766
<i>Natalia Maehle, Western Norway University of Applied Sciences, Norway</i>	
<i>Cele Otnes, University of Illinois at Urbana-Champaign, USA</i>	
<i>Nina M. Iversen, BI Norwegian Business School, Norway</i>	
<i>Leif Hem, Norwegian School of Economics, Norway</i>	
The Double-Edged Sword of Social Closeness in Gift Giving	768
<i>Sam J. Maglio, University of Toronto, Canada</i>	
<i>Evan Polman, University of Wisconsin-Madison, USA</i>	
<i>Alex Kaju, University of Toronto, Canada</i>	
Same Same, But Different: How Refutational Two-sided Messages Steer Ambivalent Attitudes	769
<i>Anuja Majmundar, University of Southern California, USA</i>	
<i>Erlinde Cornelis, San Diego State University, USA</i>	
<i>Nico Heuvinck, Lille Catholic University, France</i>	
Can Packaging Color Influence Consumers' Willingness To Pay? Evidences of the Au Naturel-Colored Packaging Effect	771
<i>Veronica Marozzo, University of Calabria, Italy</i>	
<i>Maria Antonietta Raimondo, University of Calabria, Italy</i>	
<i>Gaetano Miceli, University of Calabria, Italy</i>	
When High Failure, Risky Technology Leads to Market Expansion: The Case of the Fertility Services Market.	773
<i>Laetitia Mimoun, HEC Paris, France</i>	
<i>Lez Trujillo Torres, University of Illinois at Chicago, USA</i>	
<i>Francesca Sobande, University of Dundee, UK</i>	
Consuming the Inauthentic as a Self-Authenticating Act in Insa-dong, Seoul	775
<i>Hyun Jeong Min, Black Hills State University, USA</i>	
Form, Function, and Fluency: Surprising Effects of Product Presentation (Dis)fluency on Attribute Evaluations.	777
<i>James A. Mourey, DePaul University, USA</i>	
<i>Aparna Labroo, Northwestern University, USA</i>	
When Do Limited Time Offers Work? A Reactance Perspective	778
<i>Ashesh Mukherjee, McGill University, USA</i>	
<i>Seung Yun Lee, Konkuk University, South Korea</i>	
<i>Andrew D. Gershoff, University of Texas at Austin, USA</i>	

How Am I Doing? Perceived Financial Well-Being, Its Potential Antecedents, and Its Relation to Overall Well-Being	780
<i>Richard Netemeyer, University of Virginia, USA</i>	
<i>Dee Warmath, University of Wisconsin-Madison, USA</i>	
<i>Daniel Fernandes, Católica-Lisbon School of Business and Economics, Portugal</i>	
<i>John G. Lynch, Jr., University of Colorado-Boulder, USA</i>	
Unconventional Consumption Methods and Enjoyment of Things Consumed: Recapturing The “First Time” Experience.	782
<i>Ed O'Brien, University of Chicago, USA</i>	
<i>Robert Smith, Ohio State University, USA</i>	
European Consumers and their Persistent Resilience in the Face of Austerity.	785
<i>Deirdre M. O'Loughlin, University of Limerick, Ireland</i>	
<i>Morven G. McEachern, University of Huddersfield, UK</i>	
<i>Isabelle T. Szmigin, University of Birmingham, UK</i>	
<i>Kalipso Karantinou, Athens University of Economics and Business, Greece</i>	
<i>Belem Barbosa, University of Aveiro, Portugal</i>	
<i>Maria Eugenia Fernández Moya, CUNEF, Spain</i>	
<i>Grigorio Lamprinakos, Athens University of Economics and Business, Greece</i>	
Moral Consumers and the Moral Economy.	787
<i>Mansour Omeira, University of Neuchâtel, Switzerland</i>	
<i>Valéry Bezençon, University of Neuchâtel, Switzerland</i>	
Similarity Focus and Support for Redistribution.	789
<i>Nailya Ordabayeva, Boston College, USA</i>	
<i>Daniel Fernandes, Católica-Lisbon School of Business and Economics, Portugal</i>	
Customers' Emotions in Service Failure and Recovery: A Meta-Analysis	791
<i>Chiara Orsingher, University of Bologna, Italy</i>	
<i>Sara Valentini, University of Bologna, Italy</i>	
<i>Alexandra Polyakova, University of Sussex, UK</i>	
Grammatical Subject, Base Rates, and Persuasion.	793
<i>Max Ostinelli, Winthrop University, USA</i>	
<i>David Luna, Baruch College, USA</i>	
The Drain of Affective Decisions	795
<i>Ashley Otto, Baylor University, USA</i>	
<i>Joshua Clarkson, University of Cincinnati, USA</i>	
<i>Ryan Rahinel, University of Cincinnati, USA</i>	
The Role of Scales on Evaluations of Identical Goal Progress	799
<i>Timucin Ozcan, Rollins College, USA</i>	
<i>Kunter Gunasti, Washington State University, USA</i>	
Meaning in Life, Powerlessness, and Nostalgia: Using Nostalgia to Mitigate the Effect of Powerlessness on the Search for Meaning in Life	801
<i>Jun Pang, Renmin University of China, China</i>	
<i>Sheng Bi, Washington State University, USA</i>	
<i>Huan Chen, Renmin University of China, China</i>	
<i>Andrew Perkins, Washington State University, USA</i>	
The Asymmetric Effect of a Firm's Invested Effort in the CSR Campaign	803
<i>Taehoon Park, University of South Carolina, USA</i>	
<i>Elise Chandon Ince, University of South Carolina, USA</i>	
<i>Anastasiya Pocheptsova Ghosh, University of Arizona, USA</i>	
Divided, Strategic, or Something Else? Exploring the Impact of Social Mobility on Habitus	805
<i>Erika L. Paulson, Quinnipiac University, USA</i>	

Self-Disclosure Asymmetry in Online Communities:	
A Challenge of Demographic Diversity	807
<i>Cornelia (Connie) Pechmann, University of California Irvine, USA</i>	
<i>Kelly EunJung Yoon, University of California Irvine, USA</i>	
<i>Denis Trapido, University of Washington Bothell, USA</i>	
<i>Judith J. Prochaska, Stanford University, USA</i>	
The Conformity-Risk Paradox: Why Increasingly Risky Mortgages	
are Acquired by Increasingly Risk-Averse Consumers	809
<i>Léna Pellandini-Simányi, Università della Svizzera italiana, Switzerland</i>	
<i>Ádám Banai, Central Bank of Hungary, Hungary</i>	
Sadness Reduces Decisiveness	812
<i>Beatriz Pereira, Iowa State University, USA</i>	
<i>Scott Rick, University of Michigan, USA</i>	
Market Memory	815
<i>Dolbec Pierre-Yann, Concordia University, Canada</i>	
Curiosity and Want/Should Conflicts	818
<i>Evan Polman, University of Wisconsin-Madison, USA</i>	
<i>Rachel Ruttan, Northwestern University, USA</i>	
<i>Joann Peck, University of Wisconsin-Madison, USA</i>	
Evaluation Overconfidence: When Uncertainty in Attribute	
Under Produces Less Extreme Product Evaluations	822
<i>Deidre Popovich, Texas Tech University, USA</i>	
<i>Ryan Hamilton, Emory University, USA</i>	
Gender Identity and Liminality: An Exploration	
among Young Women with Breast Cancer	824
<i>Kathrynn Pounders, University of Texas at Austin, USA</i>	
<i>Marlys Mason, Oklahoma State University, USA</i>	
Examining the Effect of Gender on Thinking Style, Price-Quality	
Perceptions, and the Actual Prices that Consumers Pay	826
<i>Vahid Rahmani, Rowan University, USA</i>	
<i>Elika Kordrostami, Humboldt State University, USA</i>	
<i>John Ford, Old Dominion University, USA</i>	
The Begging Game: On the Power of the Ask in Charitable Exchange	827
<i>Mark Ratchford, Tulane University, USA</i>	
<i>Ethan Pew, Stony Brook University, USA</i>	
<i>Bart Victor, Vanderbilt University, USA</i>	
I'm Not Your Friend, Buddy: Friendliness Without Friendship	
Hinders Consumer-Firm Relationship Development	829
<i>Suzanne Rath, Queen's University, Canada</i>	
<i>Laurence Ashworth, Queen's University, Canada</i>	
<i>Nicole Robitaille, Queen's University, Canada</i>	
<i>Matthew Philp, Université de Montréal, Canada</i>	
Customers' Magnitude Perception for Letters Versus Numbers.	831
<i>Shelly Rathee, University of Utah, USA</i>	
<i>Arul Mishra, University of Utah, USA</i>	
<i>Himanshu Mishra, University of Utah, USA</i>	
Ritualistic Meal Consumption and the Temporal Reduction	
of Divisions Due to Economic Disparity	833
<i>Ateeq Abdul Rauf, Information Technology University, Pakistan</i>	
<i>Ajresh Prasad, Tecnológico de Monterrey, Mexico</i>	
Made by Mistake: When Mistakes Increase Product Preference	835
<i>Taly Reich, Yale University, USA</i>	
<i>Daniella Kupor, Boston University, USA</i>	
<i>Rosanna Smith, Yale University, USA</i>	

Active Consumption: How the Architecture of the Experience Activates Consumer Engagement and Enjoyment	839
<i>Taly Reich, Yale University, USA</i>	
<i>Rosanna K. Smith, University of Georgia, USA</i>	
<i>Ernest Baskin, Saint Joseph's University, USA</i>	
Praise for Blame: Consumer Inferences following Cause Marketing	842
<i>Brandon Reich, University of Oregon, USA</i>	
<i>Troy Campbell, University of Oregon, USA</i>	
<i>Robert Madrigal, California State University at Chico, USA</i>	
Using a Neural Network Model to Assess Advertising Effectiveness: A Validation of the Strategy Assessment (Strata) Model	844
<i>Thomas Reynolds, (Emeritus) University of Texas, Dallas, USA</i>	
The Intent to Persuade: Spontaneous Emotionality in Word-of-Mouth Communications.	848
<i>Matthew D. Rocklage, Northwestern University, USA</i>	
<i>Derek D. Rucker, Northwestern University, USA</i>	
<i>Loran F. Nordgren, Northwestern University, USA</i>	
Keep Calm and Smell the Roses: The Differential Impact of Low and High Arousal Emotions on Consumption Outcomes.	850
<i>Maria Rodas, University of Minnesota, USA</i>	
<i>Rohini Ahluwalia, University of Minnesota, USA</i>	
Thicker than Water: The Influence of Familism on Consumer Response to Brand Extensions	851
<i>Maria A. Rodas, University of Minnesota, USA</i>	
<i>Michael J. Barone, University of Louisville, USA</i>	
<i>Carlos J. Torelli, University of Illinois at Urbana-Champaign, USA</i>	
Preference Refinement After a Budget Contraction	852
<i>Gretchen Ross, Penn State University, USA</i>	
<i>Kurt A. Carlson, Georgetown University, USA</i>	
<i>Margaret G. Meloy, Penn State University, USA</i>	
How Discount Price Negatively Influences Ethical Consumption	854
<i>Yuhosua Ryoo, University of Texas at Austin, USA</i>	
<i>Minette Drumwright, University of Texas at Austin, USA</i>	
Driven by the Cues: Goal Attainment Makes Consumers More Responsive to Shopping-Related Contextual Cues.	856
<i>Sebastian Sadowski, Maastricht University, The Netherlands</i>	
<i>Bob Fennis, University of Groningen, The Netherlands</i>	
<i>Koert van Ittersum, University of Groningen, The Netherlands</i>	
Word of Mouth as Compensatory Consumer Behavior: Can Talking About Brands Restore Consumers' Self-Concepts After Self-Threat?	858
<i>Christina Saenger, Youngstown State University, USA</i>	
<i>Veronica L. Thomas, Towson University, USA</i>	
<i>Dora Bock, Auburn University, USA</i>	
Fight Fire with Fire: Using One Consumer Stereotype to Overcome Another via Contingency Information.	860
<i>Julian Saint Clair, Loyola Marymount University, USA</i>	
<i>Mitchell Hamilton, Loyola Marymount University, USA</i>	
<i>Delancy Bennett, Clemson University, USA</i>	
Understanding Chat Perceptions in a Customer Assistance Channel	862
<i>Marion Sanglé-Ferrière, ESCP Europe, France</i>	
<i>Benjamin Voyer, ESCP Europe, UK</i>	
Do Financial Restrictions Deteriorate or Improve Self-Control? The Role of Mindfulness	865
<i>Gülen Sarial Abi, Bocconi University, Italy</i>	
<i>Sadaf Mokarram Dorri, Bocconi University, Italy</i>	

Those Who Have Financial Restrictions Cannot Buy but Can Save Time: I Have to Do Everything by Myself BUT with One Product Fits it All	867
<i>Gülen Sarial Abi, Bocconi University, Italy</i>	
<i>Zeynep Gürhan Canli, Koc University, Turkey</i>	
Monsters in Our World: Narrative Transportation in Pokémon GO's Mixed Reality	869
<i>Joachim Scholz, Cal Poly, USA</i>	
<i>Andrew Smith, Suffolk University, USA</i>	
Does Pulling Together Lead to Falling Apart? The Self-Regulatory Consequences of Cooperative Orientations for the Self-Reliant	872
<i>Ainslie Schultz, Providence College, USA</i>	
<i>Cait Lamberton, University of Pittsburgh, USA</i>	
<i>Jesper Nielsen, University of Arizona, USA</i>	
A Regulatory Focus Approach to Consumers' Moral Decision Making.	874
<i>Maria Schwabe, Friedrich-Schiller-University of Jena, Germany</i>	
<i>David B. Dose, Friedrich-Schiller-University of Jena, Germany</i>	
<i>Gianfranco Walsh, Friedrich-Schiller-University of Jena, Germany</i>	
The Chill of the Moment: Emotions and Pro-Environmental Behavior.	876
<i>Daniel Schwartz, University of Chile, Chile</i>	
<i>George Loewenstein, Carnegie Mellon University, USA</i>	
Will It Taste Better If You Think about What You Are Eating? Cultural Differences in Food-Ingredient Information Seeking	878
<i>Hao Shen, Chinese University of Hong Kong, China</i>	
<i>Jun Pang, Renmin University of China, China</i>	
From Strong Uncertainty-Loathing to Strong Uncertainty-Loving	879
<i>Luxi Shen, Chinese University of Hong Kong, China</i>	
Embracing Experiential over Material Consumption: Thinking about Death Increases Consumer Preferences for Experiences	881
<i>Yoonji Shim, University of British Columbia, Canada</i>	
<i>Katherine White, University of British Columbia, Canada</i>	
Mind The Gap: How Smaller Numerical Differences Can Increase Product Attractiveness	884
<i>Meyrav Shoham, Bar-Ilan University, Israel</i>	
<i>Yael Steinhart, Tel-Aviv University, Israel</i>	
<i>Sarit Moldovan, The Open University of Israel, Israel</i>	
The Friend-Number Paradox	885
<i>Kao Si, The Chinese University of Hong Kong, Hong Kong</i>	
<i>Xianchi Dai, The Chinese University of Hong Kong, Hong Kong</i>	
<i>Robert Wyer, The Chinese University of Hong Kong, Hong Kong</i>	
Time Units and Patience	888
<i>Rafay A. Siddiqui, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Ashwani Monga, Rutgers University, USA</i>	
<i>Eva Buechel, University of South Carolina, USA</i>	
Lacking a Resource or Being One: Money Scarcity versus Time Scarcity Differentially Shape Self-value and Product Judgments	890
<i>Jane So, University of Washington, USA</i>	
<i>Nidhi Agrawal, University of Washington, USA</i>	
The Power of Negative Visualizations: When Fear Appeals Motivate Consumer Behavior	892
<i>Kamila Sobol, Concordia University, Canada</i>	
<i>Marilyn Giroux, Auckland University of Technology, New Zealand</i>	

1 / Table of Contents

How Does Power Distance Belief Affect Consumers' Preference for User- versus Designer-Designed Products?	894
<i>Xiaobing Song, Dalian University of Technology, China</i>	
<i>Yinlong Zhang, University of Texas at San Antonio, USA</i>	
<i>Vikas Mittal, Rice University, USA</i>	
Unethical Product Returning as a Function of Consumers' Experienced Psychological Distance.	896
<i>Anja Spilski, Saarland University, Germany</i>	
<i>Andrea Groeppel-Klein, Saarland University, Germany</i>	
<i>Hannah Jungfleisch, Saarland University, Germany</i>	
<i>Anja Bsdurek, Saarland University, Germany</i>	
Why Garlic Ice Cream? Innovative Line Extensions Can Increase Choice of a Brand's Pre-existing Products	898
<i>Brittney L. Stephenson, Washington University in St. Louis, USA</i>	
<i>Cynthia E. Cryder, Washington University in St. Louis, USA</i>	
<i>Stephen M. Nowlis, Washington University in St. Louis, USA</i>	
<i>Robyn A. LeBoeuf, Washington University in St. Louis, USA</i>	
The Name Game: How Naming Promotes Effects Beneficial to Marketers.	900
<i>Jennifer L. Stoner, University of North Dakota, USA</i>	
<i>Barbara Loken, University of Minnesota, USA</i>	
<i>Ashley Stadler Blank, University of St. Thomas, USA</i>	
The Influence of Visual Aesthetics on Food Choice: The Moderating Effect of Food Processing	901
<i>Jacob Suher, Portland State University, USA</i>	
<i>Courtney Szocs, Portland State University, USA</i>	
<i>Koert Van Ittersum, University of Groningen, The Netherlands</i>	
Punishing Politeness: Moderating Role of Belief in Just World on Severity?.	903
<i>Aparna Sundar, University of Oregon, USA</i>	
<i>Wendy Paik, University of Oregon, USA</i>	
The Influence of Posture on Taste Evaluations	906
<i>Courtney Szocs, Portland State University, USA</i>	
<i>Dipayan Biswas, University of South Florida, USA</i>	
<i>Annika Abell, University of South Florida, USA</i>	
When Less is More: Not Showing the Product's Picture in an Advertisement Can Increase Ad and Brand Evaluations	908
<i>Tao Tao, Hong Kong Baptist University, Hong Kong, China</i>	
<i>Leilei Gao, Chinese University of Hong Kong, China</i>	
"I Am What You Eat": Parents' Morality is Inferred from the Products they Choose for their Children	910
<i>Stefanie M. Tignor, Northeastern University, USA</i>	
<i>Remi Trudel, Boston University, USA</i>	
The Implications of a Planned Development on Consumption Practices: A Case Study of an Orang Asli Community in Malaysia	914
<i>Ding Hooi Ting, Universiti Teknologi PETRONAS, Malaysia</i>	
<i>Mireya Sosa Abella, Universiti Malaya, Malaysia</i>	
Countdown or Countup: Effect of Direction of Time-keeping on Resource Deficiency and Related Downstream Preferences	916
<i>Sanjeev Tripathi, Indian Institute of Management, Indore, India</i>	
<i>Ankur Kapoor, Indian Institute of Management, Ahmedabad, India</i>	
How Incidental Confidence Influences Self-Interested Behaviors? A Double-Edged Sword	918
<i>Claire Tsai, University of Toronto, Canada</i>	
<i>Jia lin Xie, University of Toronto, Canada</i>	

How Accepting Hierarchy Impacts Information Processing	922
<i>Lingjiang Lora Tu, Baylor University, USA</i>	
<i>Yinlong Zhang, University of Texas at San Antonio, USA</i>	
Acknowledging versus Ignoring the Identity-Relevance of Rivalry: Why Endorsing Dual Identities Decreases Spectator Aggression and Downplaying Makes Things Worse	924
<i>Sebastian Uhrich, German Sport University Cologne, Germany</i>	
<i>Johannes Berendt, German Sport University Cologne, Germany</i>	
Optionally Green: The Role of Green Attribute Optionality in Influencing Performance Evaluations	926
<i>Bryan Usrey, University of East Anglia, UK</i>	
<i>Dayananda Paliwadana, Leeds University, UK</i>	
<i>Charalampos Saridakis, Leeds University, UK</i>	
<i>Aristeidis Theotokis, Leeds University, UK</i>	
The Role of Women, Sexualization and Objectification in LGBTQ Advertising	928
<i>Patrick van Esch, Moravian College, USA</i>	
<i>Ally Geisler, Moravian College, USA</i>	
<i>Lizabeth Kleintop, Moravian College, USA</i>	
<i>Gavin Northey, University of Auckland, New Zealand</i>	
<i>Jonas Heller, University of New South Wales, Australia</i>	
Personal Control and Perceived Product Efficacy	930
<i>Noah VanBergen, University of Cincinnati, USA</i>	
<i>Caglar Irmak, University of Miami, USA</i>	
How Process Explanations Impact Assessments of Predictions of Uncertain Events.	932
<i>Daniel Villanova, Virginia Tech, USA</i>	
<i>Elise Chandon Ince, University of South Carolina, USA</i>	
<i>Rajesh Bagchi, Virginia Tech, USA</i>	
Extreme Marketplace Exclusion in Subsistence Marketplaces: A Study in a Refugee Settlement in Nakivale, Uganda	933
Large Steps Toward Small Donations: Reputational Benefits of Nominal Corporate Generosity	937
<i>Tiffany Vu, University of Michigan, USA</i>	
<i>Scott Rick, University of Michigan, USA</i>	
More Harm is Less Dangerous	940
<i>Monica Wadhwa, INSEAD, Singapore</i>	
<i>Mustafa Karatas, Koc University, Turkey</i>	
When Numbers Make You Feel: The Impact of Round versus Precise Numbers on Preventive Health Behavior	943
<i>Monica Wadhwa, INSEAD, Singapore</i>	
<i>Kuangjie Zhang, Nanyang Technological University, Singapore</i>	
Range Goals as Dual Reference Points: Insights for Effective Goal-Setting and Pursuit.	946
<i>Scott G. Wallace, Duke University, USA</i>	
<i>Jordan Etkin, Duke University, USA</i>	
Counterfeits Can Benefit Original Brands When People are Caught Using Counterfeits: The Role of Face Restoration	948
<i>Liangyan Wang, Shanghai Jiaotong University, USA</i>	
<i>Qin Wang, Arizona State University, USA</i>	
<i>L. Robin Keller, University of California Irvine, USA</i>	
<i>Eugene Chan, Monash University, Australia</i>	
Design an Experience Bundle: The Role of Experience Structure.	951
<i>Juan Wang, University of Guelph, Canada</i>	
<i>Miranda Goode, Western University, Canada</i>	
<i>June Cotte, Western University, Canada</i>	

Ironic Consumption	952
<i>Caleb Warren, University of Arizona, USA</i>	
<i>Gina S. Mohr, Colorado State University, USA</i>	
The Biographies of Things: Provenance and the Pursuit of Moral Consumption	955
<i>Todd Weaver, Point University, USA</i>	
<i>Pam Ellen, Georgia State University, USA</i>	
<i>Carolyn Curasi, Georgia State University, USA</i>	
Possession Substitutability: Identity and Usage of Rented (Versus Owned) Products	957
<i>Liad Weiss, University of Wisconsin-Madison, USA</i>	
The Influence of Purchase Motivation on Assortment Size Preferences	959
<i>Sarah C. Whitley, Boston University, USA</i>	
<i>Remi Trudel, Boston University, USA</i>	
<i>Didem Kurt, Boston University, USA</i>	
Gifts of Consolation: Gifts as Substitutes for Emotional Support	961
<i>Hillary Wiener, SUNY-Albany, USA</i>	
<i>Tanya Chartrand, Duke University, USA</i>	
You are not as Smart as You Think You are: Effects of Self-Perceived Knowledge on Consumer Information Processing and Decision Making	962
<i>Ruomeng Wu, University of Cincinnati, USA</i>	
<i>Brianna Escoe, University of Cincinnati, USA</i>	
<i>Frank R. Kardes, University of Cincinnati, USA</i>	
Feel Closer When Event Comes: Time-moving Metaphor and Temporal Estimation	964
<i>Xiaobing Xu, Nankai University, China</i>	
<i>Rong Chen, Tsinghua University, China</i>	
<i>Miaolei (Liam) Jia, National University of Singapore, Singapore</i>	
“That’s bitter!” Culture Specific Effects of Gustatory Experience on Judgments of Fairness and Advancement	966
<i>Jialiang Xu, University of Manitoba, Canada</i>	
<i>Fang Wan, University of Manitoba, Canada</i>	
<i>Norbert Schwarz, University of Southern California, USA</i>	
<i>Yuhuang Zheng, Tsinghua University, China</i>	
Appreciation of Creativity: Unintended Consequences of Thematic versus Taxonomic Product Organization	968
<i>Alison Jing Xu, University of Minnesota, USA</i>	
<i>Joan Meyers-Levy, University of Minnesota, USA</i>	
<i>Barbara Loken, University of Minnesota, USA</i>	
<i>Ryan Tzushuo Wang, University of Minnesota, USA</i>	
Effects of Age on Taste Perceptions in a Food Service Context	970
<i>Amanda Pruski Yamim, Grenoble École de Management, France</i>	
<i>JoAndrea Hoegg, University of British Columbia, Canada</i>	
<i>Darren Dahl, University of British Columbia, Canada</i>	
<i>Adilson Borges, NEOMA Business School, France</i>	
Back to the Golden Age: When Economic Insecurity Promotes Nostalgic Consumption	972
<i>Chun-Ming Yang, Ming Chuan University, Taiwan</i>	
How Group Identification and Stereotype Content Determine the Effectiveness of Ads Portraying Positive Stereotypes	974
<i>Linyun W. Yang, University of North Carolina at Charlotte, USA</i>	
<i>Tanya L. Chartrand, Duke University, USA</i>	
<i>Gavan J. Fitzsimons, Duke University, USA</i>	
Effects of Matched and Mismatched Comparative Advertising Messages: The Moderating Role of Consumers’ Processing Focus	976
<i>Xiaojing Yang, University of Wisconsin - Milwaukee, USA</i>	
<i>Shailendra Jain, University of Washington, USA</i>	
<i>Charles Lindsey, State University of New York, Buffalo, USA</i>	
<i>Frank Kardes, University of Cincinnati, USA</i>	

Regulatory Focus and Donation to Proactive and Reactive Causes	977
<i>Zhiyong Yang, University of Texas at Arlington, USA</i>	
<i>Sijie Sun, University of Texas at Arlington, USA</i>	
<i>Narayan Janakiraman, University of Texas at Arlington, USA</i>	
<i>Ritesh Saini, University of Texas at Arlington, USA</i>	
The Paradoxical Impact of Positive Mood on Goal Favorability	980
<i>Haiyang Yang, Johns Hopkins University, USA</i>	
<i>Antonios Stamatogiannakis, IE University, Spain</i>	
The “Smile-Seeking” Giver:	
How Immediate Affective Reactions Motivate and Reward Gift-giving.	982
<i>Adelle Yang, National University of Singapore, Singapore</i>	
<i>Oleg Urminsky, University of Chicago, USA</i>	
The Effect of Pre-giving Incentives on Relationship Norms and Donation Behavior.	985
<i>Bingqing (Miranda) Yin, University of Kansas, USA</i>	
<i>Yexin Jessica Li, University of Kansas, USA</i>	
<i>Surendra Singh, University of Kansas, USA</i>	
Choosing versus Rejecting: The Effect of Decision Modes on Subsequent Preferences	987
<i>Sangsuk Yoon, Temple University, USA</i>	
<i>Vinod Venkatraman, Temple University, USA</i>	
Don’t Kill the Suspense: The Duality of Suspense in Entertainment Consumption	989
<i>Mujde Yuksel, Suffolk University, USA</i>	
<i>Elizabeth G Miller, University of Massachusetts Amherst, USA</i>	
<i>Easwar Iyer, University of Massachusetts Amherst, USA</i>	
Hiding Gifts behind the Veil of Vouchers:	
The Effect of Gift Vouchers in Conditional Promotions	990
<i>Yan Zhang, National University of Singapore, Singapore</i>	
<i>Yu Ding, Columbia University, USA</i>	
Counterhedonic Food Consumption:	
How Eating “Yucky but Healthy” Food Promotes Marketplace Morality	993
<i>Zhe Zhang, University of Houston, USA</i>	
<i>Vanessa M. Patrick, University of Houston, USA</i>	
Going It Alone or Together:	
The Role of Product Space on Consumer Perceptions of Price Promotions	995
<i>Yuli Zhang, Drexel University, USA</i>	
<i>Hyokjin Kwak, Drexel University, USA</i>	
<i>Marina Puzakova, Lehigh University, USA</i>	
Unpacking Mixed Emotions at Experiential Endings: Total Emotionality, and Differential Roles of Enjoyableness, Meaningfulness and Sociality of Experience	997
<i>Xiaohua Zhao, Tsinghua University, China</i>	
<i>Wendy Liu, University of California, San Diego, USA</i>	
Exercise Your Mind –	
Physical Activity Alters Attribute Weighing in Consumer Choice	999
<i>Laura Zimmermann, London School of Economics and Political Science, UK</i>	
<i>Amitav Chakravarti, London School of Economics and Political Science, UK</i>	

Videography 2017

Luxurious Emirati Weddings: The Expenses, Pressures and Consequences	1001
<i>Damien Arthur, Zayed University, UAE</i>	
<i>Sara Mohamed Al Marzooqi, Zayed University, UAE</i>	
<i>Nuha Nasser Salem Al Amri, Zayed University, UAE</i>	

Envisioning How New Technologies Can Fulfill Customers' Unmet Needs1001
Yaliang Chuang, Eindhoven University of Technology, The Netherlands
Yu-Shan Athena Chen, Eindhoven University of Technology, The Netherlands
Lin-Lin Chen, National Taiwan University of Science and Technology, Taiwan
Yung-Hsun Chen, National Taiwan University of Science and Technology, Taiwan

Excessive Online Gaming: Inside the Routine of an E-Sports Fanatic1001
Thiago Rafael Ferreira Marques, SENAC, Brazil
Tania Veludo-de-Oliveira, Escola de Administração de Empresas de São Paulo da Fundação Getulio Vargas – FGV EAESP, Brazil

Searching for RNgesus: A Study on the Use of Randomization in Video Games1002
Jacob Hiler, Ohio University, USA
William Northington, Idaho State University, USA
Laurel Cook, West Virginia University, USA

Tomorrowland Festival: A Journey in Devirotopia1002
Julie Masset, University of Namur, Belgium
Alain Decrop, University of Namur, Belgium

Becoming the Character: The Cosplayer Experience in a Con1002
Stefânia Ordovás de Almeida, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil
João Pedro Fleck, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil
Rafael Mello, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil

Re-Assembling: Social Entrepreneurship, Motorcycles and Cast-Away Youth.1003
Joonas Rokka, EMLYON Business School, France
Joel Hietanen, Aalto University, Finland
Klaus Kangaspunta, Finland
John Schouten, St. John University, Canada

Stealing from the Rich1003
Stefan H. Szugalski, Stockholm School of Economics, Sweden
Jonas Colliander, Stockholm School of Economics, Sweden
Magnus Söderlund, Stockholm School of Economics, Sweden
Sofie Sagfossen, Stockholm School of Economics, Sweden

Roundtable Summaries

The Evolution of Signals1005
Russ Belk, York University, Canada
Silvia Bellezza, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA
James R. Bettman, Duke University, USA
David Gal, University of Illinois at Chicago, USA
Anat Keinan, Harvard University, USA
Amna Kirmani, University of Maryland, USA
Ayalla Ruvio, Michigan State University, USA
Yajin Wang, University of Maryland, USA
Morgan K. Ward, Emory University, USA
Caleb Warren, University of Arizona, USA

Expanding the Horizons of Videographic Consumer Research1005
Russell Belk, York University, Canada
Robert Kozinets, University of Southern California, USA
Brownlie Douglas, University of Dundee, UK
Paul Henry, University of Sydney, Australia
Joel Hietanen, Aalto University, Finland
Eric Li, University of British Columbia, USA
Jacob Ostberg, Stockholm Business School, Sweden
John Schouten, University of St. John, Canada
Baptiste Cléret, University of Rouen, France
Anastasia Seregina, Aalto University, Finland

Friends with Money: The Interplay of Social and Financial Well-Being1006

- Jonathan Z. Berman, London Business School, UK*
- James R. Bettman, Duke University, USA*
- Cynthia E. Cryder, Washington University, USA*
- Elizabeth W. Dunn, University of British Columbia, Canada*
- Gavan J. Fitzsimons, Duke University, USA*
- Cassie Mogilner Holmes, University of California Los Angeles, USA*
- Michael I. Norton, Harvard University, USA*
- Jenny G. Olson, Indiana University, USA*
- Colbey Emerson Reid, North Carolina State University, USA*
- Scott Rick, University of Michigan, USA*
- Avni M. Shah, University of Toronto, Canada*
- Stephen A. Spiller, University of California Los Angeles, USA*
- Abigail B. Sussman, University of Chicago, USA*
- Kathleen D. Vohs, University of Minnesota, USA*
- Lisa A. Cavanaugh, University of British Columbia, Canada*

Everyday Consumer Aesthetics1006

- Lauren Block, Baruch College, USA*
- Laura Peracchio, University of Wisconsin - Milwaukee, USA*
- Claudia Townsend, University of Miami, USA*
- Mario Pandelaere, Virginia Tech, USA*
- Ravi Mehta, University of Illinois at Urbana-Champaign, USA*
- JoAndrea (Joey) Hoegg, University of British Columbia, Canada*
- Maureen Morrin, Temple University, USA*
- Aradhna Krishna, University of Michigan, USA*
- Maura Scott, Florida State University, USA*
- Luca Cian, University of Virginia, USA*
- Henrik Hagvtedt, Boston College, USA*
- Adriana Madzharov, Stevens Institute of Technology, USA*
- Kelly Herd, Indiana University, USA*
- Maura Scott, Florida State University, USA*
- Martin Reimann, University of Arizona, USA*
- Theodore Noseworthy, York University, USA*
- Xiaojing Yang, University of Wisconsin – Milwaukee, USA*
- Xiaoyan Deng, Ohio State University, USA*
- Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong*
- Lei Jia, Ohio State University, USA*
- Rita To, University of Houston, USA*
- Zhe Zhang, University of Houston, USA*
- Tim Doering, University of Michigan, USA*
- Julio Sevilla, University of Georgia, USA*

Theoretical Advances in Consumer Neuroscience: How Affective, Cognitive, and Social Neuroscience Informs Consumer Behavior (and Vice Versa)1007

- Clark Cao, University of Arizona, USA*
- Adam Craig, University of Kentucky, USA*
- Raquel Castaño, Tecnológico de Monterrey, Mexico*
- Moran Cerf, Northwestern University, USA*
- Angelika Dimoka, Temple University, USA*
- Bill Hedgcock, University of Iowa, USA*
- Hilke Plassmann, INSEAD, France*
- Martin Reimann, University of Arizona, USA*
- Ale Smids, Erasmus University Rotterdam, The Netherlands*
- Carolyn Yoon, University of Michigan, USA*

Conspicuous Consumption Revisited in the Digital Era . . . . .	.1007
<i>David Dubois, INSEAD, France</i>	
<i>Paurav Shukla, Essex University, UK</i>	
<i>Valentina Clergue, HEC Lausanne, Switzerland</i>	
<i>Bruno Kocher, HEC Lausanne, Switzerland</i>	
<i>Leif Brandes, Warwick University, UK</i>	
<i>Martin Liu, Nottingham University, Ningbo Campus, China</i>	
<i>Teck Y. Eng, University of Southampton, UK</i>	
<i>Julia Wolny, University of Southampton, UK</i>	
<i>Chunyan Xie, Western Norway University of Applied Sciences, Norway</i>	
<i>Lily Wang, Zhejiang University, China</i>	
<i>Elodie Caucigh, University of Vienna, Austria</i>	
<i>Jeff Lee, NYU Shanghai, China</i>	
<i>Nailya Ordabayeva, Boston College, USA</i>	
What is a Consumption Experience? . . . . .	.1007
<i>Richard Lutz, University of Florida, USA</i>	
<i>Hope Jensen Schau, University of Arizona, USA</i>	
<i>David Mick, University of Virginia, USA</i>	
<i>Deborah Macinnis, University of Southern California, USA</i>	
<i>Cassie Mogilner Holmes, University of California Los Angeles, USA</i>	
<i>Rebecca Hamilton, Georgetown University, USA</i>	
<i>Markus Giesler, York University, Canada</i>	
<i>Robin Coulter, University of Connecticut, USA</i>	
<i>Eileen Fischer, York University, Canada</i>	
<i>Linda Price, University of Oregon, USA</i>	
Charting the Future of the Transformative Consumer Research Movement. . . . .	.1008
<i>David Mick, University of Virginia, USA</i>	
<i>Cornelia Pechmann, University of California Irvine, USA</i>	
<i>Maura Scott, Florida State University, USA</i>	
<i>Martin Mende, Florida State University, USA</i>	
<i>Janet McColl-Kennedy, University of Queensland, Australia</i>	
<i>Lucie Ozanne, University of Canterbury, New Zealand</i>	
<i>Chris Blocker, Colorado State University, USA</i>	
<i>Andres Barrios, Universidad de los Andes, Colombia</i>	
<i>Laurel Anderson, Arizona State University, USA</i>	
<i>Jeff Murray, University of Arkansas, USA</i>	
<i>Lauren Block, Baruch College, USA</i>	
<i>Linda Price, University of Oregon, USA</i>	
<i>Madhu Viswanathan, University of Illinois, Urbana-Champaign, USA</i>	
<i>Leonard Lee, National University of Singapore, Singapore</i>	
<i>Beth Vallen, Villanova University, USA</i>	
<i>Karen Winterich, Penn State, USA</i>	
<i>Laura Peracchio, University of Wisconsin Milwaukee, USA</i>	
<i>Rodrigo Castilhos, Universidade Federal do Rio Grande do Sul, Portugal</i>	
<i>Samuelson Appau, University of Melbourne, Australia</i>	
<i>L. Lin Ong, Cal Poly Pomona, USA</i>	
<i>Marcus Phipps, University of Melbourne, Australia</i>	
<i>Shikha Upadhyaya, California State University Los Angeles, USA</i>	
<i>Emily C. Tanner, West Virginia University, USA</i>	
<i>Elizabeth Crosby, University of Wisconsin, USA</i>	
<i>Christopher Berry, Colorado State University, USA</i>	
<i>Sterling Bone, Utah State University, USA</i>	
<i>Daniele Mathras, Northeastern University, USA</i>	
<i>Kelly Haws, Vanderbilt University, USA</i>	
<i>Zafeirenia Brokalaki, Kings' College London, UK</i>	

Toward an Integrated Understanding of Resource Scarcity1009
Andrea Morales, Arizona State University, USA
Angela Lee, Northwestern University, USA
Anthony Salerno, University of Cincinnati, USA
Anuj Shah, University of Chicago, USA
Brent McFerran, Simon Fraser University, Canada
Chiraag Mittal, Texas A&M University, USA
Danit Ein-Gar, Tel Aviv University, Israel
Darren Dhal, University of British Columbia, Canada
Debra Thompson, Georgetown University, USA
Deborah Roedder John, University of Minnesota, USA
Eesha Sharma, Dartmouth College, USA
Juliano Laran, University of Miami, USA
Julio Sevilla, University of Georgia, USA
Kirk Kristofferson, Arizona State University, USA
Lan Nguyen Chaplin, University of Illinois at Chicago, USA
Liat Levontin, Israel institute of Technology, Israel
Meryl Gardner, University of Delaware, USA
Rebecca Hamilton, Georgetown University, USA
Rebecca Ratner, University of Maryland, USA
Sarah Hill, Texas Christian University, USA
Kristina Durante, Rutgers University, USA

Working Papers

17-D: Friends with Benefits: Social Support and Pain of Payment1011
Deborah Abrams, Georgia Tech, USA
Samuel Bond, Georgia Tech, USA
Michael Lowe, Georgia Tech, USA

13-J: The Effect of Stress on Consumers' Private Information Disclosure1011
Sinem Acar-Burkay, University College of Southeast Norway, Norway
Bob M. Fennis, University of Groningen, The Netherlands

20-U: Who are the Influentials?
Social Media, Opinion Leadership and New Product Adoption1011
Duygu Akdevelioglu, University of California Irvine, USA
Selcan Kara, University of Massachusetts, Dartmouth, USA

8-E: Jeitinho Brasileiro:
Understanding Financial Vulnerability from a Cultural Perspective1011
Rafaela Almeida Cordeiro, Escola Superior de Propaganda e Marketing, Brazil
Nancy Wong, University of Wisconsin - Madison, USA
Mateus Ponchio, Escola Superior de Propaganda e Marketing, Brazil

9-FF: Emotional Labor and Emotional Intelligence in
Healthcare Delivery Organizations: The Case of Medicaid Recipients1011
Eklou Amendah, Southern New Hampshire University, USA
Adrienne Hall-Phillips, Worcester Polytechnic Institute, USA

2-U: The Effect of Healthcare Product Type and
Anthropomorphized Brand Role on Consumer Judgments1012
Jiyeon An, University of Rhode Island, USA
Daniel Sheinin, University of Rhode Island, USA

1-F: Grotesque Imagery Enhancing Persuasiveness of Luxury Brand Advertising1012
Donghwy An, Hongik University, South Korea
Chulsung Lee, Hongik University, South Korea
Janghyun Kim, Korea Christian University, South Korea
Nara Youn, Hongik University, South Korea

1-A: Art Appreciation Opens Affirmed Minds to Cultural Diversity1012
Donghwy An, Hongik University, South Korea
Boram Lee, Hongik University, South Korea
Nara Youn, Hongik University, South Korea

13-G: New with Tags: Consumer and Brand Relationships in Consumer-to-Consumer Buy/Sell/Trade Groups on Social Media. . . . . .	.1012
<i>Catherine Armstrong Soule, Western Washington University, USA</i>	
<i>Sara Hanson, University of Richmond, USA</i>	
14-I: Signaling Nothing: Conspicuous Anti-Consumption in Demarketing Contexts . . . . .	.1012
<i>Catherine Armstrong Soule, Western Washington University, USA</i>	
<i>Tejvir Sekhon, Western Washington University, USA</i>	
19-A: The Interactive Effect of Type and Framing of Discounts on Consumers' Preference . . . . .	.1013
<i>Amin Attari, University of Kansas, USA</i>	
<i>Promothesh Chatterjee, University of Kansas, USA</i>	
<i>Surendra Singh, University of Kansas, USA</i>	
13-K: The Fit Between Depth of Self-Disclosure and Self-Construal on Consumer Evaluations in Peer-to-Peer Markets . . . . .	.1013
<i>Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand</i>	
<i>Ashesh Mukherjee, McGill University, Canada</i>	
<i>Dan King, University of Texas Rio Grande Valley, USA</i>	
9-GG: Narrative Engagement: A Model for Suicide Prevention. . . . . .	.1013
<i>Caroline Graham Austin, Montana State University, USA</i>	
<i>Sarah Keller, Montana State University, USA</i>	
11-J: Moral Legitimation of Hybrid Consumption Practices: A Study of Gluten-Free Lifestyles . . . . .	.1013
<i>Ana Babic Rosario, University of Denver, USA</i>	
14-U: Seeing Through Consumer: Predicting Consumer Preferences and Choices by using Deep Learning Neural Networks . . . . .	.1013
<i>Marija Banovic, Aarhus University, Denmark</i>	
<i>Vladan Arsenijevic, Seven Bridges Genomics, Serbia</i>	
5-M: Saved by the Past? Activated Disease Threat Promotes Consumer Preferences for Nostalgic Products . . . . .	.1014
<i>Dovilė Barauskaitė, ISM University of Management and Economics, Lithuania</i>	
<i>Justina Gineikienė, ISM University of Management and Economics, Lithuania</i>	
<i>Bob M. Fennis, University of Groningen, The Netherlands</i>	
7-G: How the Uniqueness of Goods Influences Consumers' Response to Price Increase for Experiences versus Objects . . . . .	.1014
<i>Wilson Bastos, Catholic University of Portugal, Portugal</i>	
7-C: Conceptualizing the Digital Experience in Luxury . . . . .	.1014
<i>Wided Batat, University of Lyon 2, France</i>	
<i>Olivier Sinai, Birkbeck, University of London, UK</i>	
7-H: Identity Construction Through Destination Experience: An Introspective Approach . . . . .	.1014
<i>Wided Batat, University of Lyon 2, France</i>	
11-I: Effects of the Qualification of Potentially Misleading Claims on Production Characteristics on Buying Intention . . . . .	.1014
<i>Tino Bech-Larsen, Aarhus University, Denmark</i>	
<i>George Tsalis, Aarhus University, Denmark</i>	
<i>Trine Moerk, Aarhus University, Denmark</i>	
<i>Klaus G. Grunert, Aarhus University, Denmark</i>	
14-O: The Neuroscience Viewpoint on the Interaction Effect between Persuasive Arguments and Celebrity on Attitude Change . . . . .	.1015
<i>Lien-Ti Bei, National Chengchi University, Taiwan</i>	
<i>Li-Keng Cheng, National Chengchi University, Taiwan</i>	
<i>Wei-Chin Hsu, National Taiwan University of Science and Technology, Taiwan</i>	
<i>Yu-Shan Athena Chen, Technische Universiteit Eindhoven, The Netherlands</i>	

9-CC: Will Consumers Accept Foods Made from Surplus Ingredients? . . . . .	.1015
<i>Siddharth Bhatt, Drexel University, USA</i>	
<i>Jeonggyu Lee, Drexel University, USA</i>	
<i>Jonathan Deutsch, Drexel University, USA</i>	
<i>Hasan Ayaz, Drexel University, USA</i>	
<i>Benjamin Fulton, Drexel University, USA</i>	
<i>Rajneesh Suri, Drexel University, USA</i>	
12-F: The Motivation to Exclude Others and its Impact on Brand Commitment . . . . .	.1015
<i>Samantha Bittner, Florida State University, USA</i>	
<i>Tatiana Fajardo, Florida State University, USA</i>	
4-Q: The Use of Ethnically Ambiguous Models in Advertising to Preserve Consumer Well-being in an Organic Multicultural Market. . . . . .	.1015
<i>Wim Boooyse, University of Pretoria, South Africa</i>	
<i>Samantha Swanepoel, University of Pretoria, South Africa</i>	
9-T: Savoring Stress: Can Feeling Stressed Reduce the Rate of Satiation? . . . . .	.1015
<i>Benjamin Borenstein, University of Miami, USA</i>	
<i>Juliano Laran, University of Miami, USA</i>	
<i>Luke Nowlan, University of Miami, USA</i>	
20-J: Promotional Reviews, Social Influence, and the Information Content of Online Reviews. . . . . .	.1016
<i>Leif Brandes, University of Warwick, UK</i>	
<i>Rosa Cacabelos, University of Zurich, Switzerland</i>	
<i>Egon Franck, University of Zurich, Switzerland</i>	
1-G: I Want the Best, So Give Me All the Bells and Whistles: How Maximizers versus Satisficers Evaluate Feature-Rich Products. . . . . .	.1016
<i>Daniel Brannon, University of Northern Colorado, USA</i>	
<i>Brandon Soltwisch, University of Northern Colorado, USA</i>	
11-S: When Do Ethical Consumers Elicit Inspiration Instead of Denigration? . . . . .	.1016
<i>Claire Brouwer, Universitat Pompeu Fabra, Spain</i>	
<i>Jan Willem Bolderdijk, University of Groningen, The Netherlands</i>	
<i>Gert Cornelissen, Universitat Pompeu Fabra, Spain</i>	
20-K: Provision of Sales Volume Information Influences Consumers' Preferences Via Perceived Purchase and Word-of-Mouth Popularity . . . . .	.1016
<i>Adrian Camilleri, RMIT University, Australia</i>	
2-A: Shante you Stay/ Sashay Away: Approaching Language Within Brand Assemblages . . . . .	.1016
<i>Mario Campana, Goldsmiths, University of London, UK</i>	
<i>Katherine Duff, University of Glasgow, UK</i>	
<i>Alessandro Caliendo, Middlesex University, UK</i>	
9-L: Healthy or Happy? How Awe Enhances Consumers' Preferences for Healthy Products. . . . . .	.1017
<i>Fei Cao, Renmin University of China, P.R. China</i>	
<i>Xia Wang, Renmin University of China, P.R. China</i>	
<i>Ze Wang, University of Central Florida, USA</i>	
7-K: Negotiated Outsourcing – Towards an Understanding of Market Tension in Enduring Consumption Experiences . . . . .	.1017
<i>Flavia Cardoso, Universidad Adolfo Ibáñez, Chile</i>	
<i>Pilar Rojas-Gaviria, Pontificia Universidad Católica de Chile, Chile</i>	
<i>Daiane Scaraboto, Pontificia Universidad Católica de Chile, Chile</i>	
2-R: Oxytocin Increases Trust for Familiar and Familial Brands. . . . . .	.1017
<i>Lilian Carvalho, Fundacao Getulio Vargas, Brazil</i>	
<i>Gad Saad, Concordia University, Canada</i>	
<i>Eliane Brito, Fundacao Getulio Vargas, Brazil</i>	
17-A: Consumer Perceptions of Social Robots . . . . .	.1017
<i>Noah Castelo, Columbia University, USA</i>	
<i>Bernd Schmitt, Columbia University, USA</i>	

5-Q: The Effect of Working with Ingroup versus Outgroup Members on Affective Forecasting Bias . . . . .	.1017
<i>Lorenzo Cecutti, The Chinese University of Hong Kong, China</i>	
<i>Jessica Kwong, The Chinese University of Hong Kong, China</i>	
3-F: Pride Shapes Decisions through Construal Level: The Effect of Authentic vs. Hubristic Pride on Construal Level. . . . . .	.1018
<i>Melis Ceylan, Koc University, Turkey</i>	
<i>Nilüfer Aydınoğlu, Koc University, Turkey</i>	
<i>Selin Atalay, Frankfurt School of Finance and Management, Germany</i>	
10-C: Calendar Framing Affects Perception and Anticipation of Sunday. . . . . .	.1018
<i>Rebecca Chae, University of Michigan, USA</i>	
<i>Christine Kang, California State University Long Beach, USA</i>	
5-O: The Effect of Antecedents of Sadness on Brand Evaluation . . . . .	.1018
<i>Luxi Chai, University of Kansas, USA</i>	
<i>Yexin Jessica Li, University of Kansas, USA</i>	
9-A: “I Reward Myself with Salad!” Framing Healthy Food Option as a Reward Increases Purchasing Intention. . . . . .	.1018
<i>Luxi Chai, University of Kansas, USA</i>	
<i>Marija Grishin, University of Kansas, USA</i>	
16-A: Adding a Charitable Donation to a Product or Adding a Product to a Charitable Donation? How Much You Can Raise Depends on How You Frame the Case. . . . . .	.1018
<i>Chia-Chi Chang, National Chiao-Tung University, Taiwan</i>	
<i>Po-Yu Chen, National Chiao-Tung University, Taiwan</i>	
19-D: Studying Bets and Hedges in Simple Lotteries. . . . . .	.1018
<i>Subimal Chatterjee, SUNY Binghamton, USA</i>	
<i>Satadruta Mookherjee, SUNY Binghamton, USA</i>	
3-H: Through the Looking Glass: Role of Construal Level on Description-Intensive Reviews . . . . .	.1019
<i>Swagato Chatterjee, Institute for Financial Management and Research, India</i>	
<i>Aruna Divya T, IIM Ahmedabad, India</i>	
14-M: The Making of a Successful Advocate: How Incentivizing Consumer Referrals Affects Persuasion . . . . .	.1019
<i>Lauren Cheatham, Stanford University, USA</i>	
<i>Zakary Tormala, Stanford University, USA</i>	
4-G: Examining Tourists’ Intentions to Revisit Religion Processions: The Role of Religiosity and Flow Experience . . . . .	.1019
<i>Annie Chen, University of West London, UK</i>	
<i>Norman Peng, University of Westminster, UK</i>	
5-B: Coping with On-going Terror and Threats: Resilience, Place Attachment, and Behaviors . . . . .	.1019
<i>Ning (Chris) Chen, University of Canterbury, New Zealand</i>	
<i>Rohail Ashraf, Lahore University of Management Sciences, Pakistan</i>	
6-A: Chooser or Suitor: The Effects of Mating Cues on Men’s vs. Women’s Reaction to Brand Rejection. . . . . .	.1019
<i>Rui Chen, Xiamen University, China</i>	
<i>Chun-Ming Yang, Ming Chuan University, Taiwan</i>	
<i>Hao Shen, Chinese University of Hong Kong, China</i>	
7-M: When a Minor Problem Causes a Major Trouble for Experiential Purchases . . . . .	.1020
<i>Qihui Chen, Peking University, China</i>	
<i>Jingjing Ma, Peking University, China</i>	
5-P: The Effect of Nostalgia Advertising on Brand Loyalty . . . . .	.1020
<i>Jia Chen, University of Illinois at Chicago, USA</i>	
<i>Jingjing Ma, Peking University, China</i>	

8-F: Or Else! The Positive Effect of an Advisor’s Ultimatum on Perceived Expertise . . . . .	.1020
<i>Shirley Shuo Chen, University of Alberta, Canada</i>	
<i>Kyle B Murray, University of Alberta, Canada</i>	
10-E: An Institutional Perspective of Country-of-Origin and Its Effects on Consumer Purchase Preference. . . . .	.1020
<i>Shijiao Chen, University of Otago, New Zealand</i>	
<i>Damien Mather, University of Otago, New Zealand</i>	
<i>Hongzhi Gao, Victoria University of Wellington, New Zealand</i>	
<i>John Knight, University of Otago, New Zealand</i>	
20-T: When Too Many Friends Inhibit Talking: The Impact of Social Roles on Social Sharing Online . . . . .	.1020
<i>Yu-Jen Chen, Lingnan, Hong Kong</i>	
1-B: Cross-Cultural Differences in Aesthetic Judgments of Products: The Role of Cognitive Styles . . . . .	.1020
<i>Tseng-Ping Chiu, University of Michigan, USA</i>	
<i>Carolyn Yoon, University of Michigan, USA</i>	
<i>Shinobu Kitayama, University of Michigan, USA</i>	
18-A: Green by Itself, But Brown in Comparison: The Influence of Sustainability Disclosures at the Shelf . . . . .	.1021
<i>Yoon-Na Cho, Villanova University, USA</i>	
<i>Robin Soster, University of Arkansas, USA</i>	
<i>Scot Burton, University of Arkansas, USA</i>	
18-E: Not Green or Healthy as You Think? Misperceptions From Sustainability Labeling . . . . .	.1021
<i>Yoon-Na Cho, Villanova University, USA</i>	
8-I: How Temporal Separation in Budgeting Affects Spending Behavior . . . . .	.1021
<i>Yuna Choe, Texas A&M University, USA</i>	
<i>Christina Kan, Texas A&M University, USA</i>	
5-N: Take it Humorously: Effects of Humorous Rebuttals to Negative Attacks . . . . .	.1021
<i>Hsuan-Yi Chou, National Sun Yat-sen University, Taiwan</i>	
<i>Xing-Yu Chu, National Sun Yat-sen University, Taiwan</i>	
<i>Ching Chin, National Sun Yat-sen University, Taiwan</i>	
6-C: Mr. Right vs. Mr. Right Now: The Impact of Male Physical Dominance on Women’s Consumption Patterns. . . . .	.1021
<i>Brett Christenson, University of Alabama, USA</i>	
<i>Christine Ringler, University of Alabama, USA</i>	
<i>Nancy Sirianni, University of Alabama, USA</i>	
12-B: Interpersonal Face: A Major Motivation for Luxury Consumption in Asia . . . . .	.1021
<i>Jung-Han Chung, Sogang University, South Korea</i>	
<i>Young-Won Ha, Sogang University, South Korea</i>	
4-M: Psychological Antecedents of Luxury Brand Purchase Intent in Asian Market . . . . .	.1022
<i>Hoeun Chung, Fayetteville State University, USA</i>	
8-A: Attenuating Money Illusion? How Personalization Affects the Consideration of Inflation in the Consumers’ Financial Planning. . . . .	.1022
<i>Henning Cordes, University of Muenster, Germany</i>	
<i>Carsten Erner, University of Muenster, Germany, and University of California Los Angeles, USA</i>	
<i>Thomas Langer, University of Muenster, Germany</i>	
9-AA: What Did You Eat at School Today? The Influence of Preschool on Children’s Food Consumption . . . . .	.1022
<i>T. Bettina Cornwell, University of Oregon, USA</i>	
<i>Sung-Hee Paik, University of Oregon, USA</i>	
<i>Eric Setten, University of Oregon, USA</i>	
2-Y: Uncommon Beauty: Disabled Models in Ads Improve Brand Liking . . . . .	.1022
<i>Martina Cossu, Bocconi University, Italy</i>	
<i>Zachary Estes, Bocconi University, Italy</i>	

18-H: The Authenticity of Corporate Social Responsibility Actions on Brand Symbolism . . . . .	.1022
<i>Diego Costa Pinto, ESPM Business School, Brazil</i>	
<i>Márcia Maurer Herter, ESPM Business School, Brazil</i>	
<i>Leonardo Nicolao, UFRGS, Brazil</i>	
<i>Mellina Terres, UFCSPA, Brazil</i>	
11-U: Doing Good by Buying from a Peer: When and Why Consumers Prefer Peer Economy Options . . . . .	.1023
<i>John Costello, The Ohio State University, USA</i>	
<i>Rebecca Walker Reczek, The Ohio State University, USA</i>	
11-T: Carpe Diem: Examining the Impact of Hedonic Experiences on Prosocial Behavior . . . . .	.1023
<i>Daniela Cristian, BI Norwegian Business School, Norway</i>	
<i>Bob Fennis, University of Groningen, The Netherlands</i>	
<i>Luk Warlop, BI Norwegian Business School, Norway</i>	
7-D: Do Hedonic Experiences Facilitate the Disregard of Sunk Costs? . . . . .	.1023
<i>Daniela Cristian, BI Norwegian Business School, Norway</i>	
<i>Bob Fennis, University of Groningen, The Netherlands</i>	
<i>Luk Warlop, BI Norwegian Business School, Norway</i>	
16-F: I'm Just Trying to Help: How Prosocial Bragging Behaviors Hurt and Help Nonprofit Organizations . . . . .	.1023
<i>Michelle Daniels, Arizona State University, USA</i>	
<i>Kirk Kristofferson, Arizona State University, USA</i>	
<i>Andrea Morales, Arizona State University, USA</i>	
16-I: Structure-Seeking in the Sharing Economy. . . . .	.1023
<i>Alexander Davidson, Concordia University, Canada</i>	
<i>Mohammad Reza Habibi, California State University Fullerton, USA</i>	
<i>Michel Laroche, Concordia University, Canada</i>	
15-G: The Smell of Selling: Olfactory Cues as a route for Product Aesthetic Preferences. . . . .	.1024
<i>Ramona De Luca, FGV-EAESP Escola de Administração de Empresas de São Paulo, Brazil</i>	
<i>Delane Botelho, FGV-EAESP Escola de Administração de Empresas de São Paulo, Brazil</i>	
16-J: Temporal Focus and Consumer Response to Donation Appeals. . . . .	.1024
<i>Yoshiko DeMotta, Fairleigh Dickinson University, USA</i>	
19-B: Keeping a Low Profile: When Outcome Uncertainty Promotes Behavioral Inhibition . . . . .	.1024
<i>Xun Deng, Shanghai JiaoTong University, China</i>	
<i>Liangyan Wang, Shanghai JiaoTong University, China</i>	
20-R: Weird Products: Too Weird For Purchase, But Perfect For Sharing. . . . .	.1024
<i>Qian (Claire) Deng, University of Alberta, Canada</i>	
<i>Paul Messinger, University of Alberta, Canada</i>	
2-L: Decomposing Consumer Evaluations of Brand Extensions: Market-based Congruity versus Engineering-based Congruity . . . . .	.1024
<i>Qian (Claire) Deng, University of Alberta, Canada</i>	
<i>Paul Messinger, University of Alberta, Canada</i>	
10-G: Consumer Reasoning Reduces Post-Choice Satisfaction while Increasing Commitment . . . . .	.1024
<i>Alexander DePaoli, Northeastern University, USA</i>	
9-EE: Compulsive Consumption and Smoking Behavior . . . . .	.1025
<i>Timothy Dewhirst, University of Guelph, Canada</i>	
<i>Drew Harden, University of Guelph, Canada</i>	
<i>Wonkyong Beth Lee, Western University</i>	
3-D: Exploring the Role of Consumption Values and Self-Construal in the Purchase of (In) Conspicuous Luxury Goods and Shopping Preferences: A Questionnaire Study. . . . .	.1025
<i>Karolina Dovgialo, London School of Economics, UK</i>	
<i>Ben Voyer, ESCP Europe, UK</i>	

17-M: The Dark Side of Competition: How Competition Results Predict Unethical Behavior . . . . .	.1025
<i>Rui Du, University of Hawaii, USA</i>	
<i>Qimei Chen, University of Hawaii, USA</i>	
<i>Miao Hu, University of Hawaii, USA</i>	
20-S: When Having Too Many Facebook ‘Friends’ Hinders Your Online Social Activity: The Impact of Social Identity Complexity. . . . .	.1025
<i>Kimberly Duval, Concordia University, Canada</i>	
<i>H. Onur Bodur, Concordia University, Canada</i>	
9-Z: Using Practices Theories to Analyze Food Practices Related to Food Waste and Healthy Eating . . . . .	.1025
<i>Margot Dyen, Montpellier Supagro, France</i>	
<i>Lucie Sirieix, Montpellier Supagro, France</i>	
<i>Sandrine Costa, Montpellier, INRA, France</i>	
9-II: The Resilient Consumer. . . . .	.1026
<i>Akon Ekpo, Rutgers University, USA</i>	
<i>Samantha Cross, Iowa State University, USA</i>	
20-G: Is it Safe to Spread the Word? Exploring the Impact of Psychological Safety in Virtual Communities on Consumer Choice. . . . .	.1026
<i>André Escórcio Soares, Coventry University, UK</i>	
<i>Anvita Kumar, Coventry University, UK</i>	
8-C: Higher Price Higher Quality? How Feeling Financially Constrained Affects Consumers’ Price-Quality Judgment. . . . .	.1026
<i>Yafeng Fan, Renmin University of China, China</i>	
<i>Jing Jiang, Renmin University of China, China</i>	
4-C: Culture Matters: How Power Distance Belief Influences the Effectiveness of Scarcity Appeal in Advertising. . . . .	.1026
<i>Yafeng Fan, Renmin University of China, China</i>	
<i>Jing Jiang, Renmin University of China, China</i>	
12-J: When Failure Isn’t the End: How Temporal Framing of Goal Failures Can Affect Goal Reengagement . . . . .	.1026
<i>Matthew Farmer, University of Arizona, USA</i>	
<i>Jennifer Savary, University of Arizona, USA</i>	
6-H: Marketplace Resources and Gender: A Standpoint Analysis of Status Bias, Cultural Stereotypes and the Production of Positional Inequalities. . . . .	.1027
<i>Shelagh Ferguson, University of Otago, New Zealand</i>	
<i>Jan Brace-Govan, Monash University, Australia</i>	
<i>Diane Martin, Aalto University, Finland</i>	
2-T: The Effect of Brand Heritage and Brand Authenticity on Consumer-Brand Relationships . . . . .	.1027
<i>Francielle Frizzo, Federal University of Parana, Brazil</i>	
<i>Jose Carlos Korelo, Federal University of Parana, Brazil</i>	
<i>Paulo Henrique Prado, Federal University of Parana, Brazil</i>	
4-J: I Am What I Bought: A Cross-Cultural Study on Consumers’ Evaluations toward Different Types of Purchases and Advertisings . . . . .	.1027
<i>Pei-Wen Fu, National Sun Yat-sen University, Taiwan</i>	
<i>Ruoyun Lin, Leibniz-Institut für Wissensmedien, Germany</i>	
<i>Sonja Utz, Leibniz-Institut für Wissensmedien, Germany</i>	
<i>Chi-Cheng Wu, National Sun Yat-sen University, Taiwan</i>	
8-H: Second Guess Yourself, But Do It Right: When Does Making A Second Estimate Improve Quantitative Judgments? . . . . .	.1027
<i>Celia Gaertig, University of Pennsylvania, USA</i>	
<i>Joseph Simmons, University of Pennsylvania, USA</i>	

19-L: The Effect of Long-Term Versus Short-Term Orientation on Variety Seeking. . . . .	.1027
<i>Huachao Gao, University of Victoria, Canada</i>	
<i>Yinlong Zhang, University of Texas at San Antonio, USA</i>	
9-V: Take a Bite out of Apple: How Does Static Food Advertising Signaling Dynamic Influence Food Consumption. . . . .	.1028
<i>Fei Gao, HEC Paris, France</i>	
<i>Weiwei Zhang, University of Otago, New Zealand</i>	
<i>Tina M. Lowrey, HEC Paris, France</i>	
20-L: Sell Out Without Losing Out: Overcoming the Harmful Impact of Incentivized Reviews. . . . .	.1028
<i>Maximilian Gerrath, Leeds University, UK</i>	
<i>Bryan Usrey, University of East Anglia, UK</i>	
10-M: Ownership Polarization: An Alternate Account of the Endowment Effect . . . . .	.1028
<i>Colleen Giblin, Carnegie Mellon University, USA</i>	
<i>Carey Morewedge, Boston University, USA</i>	
5-A: Affecting Consumers: A fMRI Study on Regulatory Focus Framed Information in the Field of Animal Welfare . . . . .	.1028
<i>Nadine Gier, Heinrich-Heine-Universität, Germany</i>	
<i>Caspar Krampe, Heinrich-Heine-Universität, Germany</i>	
<i>Peter Kenning, Heinrich-Heine-Universität, Germany</i>	
9-BB: When Innovation Collides with Nature: Mere Consideration of Novel Food Products Can Decrease Evaluations of the Entire Product Category . . . . .	.1028
<i>Justina Gineikiene, ISM University of Management and Economics, Lithuania</i>	
<i>Bob Fennis, University of Groningen, The Netherlands</i>	
4-S: When You Expect It the Yeast: The Emergence of Craft Beer Culture in Finland . . . . .	.1028
<i>Alexei Gloukhovtsev, Aalto University, Finland</i>	
10-B: Do You Feel Like a Fraud? How Experiencing the Impostor Phenomenon Influences Consumption Choices . . . . .	.1029
<i>Emily Goldsmith, Marymount Manhattan College, USA</i>	
<i>Stephen Gould, Baruch College, USA</i>	
17-O: Unaffordable Option and Sensitivity to Social Inequality. . . . .	.1029
<i>Pierrick Gomez, NEOMA Business School, France</i>	
<i>Adilson Borges, NEOMA Business School, France</i>	
14-J: Social Comparison Direction and Its Impact on Consumer Preference for Distinctive Products . . . . .	.1029
<i>Xiushuang Gong, Renmin University, China</i>	
<i>Ying Ding, Renmin University, China</i>	
<i>Yafeng Fan, Renmin University, China</i>	
2-Q: Low Fit in Co-Branding: Explaining the Success of Designer-For-Retailer Collaborations . . . . .	.1029
<i>Gabriel Gonzales, Pennsylvania State University, USA</i>	
<i>Johanna Slot, Pennsylvania State University, USA</i>	
<i>Margaret Meloy, Pennsylvania State University, USA</i>	
17-P: When Not Having Enough Prompts Consumers to Show Off: Reminders of Resource Scarcity Prompt Narcissism . . . . .	.1029
<i>Laura Goodyear, Concordia University, Canada</i>	
<i>Caroline Roux, Concordia University, Canada</i>	
<i>Ali Tezer, Université de Montréal, Canada</i>	
<i>Kelly Goldsmith, Vanderbilt University, USA</i>	
10-T: The Moderating Effect of Handedness on Lateral Placement Effects. . . . .	.1030
<i>Stephen Gould, Baruch College, USA</i>	
<i>Emily Goldsmith, Marymount Manhattan College, USA</i>	

2-I: Communication Style Mismatch on Twitter and Facebook: How Luxury Brands Fail to Communicate Their Desirability and Exclusivity . . . . .	.1030
<i>Simone Griesser, University of Warwick, UK</i>	
<i>Qing Wang, University of Warwick, UK</i>	
<i>Thomas T. Hills, University of Warwick, UK</i>	
5-F: Forget Your Regret: Invoking Post-Purchase Hyperopia Mitigates Impulse Purchase Regret . . . . .	.1030
<i>Jamie L. Grigsby, Midwestern State University, USA</i>	
<i>Robert D. Jewell, Kent State University, USA</i>	
<i>Colin Campbell, Kent State University, USA</i>	
7-F: Googled Experiences: Internet-induced Confidence in Decision Abilities Increases Enjoyment . . . . .	.1030
<i>Tito L. H. Grillo, University of Texas at Austin, USA</i>	
<i>Cristiane Pizzutti, Federal University of Rio Grande do Sul, Brazil</i>	
<i>Adrian F. Ward, University of Texas at Austin, USA</i>	
4-L: Mixed Emotions Taking Me Over: How Anticipatory Emotions and Civic Risk Determine Choices for Stigmatized Products . . . . .	.1030
<i>Jerry Grimes, Grenoble Ecole de Management, France</i>	
9-E: Children's Food-related Consumer Socialization: Parental Goals and Strategies . . . . .	.1031
<i>Alice Grønhoj, Aarhus University, Denmark</i>	
<i>Malene Gram, Aalborg University, Denmark</i>	
9-C: Brand Authenticity Revisited: The Case of Three Times a Day . . . . .	.1031
<i>Amélie Guèvremont, Université du Québec à Montréal, Canada</i>	
12-A: Input vs. Output-Based Framing and How They Influence Motivation . . . . .	.1031
<i>Manissa Gunadi, Erasmus University Rotterdam, The Netherlands</i>	
<i>Bram Van den Bergh, Erasmus University Rotterdam, The Netherlands</i>	
17-K: Role of Group Cohesiveness in Consumers' Responses to Mobile Promotions . . . . .	.1031
<i>Reetika Gupta, ESSEC Business School, Singapore</i>	
<i>Sourjo Mukherjee, ESSEC Business School, France</i>	
<i>Kasthuri Jayarajah, Singapore Management University, Singapore</i>	
Practicing the (un)Healthy = Tasty Intuition: Towards an Ecological View of the Relationship between Health and Taste Consumer Judgments. . . . . .	.1031
<i>Simona Haasova, University of Vienna, Austria</i>	
<i>Arnd Florack, University of Vienna, Austria</i>	
<i>Christoph Welles, University of Vienna, Austria</i>	
2-E: Are Brands Known by the Company They Keep? The Effects of Speech Rate on Employee and Brand Perceptions . . . . .	.1031
<i>Fatima Hajjat, Ithaca College, USA</i>	
<i>Elizabeth Miller, University of Massachusetts, USA</i>	
3-C: Does Incompetence Hurt More than Immorality? Construal Levels Affect Responses to Negative Brand Information. . . . . .	.1032
<i>Bing Han, Shanghai Jiao Tong University, China</i>	
<i>Liangyan Wang, Shanghai Jiao Tong University, China</i>	
<i>Ke Xue, Shanghai Jiao Tong University, China</i>	
2-X: To Collaborate or to Support: The Effects of Implicit Theory on Consumer Response to Anthropomorphized Brand Roles. . . . . .	.1032
<i>Bing Han, Shanghai Jiao Tong University, China</i>	
<i>Liangyan Wang, Shanghai Jiao Tong University, China</i>	
<i>Ke Xue, Shanghai Jiao Tong University, China</i>	
3-G: Reducing Regret for Maximizers: The Role of Construal Level . . . . .	.1032
<i>Louise Hassan, Bangor University, UK</i>	
<i>Edward Shiu, Bangor University, UK</i>	
<i>Miriam McGowan, Bangor University, UK</i>	

7-L: Role of Arousal in Experiencing Feeling of Missing Out . . . . .	.1032
<i>Ceren Hayran, Doctoral Candidate in Marketing Koc University, Turkey</i>	
<i>Zeynep Gürhan-Canli, Professor of Marketing at Koc University, Turkey</i>	
16-H: Secret Keeping Spurs Conformity Consumption . . . . .	.1032
<i>Dongjin He, Hong Kong Polytechnic University, China</i>	
<i>Yijie Wang, Hong Kong Polytechnic University, China</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, China</i>	
<i>Gerald Gorn, Hong Kong Polytechnic University, China</i>	
2-K: Consumer Responses to Anthropomorphized Brand Alliances . . . . .	.1033
<i>Dongjin He, Hong Kong Polytechnic University, China</i>	
<i>Fangyuan Chen, Hong Kong Polytechnic University, China</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, China</i>	
13-H: The Consumption of Digital Live Content: How Live Streaming Enhances Interest in Uninteresting Content . . . . .	.1033
<i>Daniel He, Columbia University, USA</i>	
<i>Jonathan Hurwitz, Columbia University, USA</i>	
<i>Ran Kivetz, Columbia University, USA</i>	
5-D: Does Humor in Advertising Trigger Competence and Warmth Inferences about Advertisers? . . . . .	.1033
<i>Chi Hoang, BI Norwegian Business School, Norway</i>	
<i>Luk Warlop, BI Norwegian Business School, Norway</i>	
<i>Klemens Knoferle, BI Norwegian Business School, Norway</i>	
2-V: The Influence of Sex Appeal in Advertising: The Moderating Role of Brand Loyalty . . . . .	.1033
<i>Sujeong Hong, Sungkyunkwan University, South Korea</i>	
13-L: When Dissimilar Others Positively Impact Online Purchase Intentions . . . . .	.1033
<i>Rahil Hosseini, Pompeu Fabra University, Spain</i>	
<i>Ana Valenzuela, Baruch College, USA & ESADE Business School, Spain</i>	
<i>Maria Galli, ESADE Business School, Spain</i>	
12-I: Upward Social Comparison in Goal Pursuit: Exploring the Role of Regulatory Focus. . . . .	.1033
<i>Yu Hu, Salem State University, USA</i>	
19-K: Sleepiness, Need for Stimulation, and Variety-Seeking by Consumers. . . . .	.1034
<i>Zhongqiang (Tak) Huang, University of Hong Kong, Hong Kong</i>	
<i>Yitian (Sky) Liang, University of British Columbia, Canada</i>	
<i>Charles B. Weinberg, University of British Columbia, Canada</i>	
<i>Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong</i>	
16-P: Renting Alone? Relationship Status and Differential Appeal of Acquisition Modes. . . . .	.1034
<i>Li Huang, Hofstra University, USA</i>	
<i>Anastasiya Pocheptsova Ghosh, University of Arizona, USA</i>	
16-N: Exploring Fling Relationships with Rented Products . . . . .	.1034
<i>Li Huang, Hofstra University, USA</i>	
<i>Natalie Truong, Nanyang Technological University, Singapore</i>	
<i>Jennifer Argo, University of Alberta, Canada</i>	
20-E: How Broadcasting vs. Narrowcasting on Social Media Affects Consumer Memories. . . . .	.1034
<i>Li Huang, Hofstra University, USA</i>	
<i>Frank Zheng, University of Texas at Austin, USA</i>	
<i>Adrian Ward, University of Texas at Austin, USA</i>	
18-B: Jumping on the Bandwagon or Seeking Novelty: An Experimental Study on the Effectiveness of Heuristics to Promote Pro-Environmental Behavior.. . . .	.1034
<i>Liselot Hudders, University of Ghent, Belgium</i>	
<i>Veroline Cauberghe, University of Ghent, Belgium</i>	
<i>Carla Mingolla, University of Ghent, Belgium</i>	

9-W: Taste Perception and Creativity . . . . .	.1034
<i>Young Eun Huh, HKUST, Hong Kong</i>	
<i>Yoonah Hong, Hongik University, South Korea</i>	
<i>Nara Youn, Hongik University, South Korea</i>	
17-G: How Satisfied Are You with Your Purchase?: Role of Experience Variety and Self-Construal Level . . . . .	.1035
<i>Kyoung Tae Huh, Seoul National University, South Korea</i>	
<i>Youseok Lee, Seoul National University, South Korea</i>	
<i>Sang-Hoon Kim, Seoul National University, South Korea</i>	
17-J: Robo-Chat: Social Perceptions of Artificial Intelligence Assistants . . . . .	.1035
<i>Claudia Iglesias, Wilfrid Laurier University, Canada</i>	
<i>Grant Packard, Wilfrid Laurier University, Canada</i>	
2-N: Does the Negativity Effect Really Work? The Positive-Negative Asymmetry in Computer Brand Evaluation. . . . .	.1035
<i>Magdalena Jablonska, SWPS University of Social Sciences and Humanities, Poland</i>	
<i>Andrzej Falkowski, SWPS University of Social Sciences and Humanities, Poland</i>	
9-K: Healthy Cake or Decadent Cake, Could Dialecticism Be the Answer? . . . . .	.1035
<i>Alexander Jakubanees, Norwegian School of Economics, Norway</i>	
<i>Alexander Fedorikhin, Indiana University, USA</i>	
<i>Nina Iversen, BI Norwegian Business School, Norway</i>	
11-E: Giving Money versus Giving Time: The Timing Effect of Thank-You Gifts on Donation Satisfaction . . . . .	.1035
<i>Miaolei (Liam) Jia, National University of Singapore, Singapore</i>	
<i>Isabel Ding, National University of Singapore, Singapore</i>	
10-A: Does Purging Lead to Better Self-Control? The Role of the “Simplification” Mindset . . . . .	.1035
<i>Lei Jia, Ohio State University, USA</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
<i>Xiaojing Yang, University of Wisconsin - Milwaukee, USA</i>	
14-P: The Power of Verbs: The Effect of Verbs on Purchase Intention . . . . .	.1036
<i>Miaolei (Liam) Jia, National University of Singapore, Singapore</i>	
<i>Isabel Ding, National University of Singapore, Singapore</i>	
1-L: The Spillover Effect of Beauty: Narcissists’ Overemphasis on Aesthetics in Product Choice . . . . .	.1036
<i>Lei Jia, Ohio State University, USA</i>	
<i>Xiaojing Yang, University of Wisconsin - Milwaukee, USA</i>	
<i>Huifang Mao, Iowa State University, USA</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
8-G: Power, Economic Situation and Financial Risk Taking. . . . .	.1036
<i>Jinfeng (Jemy) Jiao, State University of New York at Binghamton, USA</i>	
<i>Fang-Chi Lu, Korea University, South Korea</i>	
11-K: Pride and Dishonesty Why Does Authentic Pride Lead to More Dishonesty? . . . . .	.1036
<i>Jinfeng (Jenny) Jiao, State University of New York at Binghamton, USA</i>	
<i>Cathy Cole, University of Iowa, USA</i>	
<i>Gary Gaeth, University of Iowa, USA</i>	
11-D: How Power States Affect Charitable Behaviors towards In-Group versus Out-group Recipients . . . . .	.1036
<i>Fei Jin, Peking University, China</i>	
<i>Ping Tu, Peking University, China</i>	
<i>Huawei Zhu, Wuhan University, China</i>	
<i>Keyi Li, Peking University, China</i>	
10-N: Quantification and Experience in Effortful Task: Moderating Role of Causality Orientation, Gender. . . . .	.1037
<i>Daoyan Jin, University College of Southeast Norway, Norway</i>	
<i>Halgeir Halvari, University College of Southeast Norway, Norway</i>	
<i>Natalia Maehle, Western Norway University of Applied Sciences, Norway</i>	
<i>Christopher Niemiec, University of Rochester, USA</i>	

14-A: An Official Apology Would End the Matter: Investigation on the Fit Between Message Content and Communication Method of Mobile Marketing (Text Message vs. Instant Message) . . . . .	.1037
<i>Sunghee Jun, Seoul National University, South Korea</i>	
<i>Kiwan Park, Seoul National University, South Korea</i>	
2-J: Consumer Brand Sabotage: When and Why Does it Cause Damage among Other Consumers? . . . . .	.1037
<i>Andrea Kähr, University of Bern, Switzerland</i>	
<i>Bettina Nyffenegger, University of Bern, Switzerland</i>	
<i>Harley Krohmer, University of Bern, Switzerland</i>	
<i>Wayne D. Hoyer, University of Texas at Austin, USA</i>	
15-F: The Self-regulatory Power of Environmental Lighting . . . . .	.1037
<i>Seo Yoon Kang, Hongik University, Korea</i>	
<i>Nara Youn, Hongik University, Korea</i>	
<i>Heakyung Cecilia Yoon, Hongik University, Korea</i>	
11-N: The Impact of Vice Magnitude on Evaluations of Vice-Virtue Bundles . . . . .	.1037
<i>Mustafa Karatas, Koc University, Turkey</i>	
<i>Zeynep Gürhan-Canli, Koc University, Turkey</i>	
6-J: Vulnerable or Agentic? Medicalized Consumption and its Impact on Consumer Identity . . . . .	.1038
<i>Richard Kedzior, Bucknell University, USA</i>	
2-G: Brand Activism in the Age of Resistance: What Does it Mean? . . . . .	.1038
<i>Joya A. Kemper, University of Canterbury, New Zealand</i>	
<i>Paul W. Ballantine, University of Canterbury, New Zealand</i>	
12-H: Understanding the Motivation to Help Under Mortality Salience: Self-Worth Account Versus Cultural Standards Account . . . . .	.1038
<i>Sara Kim, University of Hong Kong, Hong Kong</i>	
<i>Youngsoo Kim, LSR/UX Lab, LG Electronics, South Korea</i>	
<i>Soraya Lambotte, AbbVie, UK</i>	
<i>Minhi Hahn, Korean Advanced Institute of Science and Technology, South Korea</i>	
1-I: The Effect of Color Saturation on Satiation: High Saturation Increases Satiation of the Product . . . . .	.1038
<i>Hakkyun Kim, Sungkyunkwan University, South Korea</i>	
<i>Eunmi Jeon, Sungkyunkwan University, South Korea</i>	
<i>Jungyun Kang, National Taiwan Normal University, Taiwan</i>	
16-E: Gift Cards vs. Cash: The Effects of Money Perception on Asymmetric Preferences for Gift Cards between Gift Givers and Receivers . . . . .	.1038
<i>Min Jung Kim, Manhattan College, USA</i>	
14-H: Narrative Advertising Effectiveness: The Role of Ad Relevance, Ad Vividness, and Ad Message Explicitness . . . . .	.1039
<i>Eunjin (Anna) Kim, Southern Methodist University, USA</i>	
<i>Eunseon (Penny) Kwon, Texas Christian University, USA</i>	
5-S: The Joint Effect of Affect and Information-processing Style on Price Judgment . . . . .	.1039
<i>Kaeun Kim, University of Massachusetts, USA</i>	
<i>Elizabeth Miller, University of Massachusetts, USA</i>	
3-A: “Mannequin and I”: How Social Distance from Mannequins and Self-Construals of Shoppers Affect Product Evaluation . . . . .	.1039
<i>Pielah Kim, Philadelphia University, USA</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
16-G: Receiving Less for More: Inequality Aversion in Crowdfunding . . . . .	.1039
<i>Joonkyung Kim, University of Toronto, Canada</i>	

5-U: When Do People Make Affectively Negative Self-Presentation? . . . . .	.1039
<i>Dan King, University of Texas Rio Grande Valley, USA</i>	
<i>Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand</i>	
<i>Zachary Mendenhall, McGill University, Canada</i>	
10-O: Sequence Fluency Effects on Consumers' Judgments of Truth . . . . .	.1039
<i>Dan King, University of Texas Rio Grande Valley, USA</i>	
<i>Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand</i>	
13-C: Creating Brand Reputation:	
How Employees Express Their Brand in Social Media Networks . . . . .	.1040
<i>Stephanie Kogler, University of Innsbruck, Austria</i>	
<i>Joonas Rokka, EMLYON Business School, France</i>	
<i>Andrea Hemetsberger, University of Innsbruck, Austria</i>	
10-K: Free to Choose: Belief in Free Will and Indecisiveness . . . . .	.1040
<i>Michail D. Kokkoris, Vienna University of Economics and Business, Austria</i>	
<i>Roy Baumeister, University of Queensland, Australia</i>	
<i>Ulrich Kühnen, Jacobs University, Germany</i>	
12-G: Too Much of a Fun Thing: When Many Fun Activities Lead to Productivity . . . . .	.1040
<i>Kate Kooi, University of Miami, USA</i>	
<i>William Nowlan, University of Miami, USA</i>	
<i>Juliano Laran, University of Miami, USA</i>	
20-B: Investigating Online Reviews: The Moderating Role of Scarcity Appeal . . . . .	.1040
<i>Elika Kordrostami, Humboldt State University, USA</i>	
<i>Yuping Liu-Thompkins, Old Dominion University, USA</i>	
<i>Vahid Rahmani, Old Dominion University, USA</i>	
14-E: Do We Always Appreciate Creative Ads?	
Unlocking the Meaning of Highly Novel Ads . . . . .	.1040
<i>Afra Koulaei, University College of Southeast Norway, Norway</i>	
12-E: The Impact of Purchase Motivation on Happiness:	
Experiential and Material Purchases . . . . .	.1041
<i>Sofia Kousi, Athens University of Economics & Business, Greece</i>	
<i>Flora Kokkinaki, Athens University of Economics & Business, Greece</i>	
<i>Stavros Drakopoulos, National and Kapodistrian University of Athens, Greece</i>	
14-R: Leaving the Lab: Can Mobile fNIRS Enhance Consumer Research? . . . . .	.1041
<i>Caspar Krampe, Heinrich-Heine-Universität, Germany</i>	
<i>Nadine Gier, Heinrich-Heine-Universität, Germany</i>	
<i>Enrique Strelow, Justus Liebig Universität, Germany</i>	
<i>Peter Kenning, Heinrich-Heine-Universität, Germany</i>	
13-D: Extending the Herding Effect to the Consumption Experience:	
The Case of Online Music . . . . .	.1041
<i>Zachary Krastel, Concordia University, Canada</i>	
<i>H. Onur Bodur, Concordia University, Canada</i>	
16-M: Bridging the Chasm for Materialists: The Case of Renting Luxury . . . . .	.1041
<i>Goedele Krekels, HEC Lausanne, Switzerland</i>	
<i>Bruno Kocher, HEC Lausanne, Switzerland</i>	
<i>Sandor Czellar, HEC Lausanne, Switzerland</i>	
<i>Brigitte Muller, IAE de Toulon, France</i>	
17-Q: When Saying Less Tells Me More:	
The Relation Between Socio-economic Status (SES) and Luxury Justification . . . . .	.1041
<i>Goedele Krekels, HEC Lausanne, Switzerland</i>	
<i>Sandor Czellar, HEC Lausanne, Switzerland</i>	
<i>David Dubois, INSEAD, France</i>	
<i>Gilles Laurent, INSEEC Business School, France</i>	
<i>Bruno Kocher, HEC Lausanne, Switzerland</i>	

20-F: How People Compose and Detect Insincere Product Reviews: Combining Experimental and Automated-Text-Analysis Approaches . . . . .	.1042
<i>Ann Kronrod, University of Massachusetts - Lowell, USA</i>	
<i>Jeff Lee, New York University, Shanghai, China</i>	
<i>Ivan Gordeliy, École Normale Supérieure, France</i>	
2-D: A Brand Community's Response to the Brand's Transgression: The Role of Collective Psychological Ownership . . . . .	.1042
<i>Christina Kuchmaner, Kent State University, USA</i>	
<i>Jennifer Wiggins, Kent State University, USA</i>	
<i>Pamela Grimm, Kent State University, USA</i>	
17-F: A Little Knowledge is a Dangerous Thing: When Co-Production Leads Consumers to Abandon a Firm for a Do-It-Yourself Alternative . . . . .	.1042
<i>Christina Kuchmaner, Kent State University, USA</i>	
<i>Jennifer Wiggins, Kent State University, USA</i>	
<i>Colin Campbell, Kent State University, USA</i>	
2-P: How Mortality Salience Impacts Consumers' Preference for Brands . . . . .	.1042
<i>Polina Landgraf, IE University, Spain</i>	
<i>Antonios Stamatogiannakis, IE University, Spain</i>	
<i>Haiyang Yang, Johns Hopkins University, USA</i>	
2-O: Environmental Threats and the Brand Incumbency Advantage. . . . .	.1042
<i>Even Lanseng, Norwegian School of Management, Norway</i>	
17-N: The Dissimilarity Magnifying Bias . . . . .	.1043
<i>Negin Latifi Kasani, ESSEC Business School, France</i>	
<i>Claudiu Dimofte, San Diego State, USA</i>	
1-E: Exploring the Concept of Beauty in Consumer Research: A Multidisciplinary Framework and Research Agenda . . . . .	.1043
<i>Marina Leban, ESCP Europe, France</i>	
<i>Benjamin Voyer, ESCP Europe, France</i>	
1-C: Differential Preference toward Aesthetic Design Elements of Airline Livery: An Examination of Design-Activity Congruency . . . . .	.1043
<i>Jeongmin Lee, Gachon University, South Korea</i>	
<i>Wujin Chu, Seoul National University, South Korea</i>	
<i>Dawon Kang, Seoul National University, South Korea</i>	
<i>Jisu Yi, Seoul National University, South Korea</i>	
10-D: "What a Loss of a Freebie!": Promotion Framing and Consumer Product Returns . . . . .	.1043
<i>Shinhyoung Lee, Seoul National University, South Korea</i>	
<i>Youjae Yi, Seoul National University, South Korea</i>	
13-E: I Want to Share My Information!: The Effects of Social Exclusion on Consumers' Information Disclosure Intentions . . . . .	.1043
<i>Jiyoung Lee, University of Texas at Austin, USA</i>	
<i>Andrew Gershoff, University of Texas at Austin, USA</i>	
12-C: Missing, not Empty: Effects of Absence of Expected Objects in a Space on Motivation and Performance . . . . .	.1044
<i>Jaewoo Lee, Boston University, USA</i>	
<i>Kyeongheui Kim, Sungkyunkwan University, South Korea</i>	
<i>Minjung Koo, Sungkyunkwan University, South Korea</i>	
<i>Eunyoung Song, University of Florida, USA</i>	
11-B: Donor Social Class Influences Appreciation of Donation . . . . .	.1044
<i>Jacob Lee, UNIST, South Korea</i>	
<i>Christine Kang, California State University Long Beach, USA</i>	
<i>Kate Min, Cornell University, USA</i>	
9-P: My Meal and My Recipe: Social Media Intervention in Rural Food Consumption . . . . .	.1044
<i>Eric Li, University of British Columbia, Canada</i>	
<i>Cristalle Smith, University of British Columbia, Canada</i>	
<i>Xin Zhao, Lancaster University, UK</i>	
<i>Sarah Weseen, University of British Columbia, Canada</i>	

4-B: Beyond Lei Feng!	
Global Fashion Brands and Modern Girl Archetypes in Emerging Chinese Market . . . . .	.1044
<i>Eric Li, University of British Columbia, Canada</i>	
<i>Xin Zhao, Lancaster University, UK</i>	
<i>Fiona Li, Independent Researcher, China</i>	
<i>Magnum Lam, Hong Kong Design Institute, Hong Kong</i>	
<i>Wing-sun Liu, Hong Kong Polytechnic University, Hong Kong</i>	
13-B: Competitive or Complementary? An Empirical Look at	
Interactions between Reselling and Agency Selling in Platform-Based Retailing . . . . .	.1044
<i>Qi Li, Nanjing University, China</i>	
<i>Quansheng Wang, Nanjing University, China</i>	
<i>Peijian Song, Nanjing University, China</i>	
11-O: The Influences of Morality-Irrelevant Inspiration on the	
Two Faces of Morality Behavior . . . . .	.1045
<i>Jianping Liang, Sun Yat-sen University, China</i>	
<i>Zengxiang Chen, Nankai University, China</i>	
<i>Jing Lei, University of Melbourne, Australia</i>	
10-P: Solving the Paradox of a Large Assortment: The Moderating Role of Choice Mode . . . . .	.1045
<i>Mikyoung Lim, Sogang University, Republic of Korea</i>	
<i>Young-Won Ha, Sogang University, Republic of Korea</i>	
5-T: The Silver Lining of Envy on Social Media? –	
The Relationships Between Post Content, Envy Type, and Purchase Intention . . . . .	.1045
<i>Ruoyun Lin, Leibniz-Institut für Wissensmedien, Germany</i>	
13-I: The Development and Validation of a Scale for Virtual Identity versus Actual Identity. . . . .	.1045
<i>Chia-Wei Joy Lin, University of Tennessee at Chattanooga, USA</i>	
<i>Yinlong Zhang, University of Texas at San Antonio, USA</i>	
14-T: On the Proliferation of Latent Construct in Consumer Research:	
A Historical Perspective . . . . .	.1045
<i>Shan Lin, Norwegian School of Economics and Business Administration, Norway</i>	
20-P: Trust is Good, Control is Effort –	
The Paradoxical Role of Privacy Concerns in Customer Loyalty Programs . . . . .	.1045
<i>Helena M. Lischka, Heinrich-Heine-Universität Düsseldorf, Germany</i>	
<i>Verena Bergers, Heinrich-Heine-Universität Düsseldorf, Germany</i>	
<i>Peter Kenning, Heinrich-Heine-Universität Düsseldorf, Germany</i>	
15-D: Product Touch and Consumers' Online and Offline Buying:	
The Moderation Effect of Mental Representation . . . . .	.1046
<i>Wumei Liu, Lanzhou University, China</i>	
<i>Rajeev Batra, University of Michigan, USA</i>	
<i>Haizhong Wang, Sun Yat-Sen University, China</i>	
14-C: Claiming to be Good in Parts or in Whole?	
The Joint Effect of Ad Headline and Body Copy on Ad Effectiveness . . . . .	.1046
<i>Xuefeng Liu, Loyola University Maryland, USA</i>	
<i>Jason Zhang, Loyola University Maryland, USA</i>	
<i>Jibo He, Wichita State University, USA</i>	
7-B: Bad Experiences Increase Social Closeness Over Time . . . . .	.1046
<i>Kailuo Liu, University of Toronto, Canada</i>	
<i>Cindy Chan, University of Toronto, Canada</i>	
2-C: “We are Breaking Up”:	
The Direct and Mediating Effects of Conceptual Metaphors on Brand Relationships . . . . .	.1046
<i>Alberto Lopez, Tecnológico de Monterrey, Mexico</i>	
<i>Martin Reimann, University of Arizona, USA</i>	
<i>Raquel Castaño, Tecnológico de Monterrey, Mexico</i>	
10-J: Fluency Leads to Overconfidence in Decision Making . . . . .	.1046
<i>Fang-Chi Lu, Korea University, South Korea</i>	
<i>Jinfeng (Jenny) Jiao, State University of New York at Binghamton, USA</i>	

14-D: Consumer Reactance to Persuasive Messages: How Personal Preferences Influence Attitude and Attitude Change . . . . .	.1047
<i>Sabrina Lucke, Technical University of Munich, Germany</i>	
<i>Joerg Koenigstorfer, Technical University of Munich, Germany</i>	
<i>Angela Y. Lee, Northwestern University, USA</i>	
19-M: The Impact of the Maximizing Mindset on Variety Seeking Behaviors . . . . .	.1047
<i>Jingjing Ma, Peking University, China</i>	
10-S: The Effect of Maximizing on Consumer Response to Features and Price . . . . .	.1047
<i>Zhenfeng Ma, Wilfrid Laurier University, Canada</i>	
<i>Jingjing Ma, Peking University, China</i>	
7-E: Emotional Cocktails: Mixed Emotions, Gratifications, and the Enjoyment of Various Types of Movie Genre . . . . .	.1047
<i>Robert Madrigal, California State University at Chico, USA</i>	
<i>Colleen Bee, Oregon State University, USA</i>	
<i>Brandon Reich, University of Oregon, USA</i>	
<i>Troy Campbell, University of Oregon, USA</i>	
<i>Nathan Warren, University of Oregon, USA</i>	
9-HH: The Power Framework of Addictive Consumption: When, Why, and How Emotion Regulation Leads to Addictive Consumption . . . . .	.1047
<i>Olga Martin, University of Washington, USA</i>	
<i>Shailendra P. Jain, University of Washington, USA</i>	
4-K: Methods to Improve Construct Measurement Equivalency in Cross-Cultural Consumer Research . . . . .	.1048
<i>Veronica Martin Ruiz, Iowa State University, USA</i>	
<i>Jose A. Rosa, Iowa State University, USA</i>	
15-H: The Sophisticated Brand Scent: The Effects of Scent Type on Brand Sophistication . . . . .	.1048
<i>Márcia Maurer Herter, ESPM Business School, Brazil</i>	
<i>Diego Costa Pinto, ESPM Business School, Brazil</i>	
<i>Mellina Terres, UFCSPA, Brazil</i>	
<i>Leonardo Nicolao, UFRGS, Brazil</i>	
4-D: Decomposing Cultural Effects in the Valuation of Time: Orientation, End and Progress . . . . .	.1048
<i>Yan Meng, Grenoble Ecole de Management, France</i>	
<i>Ana Valenzuela, Baruch College, CUNY, USA & ESADE, Spain</i>	
15-E: Putting Scent Where It Belongs: The Effects of Scent Intensity and Presentation Order on Scented Product Evaluation . . . . .	.1048
<i>Hua (Meg) Meng, Longwood University, USA</i>	
<i>Cesar Zamudio, Kent State University, USA</i>	
<i>Robert D. Jewell, Kent State University, USA</i>	
17-B: Every Crowd Has a Silver Lining: Threat Unleashes the Positive Aspects of Social Density . . . . .	.1048
<i>Uwe Messer, University of Bamberg, Germany</i>	
<i>Alexander Leischnig, University of Bamberg, Germany</i>	
<i>Elisabeth Distler, University of Bamberg, Germany</i>	
6-D: On Biological Origins of Materialism . . . . .	.1049
<i>Uwe Messer, University of Bamberg, Germany</i>	
<i>Alexander Leischnig, University of Bamberg, Germany</i>	
<i>Elisabeth Distler, University of Bamberg, Germany</i>	
14-S: Liminality in Consumer Research . . . . .	.1049
<i>Laetitia Mimoun, HEC Paris, France</i>	
<i>Fleura Bardhi, City University of London, UK</i>	
20-H: Perseverance of the Underdog Effect in the Face of Negative Reviews. . . . .	.1049
<i>Dong-Jun Min, University of New Orleans, USA</i>	
<i>Anja Luethi, University of New Orleans, USA</i>	
<i>Kyeong Sam Min, University of New Orleans, USA</i>	

1-H: The Effect of Abstract Versus Representational Art Imagery on Product Luxuriousness Perception And Evaluation . . . . .	.1049
<i>Tingting Mo, Zhongnan University of Economics and Law, China</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
4-O: Tension and Trust: Crossing the Border Between Hybrid Economies and Home . . . . .	.1049
<i>Michael Moorhouse, Western University, Canada</i>	
<i>June Cotte, Western University, Canada</i>	
8-B: Eliminating the Paper Trail: Consumers Prefer Using Cash over Cards for More Painful Purchases . . . . .	.1049
<i>Joshua Morris, Stanford University, USA</i>	
<i>Szu-chi Huang, Stanford University, USA</i>	
16-B: Consumer Benevolence and Risk Taking: Is Altruism Perilous? . . . . .	.1050
<i>Sudipta Mukherjee, Virginia Tech, USA</i>	
<i>Sam Bond, Georgia Tech, USA</i>	
<i>Mario Pandelaere, Virginia Tech, USA</i>	
10-I: Do Deals Really Help Save Money: Deal Salience Results in Increased Consumer Spending . . . . .	.1050
<i>Sudipta Mukherjee, Virginia Tech, USA</i>	
<i>Mario Pandelaere, Virginia Tech, USA</i>	
11-F: Looking a Free Gift in The Mouth: The Effect of Free Gifts on Charitable Behavior. . . . .	.1050
<i>Ashesh Mukherjee, McGill University, Canada</i>	
<i>Raj Raghunathan, University of Texas at Austin, USA</i>	
<i>Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand</i>	
5-H: I'm Scared, Want to Listen? Incidental Fear's Influence on Self-Disclosure to Brands . . . . .	.1050
<i>Anupama Mukund Bharadwaj, University of Washington, USA</i>	
<i>Lea Dunn, University of Washington, USA</i>	
5-E: Fight or Flight? Consumers' Implicit and Explicit Emotional Reactions to Looming Threat . . . . .	.1050
<i>Lana Mulier, Ghent University, Belgium</i>	
<i>Hendrik Slabbinck, Ghent University, Belgium</i>	
<i>Iris Vermeir, Ghent University, Belgium</i>	
18-D: Me First, Then the Environment: Pro-Environmental Behavior in Communal vs. Agentic Narcissists. . . . .	.1050
<i>Iman Naderi, Fairfield University, USA</i>	
5-C: Do Consumers Get What They Want? How Desires Influence Consumer Happiness . . . . .	.1051
<i>Leonardo Nicolao, UFRGS, Brazil</i>	
<i>Vinicius Brei, UFRGS, Brazil</i>	
8-D: How Price Path Characteristics Shape Investment Behavior . . . . .	.1051
<i>Sven Nolte, University of Muenster, Germany</i>	
<i>Judith Schneider, University of Muenster, Germany</i>	
10-H: Creativity in Real Life: How a Creative Mindset Affects Intertemporal Preferences. . . . .	.1051
<i>Luke Nowlan, University of Miami, USA</i>	
<i>Carter Morgan, University of Miami, USA</i>	
4-E: Domains of Consumer Tranquility and the "Tranquility Gap" . . . . .	.1051
<i>Hyewon Oh, University of Illinois at Urbana-Champaign, USA</i>	
<i>Cele Omes, University of Illinois at Urbana-Champaign, USA</i>	
<i>Ravi Mehta, University of Illinois at Urbana-Champaign, USA</i>	
9-M: Improving the Efficacy of Posted Calorie Information Through the Strategic Use of Provincial Norms . . . . .	.1051
<i>Ashley Otto, Baylor University, USA</i>	
<i>Brennan Davis, California Polytechnic State University, USA</i>	
<i>Kirk Wakefield, Baylor University, USA</i>	
<i>Joshua Clarkson, University of Cincinnati, USA</i>	

20-O: The Presence of Familiar Words Drive Social Media Likes, Comments, and Shares . . . . .	.1051
<i>Ethan Pancer, Saint Mary's University, Canada</i>	
<i>Vincent Chandler, Saint Mary's University, Canada</i>	
<i>Maxwell Poole, Saint Mary's University, Canada</i>	
14-L: The Effect of Stress on the Persuasiveness of (Central vs. Peripheral) Advertising Messages . . . . .	.1052
<i>Shirish Panchal, Wilfrid Laurier University, Canada</i>	
<i>Dr. Tripat Gill, Wilfrid Laurier University, Canada</i>	
<i>Dr. Zhenfeng Ma, Wilfrid Laurier University, Canada</i>	
18-G: The Asymmetric Effect of Going Green versus Going Luxury . . . . .	.1052
<i>Jooyoung Park, Peking University, China</i>	
10-L: Number-location Bias: Do Consumers Correctly Process the Number? . . . . .	.1052
<i>Jihye Park, Hankuk University of Foreign Studies, South Korea</i>	
<i>Yoon Jin Ma, Illinois State University, USA</i>	
6-I: The Impact of Mixed-Sex Competition on Women's Choice of Androgynous Products . . . . .	.1052
<i>Jooyoung Park, Peking University, China</i>	
<i>Fayrouz Souissi, Peking University, China</i>	
11-G: Pride and Donation Behaviors . . . . .	.1052
<i>Sungjun (Steven) Park, Korea Advanced Institute of Science and Technology (KAIST), South Korea</i>	
<i>Yong J. Hyun, Korea Advanced Institute of Science and Technology (KAIST), South Korea</i>	
14-F: Free But Suspicious Gift Promotion: the Influence of Product-gift Fit on Devaluating the Promoted Product . . . . .	.1052
<i>Yookyung Park, Seoul National University, Korea</i>	
<i>Youjae Yi, Seoul National University, Korea</i>	
2-S: The Asymmetric Attribution toward Brands (Underdog vs. Top-dog) upon Brand Crisis (External vs. Internal) . . . . .	.1053
<i>Kiwan Park, Seoul National University, Republic of Korea</i>	
<i>Yaeri Kim, Seoul National University, Republic of Korea</i>	
<i>Seojin stacey Lee, Seoul National University, Republic of Korea</i>	
1-J: The Effect of Incidental Disgust on Aesthetic Preference . . . . .	.1053
<i>Kiwan Park, Seoul National University, South Korea</i>	
<i>Seojin Stacey Lee, Seoul National University, South Korea</i>	
<i>Joonkyung Kim, University of Toronto, Canada</i>	
19-H: An Individual Choice vs. A Bundle Choice: The Effect of Choice Mechanics on Diversification Bias . . . . .	.1053
<i>Jihye Park, Hankuk University of Foreign Studies, South Korea</i>	
13-F: Location-based Services Effect on Online Purchase Intention . . . . .	.1053
<i>Jean-Eric Pelet, ESCE International Business School, France</i>	
<i>Jashim Khan, University of Surrey, UK</i>	
<i>Kelly Cowart, University of South Florida Sarasota-Manatee, USA</i>	
14-G: Incorporating Vanity into a Luxury Value-Attitude-Behavior Model- Evidence from Luxury Restaurant Consumers . . . . .	.1053
<i>Norman Peng, University of Westminster, UK</i>	
<i>Annie Chen, University of West London, UK</i>	
<i>Li-Wei Mai, University of Westminster, UK</i>	
<i>Stella Kladou, Sheffield Hallam University, UK</i>	
3-B: Can Implicit Theory Influence Construal Level? . . . . .	.1054
<i>Sara Penner, University of Manitoba, Canada</i>	
<i>Olga Bullard, University of Winnipeg, Canada</i>	
<i>Kelley J. Main, University of Manitoba, Canada</i>	
16-L: When is More Better? Will How Many People Ask Affect the Outcome? . . . . .	.1054
<i>Sara Penner, University of Manitoba, Canada</i>	
<i>Kelley Main, University of Manitoba, Canada</i>	
<i>Jennifer Argo, University of Alberta, Canada</i>	

11-M: Puritan Peers or Egoistic Entrepreneurs?	
An Examination of Moral Identity in Collaborative Consumption . . . . .	.1054
<i>Rebeca Perren, California State University San Marcos, USA</i>	
<i>Kristin Stewart, California State University San Marcos, USA</i>	
18-F: Redeeming Guilty Pleasures -	
Sustainable Consumption Across Vice and Virtue Categories . . . . .	.1054
<i>Anne Odile Peschel, Aarhus University, Denmark</i>	
<i>Jessica Aschemann-Witzel, Aarhus University, Denmark</i>	
9-Y: Too Large to Eat it All:	
How Package Size Impacts Anticipated Food Waste, Intentions and Preferences . . . . .	.1054
<i>Olivia Petit, INSEEC Business School, France</i>	
<i>Renaud Lunardo, KEDGE Business School, France</i>	
<i>Bradley J. Rickard, Cornell University, USA</i>	
9-U: Smell-o-Vision:	
Olfactory and Visual Store Atmospherics Prime Healthy Food Choices . . . . .	.1055
<i>Megan Phillips, Auckland University of Technology, New Zealand</i>	
<i>Sommer Kapitan, Auckland University of Technology, New Zealand</i>	
5-I: Judgement and Decision-Making:	
The effect of induced emotional uncertainty on predicted utility and forecasting accuracy. . . . .	.1055
<i>Athanasios Polypourtis, Athens University of Economics & Business, Greece</i>	
<i>Flora Kokkinaki, Athens University of Economics & Business, Greece</i>	
6-F: The Red Derogation Effect . . . . .	.1055
<i>Nicolas Pontes, Queensland University of Technology, Australia</i>	
<i>JoAndrea Hoegg, University of British Columbia, Canada</i>	
11-H: Being Good Versus Being the Better:	
Consumer Responses to Preferential Treatment. . . . .	.1055
<i>Vivian Pontes, Queensland University of Technology, Australia</i>	
<i>Nicolas Pontes, Queensland University of Technology, Australia</i>	
<i>Dominique Greer, Queensland University of Technology, Australia</i>	
5-K: Pride and Shame Moderate the Effect of Regulatory Focus on Risk Taking Propensity. . . . .	.1055
<i>Aylar Pour Mohammad, Bocconi University, Italy</i>	
<i>Gulen Sarial Abi, Bocconi University, Italy</i>	
7-J: Making Money Meaningful:	
Fostering Meaningful Lives Through Growth-Based Experiential Purchases . . . . .	.1055
<i>Emily Powell, New York University, USA</i>	
<i>Adam Alter, New York University, USA</i>	
20-Q: Understanding Word-of-Mouth Transmission . . . . .	.1056
<i>Ashleigh E. Powell, RMIT University, Australia</i>	
<i>Adrian R. Camilleri, RMIT University, Australia</i>	
<i>Angela R. Dobeles, RMIT University, Australia</i>	
<i>Constantino Stavros, RMIT University, Australia</i>	
17-L: Social TV and Viewing Experience . . . . .	.1056
<i>Emily Powell, New York University, USA</i>	
<i>Alixandra Barasch, New York University, USA</i>	
9-S: Presentation Style Affects Decision Processes: A Dietary Choice Study . . . . .	.1056
<i>Mona Prakash, Duke University, USA</i>	
<i>Jonathan Winkle, Duke University, USA</i>	
<i>Nicolette Sullivan, Duke University, USA</i>	
<i>Gavan Fitzsimons, Duke University, USA</i>	
<i>John Pearson, Duke University, USA</i>	
<i>Scott Huettel, Duke University, USA</i>	

11-Q: The Viciousness and Caring of Sharing: Morality and Motivations of Online Shamers. . . . .	.1056
<i>Chen Pundak, Tel Aviv University, Israel</i>	
<i>Yael Steinhart, Tel Aviv University, Israel</i>	
<i>Jacob Goldenberg, Interdisciplinary Center Herzliya, Israel</i>	
15-B: It ‘Sounds’ Healthy to Me! The Influence of Sound on Food Choice. . . . .	.1056
<i>Eduardo Rech, UFRGS, Brazil</i>	
<i>Cristiane Pizzutti, UFRGS, Brazil</i>	
<i>Eric Yorkston, Texas Christian University, USA</i>	
7-I: Is a Smartwatch a Fashion Item or an IT Device?: Moderating Effect of Category Frame in Smartwatch Adoption . . . . .	.1057
<i>Jong-Youn Rha, Seoul National University, Korea</i>	
<i>Jin-Myong Lee, Chungnam National University, Korea</i>	
<i>Sunny Park, Seoul National University, Korea</i>	
<i>Eunsun Cho, Seoul National University, Korea</i>	
<i>Bo Han Lee, Seoul National University, Korea</i>	
10-U: To Search or Not to Search? Exploring Consumer’s Sensitivity to Task Importance. . . . .	.1057
<i>Yefim Roth, Israel Institute of Technology, Israel</i>	
<i>Kinneret Teodorescu, Israel Institute of Technology, Israel</i>	
9-DD: “Works With/For You!” How Framing Health-Related Products as Partners Versus Servants Impacts the Consumption of Indulgences . . . . .	.1057
<i>Caroline Roux, Concordia University, Canada</i>	
<i>Kelly Goldsmith, Vanderbilt University, USA</i>	
<i>Kamila Sobol, Concordia University, Canada</i>	
<i>Laura Goodyear, Concordia University, Canada</i>	
2-M: Distancing from the Envied Person: How Envy, Personal Distance and Framing Brand Availability Affects Brand Evaluations. . . . .	.1057
<i>Rajat Roy, Bond University, Australia</i>	
<i>Subimal Chatterjee, State University of New York at Binghamton, USA</i>	
9-F: Destigmatizing the Overweight Consumers: A Communal Perspective . . . . .	.1057
<i>Nada Sayarh, University of Geneva, Switzerland</i>	
14-N: The Effect of Public Commitment in Consumers’ Satisfaction . . . . .	.1058
<i>Fernanda Scherer, UFRGS, Brazil</i>	
<i>Cristiane Pizzutti, UFRGS, Brazil</i>	
<i>Clara Koetz, Rennes School of Business, France</i>	
11-A: “Doing Good and Having Fun” - The Role of Moral Obligation and Perceived Enjoyment For Explaining Foodsharing Intention . . . . .	.1058
<i>Nadine Schreiner, Heinrich Heine University Düsseldorf, Germany</i>	
<i>Sarah Blümle, Heinrich Heine University Düsseldorf, Germany</i>	
<i>Peter Kenning, Heinrich Heine University Düsseldorf, Germany</i>	
19-E: Surprise me! How Uncertainty Labels Affect Product Consumption. . . . .	.1058
<i>Anika Schumacher, Maastricht University, The Netherlands</i>	
<i>Caroline Goukens, Maastricht University, The Netherlands</i>	
<i>Kelly Geyskens, Maastricht University, The Netherlands</i>	
<i>Martin Reimann, University of Arizona, USA</i>	
18-C: Let Market Know How Your Firm is Implementing Corporate Social Responsibility . . . . .	.1058
<i>Junhee Seok, Seoul National University, Korea</i>	
<i>Sarang Go, Seoul National University, Korea</i>	
<i>Youseok Lee, Seoul National University, Korea</i>	
<i>Byungdo Kim, Seoul National University, Korea</i>	
4-R: Transnational Consumption . . . . .	.1058
<i>Zahra Sharifonnasabi, University of London, UK</i>	
<i>Fleura Bardhi, University of London, UK</i>	

2-Z: When Not to Surprise? The Role of Rewards and Communal Mindset on Perceptions of Brand Value . . . . .	.1059
<i>Sirajul Shibby, State University of New York at Binghamton, USA</i>	
<i>Subimal Chatterjee, State University of New York at Binghamton, USA</i>	
14-B: Can't Switch Off: The Impact of an Attentional Bias on Attitudes . . . . .	.1059
<i>Sunaina Shrivastava, University of Iowa, USA</i>	
<i>Gaurav Jain, Rensselaer Polytechnic Institute, USA</i>	
<i>Dhananjay Nayakankuppam, University of Iowa, USA</i>	
<i>Gary Gaeth, University of Iowa, USA</i>	
17-H: Publicity as Justification. . . . .	.1059
<i>Kao Si, The Chinese University of Hong Kong, China</i>	
<i>Xianchi Dai, The Chinese University of Hong Kong, China</i>	
19-G: Hot Streak! Consumer Inferences from Streaks of Virtuous Choices . . . . .	.1059
<i>Jackie Silverman, University of Pennsylvania, USA</i>	
<i>Alixandra Barasch, New York University, USA</i>	
<i>Deborah Small, University of Pennsylvania, USA</i>	
11-P: The Positive Effect of Moral Licensing on Human Behavior: When a Virtuous Act Motivates You to Work Hard . . . . .	.1059
<i>Anirban Som, IIM Trichy, India</i>	
1-D: Effects of Logo Colorfulness on Consumer Judgments . . . . .	.1059
<i>Jiaqi Song, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong</i>	
9-Q: Packaging Glossiness Thwarts Perceived Food Healthiness . . . . .	.1060
<i>Jiaqi Song, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Anish Nagpal, University of Melbourne, Australia</i>	
<i>Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong</i>	
1-K: The Impact of Visual Glossiness on Psychological Newness and Product Judgment. . . . .	.1060
<i>Jiaqi Song, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong</i>	
7-N: “You Grin At Each Other, You Celebrate Together, You Hug Strangers”: Consequences of Shared Identity Within Crowds at Sporting and Music Events . . . . .	.1060
<i>Maximilian Stieler, University of Bayreuth, Germany</i>	
<i>Fergus G. Neville, University of St. Andrews, UK</i>	
<i>Claas Christian Germelmann, University of Bayreuth, Germany</i>	
3-E: Neurological Evidence for an Interrelation Between Imagery, Psychological Distance, and Construal . . . . .	.1060
<i>Paul E. Stillman, Ohio State University, USA</i>	
<i>Hyojin Lee, San Jose State University, USA</i>	
<i>Xiaoyan Deng, Ohio State University, USA</i>	
<i>Rao Unnava, University of California Davis, USA</i>	
<i>Kentaro Fujita, Ohio State University, USA</i>	
16-O: I Am What I Borrow: Trait Transfer in Borrowed and Rented Products . . . . .	.1060
<i>Rusty Stough, University of Wisconsin, USA</i>	
<i>Page Moreau, University of Wisconsin, USA</i>	
5-L: Psychological Drivers of Customer Compliance: Self-Identity Threats and Discrete Emotions . . . . .	.1061
<i>Kristina Stuhler, Old Dominion University, USA</i>	
<i>Chuanyi Tang, Old Dominion University, USA</i>	
<i>Mahesh Gopinath, Old Dominion University, USA</i>	
10-F: Choice of Ownership – How Choosing Enhances the Endowment Effect on Product Pricing and Evaluation . . . . .	.1061
<i>Daniel Sun, University of Calgary, Canada</i>	
<i>Mehdi Murali, University of Calgary, Canada</i>	

19-F: Vegas it Up to Boost Your Performance! . . . . .	.1061
<i>Arash Talebi, ESSEC Business School, France</i>	
<i>Sonja Prokopec, ESSEC Business School, France</i>	
4-A: Beauty is in the Eye of the Beholder: Young Girl's Perception of Female Attractiveness in New Zealand, India, and Fiji . . . . .	.1061
<i>Tabitha Thomas, University of Otago, New Zealand</i>	
<i>Kirsten Robertson, University of Otago, New Zealand</i>	
<i>Maree Thyne, University of Otago, New Zealand</i>	
4-I: Good Looks, Possessions, and Stereotypes: The Relationship Between Physical Attractiveness and Materialism . . . . .	.1061
<i>Tabitha Thomas, University of Otago, New Zealand</i>	
<i>Kirsten Robertson, University of Otago, New Zealand</i>	
<i>Maree Thyne, University of Otago, New Zealand</i>	
9-N: Medicalization in Finnish Functional Foods: The Normalization of Medical Disorders . . . . .	.1062
<i>Jack Tillotson, Aalto University, Finland</i>	
2-F: Are the Eyes the Mirror to the Soul?: The Influence of Eye Gaze Direction on Narrative Transportation and Self-Brand Connection . . . . .	.1062
<i>Ngoc (Rita) To, University of Houston, USA</i>	
<i>Vanessa Patrick, University of Houston, USA</i>	
7-A: Assembling the Ritual: Consumer Experiences in a Diverse Network . . . . .	.1062
<i>Omer Torlak, Turkish Competition Authority, Turkey</i>	
<i>Mujdat Ozmen, Eskisehir Osmangazi University, Turkey</i>	
<i>Muhammet Ali Tiltay, Eskisehir Osmangazi University, Turkey</i>	
<i>Mahmut Sami Islek, Anadolu University, Turkey</i>	
<i>Ufuk Ay, KTO Karatay University, Turkey</i>	
15-A: Does it Sound Crowded to You? A Proposed Multisensorial Approach to Crowding Research . . . . .	.1062
<i>Fernanda Trindade Deyl, Pontificia Universidade Católica do Rio Grande do Sul, Brazil</i>	
<i>Lélis Balestrin Espartel, Pontificia Universidade Católica do Rio Grande do Sul, Brazil</i>	
14-K: The Effect of Service Providers' Attractiveness on Consumers' Preferences for Status Quo . . . . .	.1062
<i>Natalie Truong, Nanyang Technological University, China</i>	
<i>Jennifer Argo, University of Alberta, Canada</i>	
<i>George Christopoulos, Nanyang Technological University, China</i>	
5-W: Why Firms Should Be Thankful for Thankful Customers: Incidental Gratitude Increases Satisfaction with Consumption Experiences . . . . .	.1063
<i>Arianna Uhalde, University of Southern California, USA</i>	
<i>Valerie Folkes, University of Southern California, USA</i>	
4-P: The Emancipatory Alliance for Social Activism: The Symbiotic Interplay between Subcultures and Social Movements . . . . .	.1063
<i>Emre Ulusoy, Youngstown State University, USA</i>	
20-D: False Positives: How Double-sided Review Systems Affect Consumers' Rating Valence . . . . .	.1063
<i>Bryan Usrey, University of East Anglia, UK</i>	
<i>Antje Graul, Leeds University, UK</i>	
10-Q: The Compromise Effect in Post-Purchase Consumption Behavior: Evidences from Field Experiments . . . . .	.1063
<i>Veronica Valli, University of Mannheim, Germany</i>	
<i>Florian Stahl, University of Mannheim, Germany</i>	
<i>Elisa Montaguti, University of Bologna, Italy</i>	
17-E: Glass Houses: Disability Perceptions in the Consumption Environment . . . . .	.1063
<i>Helen van der Sluis, Arizona State University, USA</i>	
<i>Adriana Samper, Arizona State University, USA</i>	
<i>Kirk Kristofferson, Arizona State University, USA</i>	

9-D: Bring Back My Childhood!	
Nostalgia as Mediator of Retro-Food and Consumer Based Brand Equity . . . . .	.1064
<i>Caty Velez, Tecnológico de Monterrey, Mexico</i>	
<i>Miriam C. Flores, Tecnológico de Monterrey, Mexico</i>	
11-W: The Impact of Perceived Temperature on Responses to PSA ads . . . . .	.1064
<i>Akshaya Vijayalakshmi, Indian Institute of Management Ahmedabad, India</i>	
<i>Meng-Hsien (Jenny) Lin, California State University Monterey Bay, USA</i>	
<i>Melika Kordrostami, California State University San Bernardino, USA</i>	
19-I: How Brand Preference Similarity Influences Married Couples' Brand Variety Seeking Over Time . . . . .	.1064
<i>Anna Vredeveld, Berry College, USA</i>	
<i>Selcan Kara, University of Massachusetts - Dartmouth, USA</i>	
12-D: The Impact of Brand Exposure on Perceived Goal Progress and Goal Satiation . . . . .	.1064
<i>Darlene Walsh, Concordia University, Canada</i>	
<i>Francis Jarry, Concordia University, Canada</i>	
9-I: Eating with Friends: Preference for Handmade Foods . . . . .	.1064
<i>Xin Wang, Nanjing University, China</i>	
<i>Chunqu Xiao, Nanjing University, China</i>	
<i>Hong Zhu, Nanjing University, China</i>	
17-C: Fluid Compensation: The Role of the Interdependent Self . . . . .	.1064
<i>Qin Wang, Arizona State University, USA</i>	
<i>Monika Lisjak, Arizona State University, USA</i>	
<i>Naomi Mandel, Arizona State University, USA</i>	
4-F: Essentialism Increases Status Consumption of High-Class (not Low-Class) Consumers. . . . .	.1065
<i>Xue Wang, Chinese University of Hong Kong, China</i>	
<i>Ying-Yi Hong, Chinese University of Hong Kong, China</i>	
<i>Robert S. Wyer, Chinese University of Hong Kong, China</i>	
19-J: Show Me More! Powerlessness Drives Variety Seeking . . . . .	.1065
<i>Wangshuai Wang, Shanghai Jiao Tong University, China</i>	
5-G: How Notifications of Product Changes Influence Consumer Ambivalence . . . . .	.1065
<i>Yiru Wang, Kent State University, USA</i>	
<i>Jennifer Wiggins, Kent State University, USA</i>	
<i>César Zamudio, Kent State University, USA</i>	
10-V: Truncated Text, Truncated Thought . . . . .	.1065
<i>Adrian Ward, University of Texas at Austin, USA</i>	
<i>Noah Castelo, Columbia University, USA</i>	
<i>Kurt Gray, University of North Carolina, USA</i>	
19-C: Keeping the Streak Alive! . . . . .	.1065
<i>Danny Weathers, Clemson University, USA</i>	
<i>T. Andrew Poehlman, Clemson University, USA</i>	
9-B: A Nuanced Nutritional System Facilitates the Recognition of Healthy Options, Increases Sales and Choice of Healthy Foods: A Comparison Between 3-Colors and 5-Colors Traffic-Lights Systems . . . . .	.1065
<i>Carolina O.C. Werle, Grenoble Ecole de Management, France</i>	
<i>Kévin Roche, Grenoble Ecole de Management, France</i>	
<i>Olivier Trendel, Grenoble Ecole de Management, France</i>	
<i>Amanda Yamim, Grenoble Ecole de Management, France</i>	
Moderately Simple Fbdg Work Better than Complex or Oversimplified Recommendations to Influence Food Consumption in a Real Setting . . . . .	.1066
<i>Carolina O.C. Werle, Grenoble Ecole de Management, France</i>	
<i>Kévin Roche, Grenoble Ecole de Management, France</i>	
<i>Olivier Corneille, Université Catholique de Louvain, Belgique</i>	
<i>Caroline Roux, Grenoble Ecole de Management, France</i>	
2-B: "Reclaiming the News": Episodes of Contention in the News Field . . . . .	.1066
<i>Verena E. Wieser, University of Innsbruck, Austria</i>	

4-N: Perspective Flexibility Matters: The Influence of Cultural Syndromes on Attribution of Service Failures. . . . .	.1066
<i>Vincent Chi Wong, Lingnan University, Hong Kong, China</i> <i>Feifei Huang, Chinese University of Hong Kong, China</i>	
14-Q: Trend versus End State: The Role of Implicit Theories in Interpreting Communications Conveying a Partial Reduction in Negative Product Attributes . . . . .	.1066
<i>Vincent Chi Wong, Lingnan University, Hong Kong, China</i> <i>Lei Su, Hong Kong Baptist University, China</i> <i>Howard Pong-Yuen Lam, Chinese University of Hong Kong, China</i>	
6-B: How Scarcity Influences Mate Preference in Romantic Relationship and Subsequent Mating Strategy? . . . . .	.1066
<i>Yinghao Wu, Renmin University, China</i> <i>Jing Jiang, Renmin University, China</i>	
5-J: Partner or Servant: How Anthropomorphized Brand Role Releases the Negative Effect of Social Exclusion. . . . .	.1067
<i>Yinghao Wu, Renmin University, China</i> <i>Jing Jiang, Renmin University, China</i>	
16-K: The Impact of CSR Transgressions on Consumer Support for Non-profits: The Role of Negative Moral Emotions and Political Identity . . . . .	.1067
<i>Chunyan Xie, Western Norway University of Applied Sciences, Norway</i> <i>Richard P. Bagozzi, University of Michigan, USA</i> <i>Silvia Mari, University of Milano-Bicocca, Italy</i>	
11-L: Prosocial Consequences of Corporate Social Irresponsible Actions: The Role of Negative Moral Emotion, Moral Identity, and Empathy . . . . .	.1067
<i>Chunyan Xie, Western Norway University of Applied Sciences, Norway</i> <i>Richard P. Bagozzi, University of Michigan, USA</i> <i>Silvia Mari, University of Milano-Bicocca, Italy</i>	
9-G: Diets with Cheat Days: The Effect of Implicit Self-Theories on Recovery from Goal-Inconsistent Behavior . . . . .	.1067
<i>Yi Xie, Arizona State University, USA</i> <i>Naomi Mandel, Arizona State University, USA</i> <i>Meryl Gardner, University of Delaware, USA</i>	
9-H: Does Larger Portion Sizes => Lower Calories? How Healthiness Beliefs Impact Calorie Estimation . . . . .	.1067
<i>Jieru Xie, Virginia Tech, USA</i> <i>Fengyan Cai, Shanghai Jiao Tong University, China</i> <i>Rajesh Bagchi, Virginia Tech, USA</i>	
5-R: The Feeling of Being Moved . . . . .	.1068
<i>Ji (Jill) Xiong, National University of Singapore, Singapore</i> <i>Leonard Lee, National University of Singapore, Singapore</i> <i>Yih Hwai Lee, National University of Singapore, Singapore</i>	
6-G: Wearing V Neck, Getting More Trust: An Evolutionary Psychology Approach to Examine the Effect of Collar Style on Trust . . . . .	.1068
<i>Jialiang Xu, University of Manitoba, Canada</i> <i>Fang Wan, University of Manitoba, Canada</i> <i>Chenbo Zhong, University of Toronto, Canada</i>	
11-R: Two Faces of Moral Identity Internalization: The Interactive Effect of Lighting, Moral Identity Internalization and Recipient's Cost on Prosocial Behavior . . . . .	.1068
<i>Jun Yan, University of Manitoba, Canada</i> <i>Fang Wan, University of Manitoba, Canada</i> <i>Luke Zhu, University of Manitoba, Canada</i> <i>Aaron Stone, University of Manitoba, Canada</i>	

5-V: When Sadness Comes Alive, Will It Be Less Painful? The Effects of Anthropomorphism on Sadness Regulation. . . . .	.1068
<i>Li Yang, Tsinghua University, China</i>	
<i>Fangyuan Chen, Hong Kong Polytechnic University, Hong Kong</i>	
<i>Rocky Peng Chen, Hong Kong Baptist University, Hong Kong</i>	
6-E: The Effects of Different Parenting Cues on Consumer’s Regulatory Focus: A Parental Investment Perspective. . . . .	.1068
<i>Chun-Ming Yang, Ming Chuan University, Taiwan</i>	
16-C: Craving for Hope: Scarcity Cues and Their Influences on Persuasiveness of Hope-Appeal Advertising. . . . .	.1069
<i>Chun-Ming Yang, Ming Chuan University, Taiwan</i>	
<i>Tzu-Yun Yang, Ming Chuan University, Taiwan</i>	
<i>Shu-Ni Hsu, National Taiwan University of Science and Technology, Taiwan</i>	
11-V: Roughness Increases Prosocial Behavior When People Believe the World Is Fair. . . . .	.1069
<i>Ning Ye, Temple University, USA</i>	
<i>Maureen Morrin, Temple University, USA</i>	
15-C: Now It’s Personal: The Influence of Touch on the Construction of Preferences. . . . .	.1069
<i>John Yi, University of Arizona, USA</i>	
<i>Jesper Nielsen, University of Arizona, USA</i>	
11-C: Feature the Benefactor or the Victim? How Charity Advertisements with Different Protagonist Foci Affect Donation Behavior . . . . .	.1069
<i>Bingqing(Miranda) Yin, University of Kansas, USA</i>	
<i>Jin Seok Pyone, University of Kansas, USA</i>	
<i>Surendra Singh, University of Kansas, USA</i>	
16-D: Don’t Appreciate Your Customer Too Much: Business Gift Giving and Verbal Acknowledgement . . . . .	.1069
<i>Yanfeng You, University of Wisconsin - Milwaukee, USA</i>	
<i>Massimiliano Ostinelli, University of Wisconsin - Milwaukee, USA</i>	
<i>Xiaojing Yang, University of Wisconsin - Milwaukee, USA</i>	
20-I: Political Ideology and Review Evaluation. . . . .	.1070
<i>Sik Chuen Yu, University of Sydney, Australia</i>	
<i>Donnel Briley, University of Sydney, Australia</i>	
<i>Pennie Frow, University of Sydney, Australia</i>	
20-A: A Taste of Discrimination: A Study on Consumer Reviews on Yelp . . . . .	.1070
<i>Chao Yu, Cornell University, USA</i>	
<i>Drew Margolin, Cornell University, USA</i>	
<i>Xian Wang, Tsinghua University, China</i>	
13-A: Cyber-Heterotopias in Social Media Platforms: The Illusion of Intimacy in Ephemeral “Stories”. . . . .	.1070
<i>Mariella C. Zavala, University of California Irvine, USA</i>	
20-C: Advice-Seeking Intention: The Interplay of Regulatory Focus and Problem Type . . . . .	.1070
<i>Xianfang Zeng, University of Calgary, Canada</i>	
<i>Mehdi Mourali, University of Calgary, Canada</i>	
2-W: The Unofficial Name: Effects of Brand and Product Nicknames on Brand Perception . . . . .	.1070
<i>Zhe Zhang, University of Houston, USA</i>	
<i>Vanessa Patrick, University of Houston, USA</i>	
2-H: Brand Hate. . . . .	.1070
<i>Chun Zhang, Concordia University, Canada</i>	
<i>Michel Laroche, Concordia University, Canada</i>	
20-N: The Effect of Uncertain Rewards on Customer Co-promotion Intention: An Exploration of Optimistic Bias . . . . .	.1071
<i>Yuan Zhang, Xiamen University, China</i>	
<i>Zhaoyang Guo, Xiamen University, China</i>	
<i>Yirang Zhang, Xiamen University, China</i>	

9-J: Familiarity and Affiliation with Anglo Names
Affect Purchase Decisions of Chinese Food1071
Xian Zhao, University of Kansas, USA

20-M: The Dynamic Diverting Effects of User-generated Contents vs. Firm-generated Contents on Product Browse.1071
Yingnan Zhao, Nanjing University, China
Xin Wang, Nanjing University, China
Quansheng Wang, Nanjing University, China
Peijian Song, Nanjing University, China

9-X: The Devil is in the Smile:
Smiley Temptation and Motivated Calorie Estimation in Restrained Eaters.1071
Xiaoying Zheng, Nankai University, China

17-I: Relational Greeting: When and When not to Treat Your Consumers as Family1071
Qichao Zhu, Tsinghua University, China
Maggie Wenjing Liu, Tsinghua University, China
Chuang Wei, Tsinghua University, China

10-R: The Effect of Free Shipping on Consumer Patience1072
Ozum Zor, Rutgers University, USA
Rafay Siddiqui, Hong Kong Polytechnic University, Hong Kong
Ashwani Monga, Rutgers University, USA

DataBlitz

Maximizing Utility but Minimizing Wellbeing:
A Meta-Analysis on the Maximizers' Paradox1073
Alex Belli, University of Technology Sydney, Australia
François Carrillat, University of Technology Sydney, Australia

Mental Stimulation and Cognitive Orientation:
Implications for Children's and Adults' Food Choices1073
Dipayan Biswas, University of South Florida, USA
Annika Abell, University of South Florida, USA
Courtney Szocs, Portland State University, USA

There Is No Such Thing as a Free Lunch:
The Negative Effect of Zero Price on Consumer Demand1073
Fengyan Cai, Shanghai Jiao Tong University, China
Xiaomeng Fan, Northwestern University, USA

The More Elongated, the More High-end:
The Effect of Package Shape on Perceived Brand Status.1073
Huan Chen, Renmin University of China, China
Jun Pang, Renmin University of China, China
Minkyung Koo, University of Illinois at Urbana Champaign, USA

What Make Products Weird? Antecedents to and Underlying Mechanism of Weirdness..1073
Qian (Claire) Deng, University of Alberta, Canada
Paul Messinger, University of Alberta, Canada

When More is Not Merrier: The Effect of Feedback Frequency on Goal Performance1074
Isabel Ding, National University of Singapore, Singapore
Leonard Lee, National University of Singapore, Singapore

The More You Know the More You Search: Post-Decision Information Search and the Effect of Prior Knowledge and Maximizing Tendencies1074
Maura Ferreira, Pontifical Catholic University of Rio Grande do Sul, Brazil
Cristiane Pizzutti, Federal University of Rio Grande do Sul, Brazil

The Motivating Effect of Expectation-Inconsistent Social Information . . . . .	.1074
<i>Katherine Flaschen, Stanford University, USA</i>	
<i>Szu-chi Huang, Stanford University, USA</i>	
Yuck! Feelings of Disgust, Self-threats and Compensatory Behaviors. . . . .	.1074
<i>Elena Fumagalli, HEC Paris, France</i>	
<i>L.J. Shrum, HEC Paris, France</i>	
The Effect of Information About Previous Donation Impact on Recurring Donations . . . . .	.1074
<i>Zohar Gilad, Technion – Israel Institute of Technology, Israel</i>	
<i>Liat Levontin, Technion – Israel Institute of Technology, Israel</i>	
The Psychophysiology of Touch-Sensitive Interfaces: Somatosensory Encoding of Intensity, Pleasantness, and Technology-Induced Affect-Regulation . . . . .	.1074
<i>Christian Hildebrand, University of Geneva, Switzerland</i>	
Choosing None versus Choosing “None of the Above”: The Effect of No-Choice Decision Expression on Choice Outcomes . . . . .	.1075
<i>Seung Eun (Sonia) Kim, Seoul National University, South Korea</i>	
<i>Sung J. Jung, INSEAD, Singapore</i>	
<i>Jin M. Kim, Yale University, USA</i>	
<i>Kyoungmi Lee, Seoul National University, South Korea</i>	
Friends Without Benefits? How the Costs of Having a Relationship Influence Risk-taking. . . . .	.1075
<i>Jennifer K. Lee, University of Southern California, USA</i>	
<i>Lisa A. Cavanaugh, University of British Columbia, Canada</i>	
Inspired to Speak Up: Role of Inspiration on Minority Opinion Expression . . . . .	.1075
<i>Xingbo Li, University of Louisville, USA</i>	
<i>Zengxiang Chen, Sun Yat-sen University, China</i>	
Effects of Implicit Theories on Customers’ Satisfaction with Service Recovery: The Value of Process . . . . .	.1075
<i>Xiaoyan Liu, Southwestern University of Finance and Economics, China</i>	
<i>Shaobo Li, Nanyang Technological University, Singapore</i>	
<i>Elison Lim, Nanyang Technological University, Singapore</i>	
Incentive Design with Uncertainty: Keep the Hope Alive . . . . .	.1075
<i>Xiyueyao Luo, Chinese University of Hong Kong, China</i>	
<i>Luxi Shen, Chinese University of Hong Kong, China</i>	
When Compensatory Consumption Backfires: The Pain and Pleasure of Experiential Purchases . . . . .	.1075
<i>Zichuan Mo, Peking University, China</i>	
<i>Jingjing Ma, Peking University, China</i>	
Appetite for Destruction: Attractive Faces Alter People’s Food Choices . . . . .	.1076
<i>Tobias Otterbring, Aarhus University, Denmark, & Karlstad University, Sweden</i>	
Emoji and Brand Engagement on Social Media . . . . .	.1076
<i>Ethan Pancer, Saint Mary’s University, Canada</i>	
<i>Lindsay McShane, Carleton University, Canada</i>	
<i>Maxwell Poole, Saint Mary’s University, Canada</i>	
The Effect of Competitive Rivalry Associations on Brand Extensions . . . . .	.1076
<i>Nicolas Pontes, Queensland University of Technology, Australia</i>	
<i>Vivian Pontes, Queensland University of Technology, Australia</i>	
Feeling Flattered or Flawed? The Effects of Consumer Embarrassment on Self-perception . . . . .	.1076
<i>Tracy Rank-Christman, University of Wisconsin - Milwaukee, USA</i>	
<i>Danielle Warren, Rutgers University, USA</i>	
Triangulating the Breadth of Explanatory Depth. . . . .	.1076
<i>Scott Roeder, Washington University in St. Louis, USA</i>	
<i>Leif Nelson, University of California, Berkeley, USA</i>	
Effect of Missing Marketing Promotions on Future Consumption . . . . .	.1076
<i>Ilana Shanks, Florida State University, USA</i>	

When Small Predicts Large: The Effect of Initial Small Contributions on Subsequent Contributions to a Crowdfunding Project. **.1077**
Yael Steinhart, Tel Aviv University, Israel
Leilei Gao, Chinese University of Hong Kong, China
Tingting Fan, Chinese University of Hong Kong, China

Effort Type Predicts Preferences for Material or Experiential Goods. **.1077**
Christopher A. Summers, University of South Carolina, USA
Eva C. Buechel, University of South Carolina, USA
Gustavo Schneider, University of South Carolina, USA

**“Broken Eggs” and “Good Eggs”:
Understanding “Post-IVF” Consumer Ambivalence Through Autography** **.1077**
Jennifer Takhar, Novancia Business School, France

The Merits of Happy Consumption: Positive Affect and Psychological Ownership **.1077**
Carina Thürriidl, Wirtschafts University, Austria
Bernadette Kamleitner, Wirtschafts University, Austria
Ruta Ruzeviciute, Wirtschafts University, Austria
Stephan Dickert, Queen Mary University of London, UK
Sophie Süssenbach, Wirtschafts University, Austria

Preemptive Social Influence: (Not) Choosing Personal Favorites in Shared Consumption? **.1077**
Yijie Wang, Hong Kong Polytechnic University, Hong Kong
Dongjin He, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Author Index

Author Index **.1079**

2017 ACR Presidential Address

Consumer Research Contribution: Love It or Leave It

Margaret C. Campbell, University of Colorado, Boulder, USA

I am honored to be here today. Thank you to the members of the Association for Consumer Research for your confidence. And my special thanks to the ACR Board for their service and help.

Over my 26 years of coming to the ACR conferences, I have always enjoyed the opportunity to hear the presidential addresses. These addresses have been informative, interesting, and inspiring. Now that I am here, I find that these earlier addresses are also intimidating. Informative, interesting, inspiring and intimidating; as a marketing professor, I call these the 4 I's of presidential addresses. My intimidation only increased as I looked over the past presidents and realized how much admiration I have for so many of the people on that list. I very much appreciate the ideas, knowledge and direction that they have provided our field and the opportunity to follow their lead.

The process of developing a presidential address is challenging. You are faced with identifying something that you and at least some other ACR members are likely to think is interesting and informative, and that is without even *hoping* that you may be able to be inspiring. Initially, I spent some time worrying about whether there was anything for me that fit this bill. However, I fairly quickly realized that there is. The contribution of consumer research, both in terms of the contribution of individual papers, and in terms of the contribution of our field, is something that I care very much about and that I think is of general interest to us all. Thus, I would like to use this time to talk to you about contribution.

The title of my talk is "Consumer Research Contribution: Love It or Lose It." I hope that by the end of my talk, and after the development of my nine propositions, you will understand the meaning of this title.

As good academics, let's start with a definition.

Contribution: the thing you believe your paper has, but the reviewers are too (fill in the blank) to see.

OK, so let's look at an actual *dictionary* definition.

The Oxford English Dictionary defines contribution as:

- a. "A gift or payment to a common fund or collection.
- b. The part played...in bringing about a result or helping something to advance."

According to the Cambridge Dictionary, a contribution is:

- a. "Something that you contribute or do to help produce or achieve something together with other people, or to help make something successful."

There are two important aspects of these dictionary definitions. First, these definitions make it clear that a contribution is a piece of something greater. Multiple people contribute pieces to a bigger collection. When one of us produces research that contributes to understanding of consumers, that is a step that moves the field of consumer research forward. Each contribution can be thought of as a gift to the common knowledge fund of the field.

This leads to my Proposition 1: Contribution requires the addition of knowledge that adds to the current common understanding.

Second, these definitions emphasize that a contribution must be considered in terms of to what it is contributing. What is the common fund? What is being helped to advance? Just like positioning a

brand, it is necessary to start with a clear understanding of the frame of reference. A contribution is relative to that frame.

We are all here at the conference for the Association for Consumer Research. As such, it is my proposition that the frame of reference for contribution should be consumers. As consumer researchers, we should contribute to the understanding of consumer-relevant issues. Some aspect of being or behaving as a consumer must be central to provide a contribution to consumer research. Consumer research needs to focus on aspects of people, not just as humans, but people *within their roles as consumers responding in relation to some marketplace*.

When I was growing up, my dad used to tell me about an architect who complained that there were clients who wanted to start with a building and then have the architect, "put the architecture on." Sometimes some consumer research seems a bit like this to me. It seems as if the researcher has wanted to research people, but then decides to, "put the consumer on." Perhaps it is because so many of us work in business schools, or have other incentives for publishing work in journals of consumer or marketing research. However, I recommend that if you want to contribute to some other field, such as psychology or sociology, or anthropology you should—that's great; just do it. But if you want to contribute to the field of consumer research, *start* with a consumer-relevant problem. It should not be the case that the focus is on a human problem, and then study 4 uses some consumer or marketplace stimulus to try to, "put the consumer on." The impetus for a true contribution to consumer research is to understand some aspect of consumer response.

This leads to Proposition 2: A contribution to consumer research focuses on a consumer-relevant issue.

Several years ago, the editors of the *Journal for Consumer Research* (JCR), Mary Frances Luce, Ann McGill, and Laura Peracchio, asked that a contribution statement be included in submissions to the journal. I think that their very good idea was to use this as a nudge to get us all to start thinking about our contribution earlier, and certainly before we submit to JCR. Starting with a contribution statement before writing the paper could be a real boost to the clarity of the work. Given the importance of JCR to our discipline, let's take a look at what JCR provides to guide the contribution statement. The JCR site states that, "Your contribution statement should be focused on the following: 1) the state of scholarship prior to your research; 2) what your research adds."

This is a lovely, concise encapsulation of how to think about contribution. First, what do we already know? Second, what can I add to improve that common knowledge? In other words, what can my research help us understand that advances existing consumer knowledge?

THE IMPORTANCE OF AUDIENCE

This leads to another important issue in terms of contribution. To whom are we speaking? Whom do we wish to help advance? When considering contribution, we need to consider the audience for our contribution. That is, we need to identify the intended beneficiary of the common fund to which we wish to add. Understanding the audience is necessary prior to asking what can be added to improve that common fund.

2 / Consumer Research Contribution: Love It or Leave It

The Association for Consumer Research has a logo with three characters. As many of you know, and as Jeff Inman pointed out in his presidential address, the characters in the logo were created to represent Academia, Industry, and Government. While you, like I, may wonder why there is no character representing Consumers, and why it looks like a family decision-making unit, one way to interpret this logo is that academic research can inform the academic literature, government policy and industry actions in the service of consumer well-being. Thus, while the primary audience for academic consumer research is academic consumer researchers, good research that provides insight to a consumer-relevant problem is likely to be able to be used to improve governmental and/or business decisions.

As academic researchers, we can contribute to consumer welfare by providing evidence-based knowledge that enables industry to provide products and services with value propositions that help consumers to achieve their goals at prices they can afford (a central objective of marketing). Likewise, our research can increase the ability of governments to develop and enact useful policies that help to regulate markets for the overall good of consumers. Further, we can contribute to consumer well-being by increasing consumers' understanding of themselves and ability to make decisions that help them pursue their goals. The dissemination of this last contribution is most typically through teaching, educational materials, and the media.

Proposition 3: A consumer research contribution provides knowledge to the academic literature, government, business, and/or consumers.

So, a contribution to consumer research starts with a consumer-relevant issue and adds to the existing knowledge about that issue. A contribution provides new insight to academia, business, government or consumers. The common fund of current knowledge, however, is contained in the literature that speaks to the consumer-relevant issue. And so, an important question is what then is necessary in terms of specific research to make a contribution to the literature?

THE UNIMPORTANCE OF SURPRISE

I will start with one thing that I do *not* believe is necessary; it is not necessary for each piece of research to propose a new theory. It seems that in consumer research we have moved somewhat away from the idea of scientific progress through applying, refining, adding to, and building upon *existing* theory. I am not contradicting Kuhn's (1962) important insight that there are periods of turmoil and "paradigm shift" within scientific progress. I am focusing attention on Kuhn's (1962) idea that these periods of turmoil interrupt periods of normal, additive progress and that *both* periods are important to overall scientific progress.

Many consumer researchers today seem to have gotten to a point of thinking that each paper must be brand new, either because of a new theory or because of surprising findings. This can lead to stand-alone findings and proliferation of constructs that do not build onto anything. We can end up producing cute research that does not link to existing literature and does not establish a basis for the type of ongoing research that contributes to our deeper understanding of consumers. To stick with the architecture metaphor, award-winning architect David Chipperfield said, "There is a danger when every building has to look spectacular; to look like it is changing the world." We do not need each piece of research to be spectacular or to change the world. In fact, I propose that striving for every piece of research to be surprising limits the advancement of knowledge.

This leads to Proposition 4a: A new theory and/or surprising findings are not necessary for a contribution to consumer research.

Kurt Lewin, the insightful social psychologist who had great impact on social and consumer psychology said, "there is nothing so practical as a good theory" (1943). This is a highly cited quote; he actually seems to have said basically the same thing in at least three different publications and it has been cited hundreds of times (McCain 2015). However, while we cite this, and many of you recognize this and many of you nodded your heads, I would bet that some of those nodding have rejected a paper because it is not "surprising" enough. Now, my central argument is that we need to focus on contribution and I am sure that some of those rejections were appropriate because of a lack of contribution. However, not every contribution needs to be, or even should be, surprising. A good theory is practical because it provides guidance in formulating interesting problems and in understanding productive directions for research. A good theory can help us to advance our understanding of a problem such that we can hypothesize findings that, rather than being surprising, are predicted by the theory. I propose that if, as a field, we are advancing knowledge, many contributions will, in fact, be unsurprising because they are developed from and contribute something to a good theory. Incremental contribution that builds on a good theory is important for the progress of the field.

Thus, Proposition 4b: Incremental addition to a good theory can provide a contribution to consumer research.

THE IMPORTANCE OF CONCEPTUAL UNDERSTANDING

While it is not necessary for a contribution to propose a new theory, it is necessary for a research contribution to advance our conceptual understanding of consumer behavior. A contribution requires conceptual or empirical evidence that supports a nuanced understanding of the process by which a consumer responds within a consumption context.

Does this mean that we always need experiments with mediation analysis? No. As others have pointed out, within an experiment, mediation analysis can be useful to understanding the process, but it is not essential or even appropriate in every case. For example, there are many times when measures of the process are unlikely to be accurate because consumers are unlikely to be able to access the process driving their responses or to be able to respond to a measure in a way that accurately reveals the underlying process.

So in these cases, what *can* we do to provide greater understanding of the process by which a consumer response arises? While not the only way, identifying a conceptually-driven moderator can be extremely useful for this. I sometimes see research, often in a reviewer or editorial role, that seems to have lost sight of the reason that a moderator is useful. An interaction is not proposed for its own sake, just to be able to "show moderation." The research goal is to identify a theoretically-relevant moderator that sheds light on an explanation for an effect.

In her Presidential Address, Alice Tybout (1995) identified a variety of myths and realities of the value of theory in consumer research. Her second myth and reality were:

"Myth 2: It is possible to render a unique explanation for a simple (two-level) main effect.

Reality: Theoretical explanations cannot be tied to any single variable, they are inherently abstract and can only be inferred by employing convergence or triangulation procedures."

Alice Tybout's reality number 2 presents an excellent case for proposing and exploring a moderator. When a researcher examines a theoretically-relevant moderator, a significant interaction provides evidence that the researcher has successfully identified an explanatory aspect of the effect. The interaction between the independent variable and the theoretically-relevant moderator provide evidence of a mechanism underlying the main effect by demonstrating when the effect is more and less likely to occur. Moderators provide value by helping us to better understand the consumer-relevant phenomenon of interest. This offers one way to provide conceptual understanding.

While mediation and moderation primarily apply to experiments, there are many other methods and ways to provide evidence that supports greater understanding of some consumer-relevant response. First, we need to identify an interesting consumer idea. Then we must design and use sound methods. If the methods aren't good, the data aren't good. And we need to develop conceptual understanding of the response. There are many types of data that can provide insight to consumer-relevant issues. In reality, we need to use multiple approaches and multiple types of data in service of better conceptual understanding of consumers.

However we approach the consumer issue, as stated in Proposition 5: A contribution improves the conceptual understanding of consumers.

THE IMPORTANCE OF REPLICATION AND GENERALIZABILITY

I am certainly not the first to make the next point and I will not be the last. A strong contribution to knowledge also requires replication. The often-called "replication crisis" has brought a lot of attention to difficulty other researchers have in replicating previously published results. A few cases of fraud have additionally focused attention on questions of ethics. Because of this, replication is currently often discussed in terms of efforts by independent researchers who attempt to strictly replicate another researcher's work. This type of replication is important to the scientific method. In addition, however, we should not lose sight of the importance of a researcher or research team self-replicating prior to publication. Nor should we lose sight of the importance of conceptual replication, where the stimuli and circumstances are not the same, in strengthening contribution to a real understanding of consumers.

Some researchers repeatedly pretest stimuli and experimental setups until they get to one that "works." They then run a study with this highly pretested setup. It is not clear what the person who reads the paper that contains these without the background of the work that went into "getting it just right" learns. It is not even clear what the researcher, who *knows* all the work that went into it, learns. What, for example, is the construct that took so many iterations by a smart person to successfully manipulate? Do we really have it figured out? What is the purpose of identifying an extremely small set of circumstances that, if perfectly created, give rise to an effect? If the purpose is publication, I suppose this type of method can achieve the purpose. But if the purpose is knowledge creation, it is less clear that the end result of this highly stylized and designed process provides a real contribution.

I see increasing requests by reviewers for "real situations" rather than lab studies. However, it is not lab studies qua lab studies that are the problem. It is not even undergraduates or now, MTurkers, that are the problem (although MTurkers may be a problem). The real problem is asking people, whoever they are, to self-report how they predict that they will behave under a particular set of imagined circumstances. Our own research repeatedly shows, not surprisingly,

that people are not particularly good at self-reporting responses to imagined circumstances. None of *us* knows or is likely to be able to accurately predict how we will behave in imagined circumstances; why do we expect our participants to be able to do this? There are too many conscious, non-conscious and contextual factors that will impact people in ways they do not understand.

One reason that field studies are increasingly desirable is that these examine consumers in real marketplace circumstances, in hotel rooms, or Disneyland, or drug stores. Well-executed field studies enable examination of consumer responses in terms of actual, consequential dependent variables in a "real" environment. There is no consumer guessing or self-prediction of how they will behave; they just behave. While I am a fan of field studies and am impressed by the work that many consumer researchers are taking on, this is not the only way to identify effects that are likely to generalize beyond a particular situation. Well-designed lab studies that move beyond imagined circumstances and self-reports and well-executed field work can provide important, generalizable insight into consumers.

Contribution does not require that every study or paper has to have a "consequential dependent variable" in terms of a "real-world" behavior. Contribution does require that every paper must include research where people are reacting to some consumer-relevant variable, whether in terms of memory, emotions, attitudes, or behavior. And, unless you are trying to understand consumer's lay theories, avoid studies that put consumers in the position of trying to guess their own likely responses.

I will go further out on this limb to propose that a true focus on making a contribution to the fund of knowledge will naturally eliminate a lot of the questionable methods that have been discussed as factors in the replication crisis. We all know that an effect that really makes a contribution can be reproduced; the effect should be open to both exact replication and to conceptual replication. An effect that can only be observed under one, exact set of circumstances is not much of an effect and does not contribute much to our understanding of consumers. Thus, a strong focus on making a contribution leads to self-replication, conceptual replication, multiple methods, larger sample sizes, varying consumer groups for our samples, more realistic stimuli, and more realistic outcome variables.

Proposition 6: Contribution requires that a finding is "real" and replicable, ideally with different conditions.

THE IMPORTANCE OF AGREEABLE DISAGREEMENT

My next point may be a bit controversial. We are, overall, a pleasant community, and this is a good thing. But I am proposing that we be more disagreeable. Disagreement is vital to the advancement of any scientific discipline. So, while I do not actually advocate that we are disagreeable to each other, I do advocate that we express disagreement with each other's ideas in order to push our science forward.

When I started coming to ACR many years ago, there were people who would raise critical questions in our talks. Frankly, it would scare me a little bit to see certain people in the room because I knew that they would openly question me if they did not see the conceptual clarity or supportive evidence that I suggested. But while it made me scared, it also made me better. Because I knew that they would openly question me if they did not see the conceptual clarity or supportive evidence that I suggested, I was very careful in developing conceptual clarity and in providing supportive evidence.

I am not, however, just talking about, or even primarily talking about, critical questions at conferences. More importantly, our journals need to be open to solid, replicated research that disagrees with

something that was published earlier. Sometimes, we may want to provide disagreeable data. Right now, it often seems that publishing something that questions something published earlier—even if that earlier finding has not been replicated outside of the initial publication—is, if not impossible, highly unlikely. In order to get something that is inconsistent with a prior publication through the review process, the researcher often needs to be able to show exactly *why* the results are in conflict. While that is a desired end goal and it is clearly important for building an area to explain differences and introduce moderator variables, I am not sure why conflicting findings can only be published if, using a moderator, the researcher can both replicate and modify the original findings. What if the original findings were wrong? What if the luck of significance testing was such that the less than 5% chance of finding the effect when it didn't really exist turned up? What if we need additional research attention focused on the original problem because it is more complicated than originally assumed? Couldn't disagreeable data be a starting point?

I wonder if the limited publication potential for disagreeable data, combined with the amazing communication ability offered by the internet pushes us toward non-peer-reviewed, and often disagreeable disagreement. The internet has lead us into uncharted territory. We must evolve new standards and rules of decorum to disagree with findings without attacking our colleagues' research and reputations. We must find ways for productive, peer-reviewed disagreement.

Professional disagreement, or even the potential for such disagreement, encourages us to sharpen our thinking and helps to further what we learn. Challenge pushes progress. One way we build overall contribution and knowledge is by challenging each other's ideas. Successful scientific movement is based on competition of ideas, of theories, and of data until we advance to some new, evidence-based understanding. We need to find ways for polite, professional, and, ultimately, peer-reviewed disagreement.

Proposition 7: Polite, professional disagreement about ideas and results can lead to contribution.

THE IMPORTANCE OF IMPACT

I am, frankly, somewhat worried about our overall contribution as a field of research. I am not the first to raise this issue; I am not even the first to raise this issue in an ACR Presidential Address. That, however, does not decrease my concern. I worry that we don't have enough impact. I worry that economists—and even psychologists—seem to have larger or more seats at the table of public interest than we do. I worry when some of our members, researchers with degrees in marketing, and/or psychology, call themselves “behavioral economists” or “behavioral scientists,” I assume because they believe this will help them to have a seat at the table and a bigger impact than if they call themselves consumer researchers. I worry when I am at a cocktail party and someone asks what I do and then says some version of, “huh, I didn't know that even existed.” I worry that our impact is less than other areas and I wonder if part of the reason for that is a lack of strong focus on the contribution of each of our pieces of research and our overall body of research.

Are we, as individual researchers and as an academy, making the level of societal contribution that we would like? If not, what can we do? Once again, I propose that a concentrated focus on contributing to knowledge about consumers can help us have more impact.

Proposition 8: Focus on contribution to knowledge about consumers can lead to greater impact.

At one of my first few ACRs, I had the great pleasure of hearing Morris Holbrook give his ACR Fellow's Address. Morris told a story, as only Morris can, about his father giving eleven-year old

Morris a chemistry set that his father carefully put together piece by piece instead of ordering the neat, matching toy company set that eleven-year old Morris craved. While every piece was superior, it wasn't neat and, most importantly, it didn't come with instructions. After describing some incidents and accidents exploring chemistry without instructions, Morris concluded, “The point, of course, is that—like my father's well-intentioned but somewhat misguided Christmas present—science does not come with an instruction book. Only toy science comes with instructions included. In real science, you must figure out the rules for yourself and you must endure a lot of bad smells, dangerous explosions, crusty messes, broken glass, and bloody fingers.”

At the time I heard this, I was young and idealistic and I thought, “wow, I am in the right place.” Now, I am not young, but perhaps still idealistic, and while I still think this is the right place, I fear that we may have lost sight of the purpose and difficulty of our science. It sometimes seems that for some, the research endeavor has become a game. Researchers often seem to be focused on publication as an end in itself, or a means to a job offer or to tenure, rather than as a way of contributing to knowledge about consumers. Science is messy and difficult and it doesn't come with an instruction booklet. Studies fail, projects have to be tossed out, and progress is always slower than we want. But, if we are sincerely focused on adding to the fund of common knowledge, then we must work hard for that advancement, even when it means throwing out studies and starting over after a research failure.

I think that we are incredibly lucky to get to spend some of our working time thinking about and examining what consumers do and why they do it. But if we want society to continue to support us in this endeavor, we need to make a contribution. I believe that if we approach this work from intrinsic, rather than extrinsic motivation we will naturally address many of these issues. If we do our research, not to have a paper before the job market or for tenure or for fame or for fortune, but because we want to know, and we want others to know about consumers we will use careful methods with sufficient samples to address interesting, real consumer issues. We will build on each other's work and theories and we will make a contribution to consumer research.

Proposition 9: Research contribution stems from a sincere desire to understand consumers.

We need to love consumer research for what we can learn about consumers. If we do consumer research because we love learning about consumers, together we will build findings, strong contributions and impact.

I hope I have made some contribution to your thinking about the consumer research endeavor and I thank you for this opportunity.

REFERENCES

- Chipperfield, David (2015) in 6 Thoughts on Berlin and Architecture, Interview by Ranier Traube in DW, January 10, 2015.
- Holbrook, Morris B. (1995), “Seven Pieces of Wisdom on Consumer Research from Sandy, Quarter, Tommy, Matthew, Paul, Dave and Dolly: A Love Letter to ACR,” in NA – *Advances in Consumer Research* Volume 22, eds. Frank R. Kardes and Mita Sujun, Provo, UT: Association for Consumer Research, 16–20.
- Inman, Jeffrey J. (2012), “The Elephant Not in the Room: the Need for Useful, Actionable Insights in Behavioral Research,” in NA – *Advances in Consumer Research* Volume 40, eds. Zeynep Gürhan-Canli, Cele Otnes, and Rui (Juliet) Zhu, Duluth, MN: Association for Consumer Research, 14.

Kuhn, Thomas S. (1962), *The Structure of Scientific Revolutions*, Chicago, IL: University of Chicago Press.

Lewin, K. (1943), "Psychology and the Process of Group Living," *Journal of Social Psychology*, 17(1), 113–131.

McCain, Katherine W. (2015), "'Nothing as Practical as a Good Theory' Does Lewin's Maxim Still Have Salience in the Applied Social Sciences?" *Proceedings for the Association for Information Science and Technology* Volume 52: 1–4.

Tybout, Alice (1995), "Presidential Address: The Value of Theory in Consumer Research," in NA – *Advances in Consumer Research* Volume 22, eds. Frank R. Kardes and Mita Sujan, Provo, UT: Association for Consumer Research, 1–8.

2017 ACR Fellow Addresses

Consumer Research in the Age of Neoliberal Discontinuities: Incitements to Intellectual Edgework

Craig J. Thompson, University of Wisconsin, USA

Preface: I owe many thanks to my long-time mentor, friend and, partner in crime, Eric J. Arnould for his constructive feedback on an earlier version of this address.

One of my favorite films is the Coen Brothers' *Barton Fink* (1991) which tells the story of moderately successful New York City playwright—the titular Fink—who is unexpectedly commissioned to write a screenplay for a major Hollywood production. Though at first uncertain about leaving his local sources of creative inspiration, Fink decides to pursue fame and fortune in Tinseltown, but upon arrival, he is stricken with a paralyzing and unremitting case of writers block. From that point, the film takes the Coen brothers' signature surreal turns. However, my own experience of being named an ACR Fellow heightened the personal relevance of Fink's agonizing plight.

Upon official announcement that I was joining my fellow award recipients Debbie MacInnis and Jagdish Sheth as the newest class of ACR Fellows, I was initially stunned and then elated and, of course, deeply honored. However, that glowing aura was soon punctured by a nagging question—"what will you say as an ACR Fellow?"—that haunted me with increasing intensity as this imminent day grew ever closer and the magnitude of the task seemed more and more daunting. And every single time I sought to placate this anxiety by making tangible progress on this talk, I had a Barton Fink moment—blank stare meets blank screen.

But as they say, "adversity is the mother of searching the ACR archives to read prior Fellows' addresses and praying that you can steal some of their ideas without anyone noticing." During the course of that envisioned archival poaching, however, I noticed that these talks seemed to express a kind of collective consciousness, or perhaps, enacted a tacitly understood cultural script of how one makes such an address. This cultural script involves two discernible narrative motifs, sometimes expressed singularly and sometimes melded into a kind of hybrid form. And this inductive realization provided the elusive catalyst for this address—Barton Fink be gone.

In the first motif, an ACR Fellow articulates a vision of the field and uses the bully pulpit of the address to advocate for a particular research direction or methodological program that might allow our sub-discipline to attain a higher level of theoretical development and societal relevance. This motif, for example, can be found in the inaugural fellows address by James Engel (1981)—"The Discipline of Consumer Research: Permanent Adolescence or Maturity?" (also see Bagozzi 1994; Lynch 2011; Wright 1999).

The second narrative motif is more retrospective, introspective, and autobiographical. In these talks, the ACR Fellow offers a personal reflection on his/her career journey and the life and career lessons learned while acknowledging all those who helped along the way (c.f., Belk 1995; Holbrook 1995; Hirschman 1996).

Of these, the second theme seemed to better capture my feelings on being named an ACR Fellow. I started to write a talk that would recognize the numerous peers, mentors, doctoral students, and co-authors who have so greatly enriched my personal and professional life. But, in was reflecting on all those relationships, discussions, and shared experiences, another more reflexive line of questioning began to crystallize in regard to the ACR Fellows Award and its institutional purpose: "This award, instituted in 1979 recognizes the career contributions of ACR individuals, preferably during their lifetime

for "significant impact on scholarly work in consumer behavior" [https://www.acrwebsite.org/web/core-activities/acr-awards.aspx].

This criterion begs a question: why should a consumer researcher, institutionally deemed to have had "significant impact," be so recognized in the first place? To ask such a question will likely strike you dear reader as a peculiar one. The answer seems to be common-sense knowledge that can "go with saying." As with many ritualistic practices, this aura of self-evidence masks that the answer to this seemingly unnecessary question is actually contingent on cultural ideals and values that are given institutional credence and, conversely, those placed in a more marginal position. At this juncture, we can begin to articulate the neoliberal discontinuities referenced in the title of this address and the tensions that they create between two contrasting normative models of consumer research. These ideological discontinuities are represented in the Figure below and which also provides a visual template for the ensuing discussion.

Discontinuous Models of Consumer Research

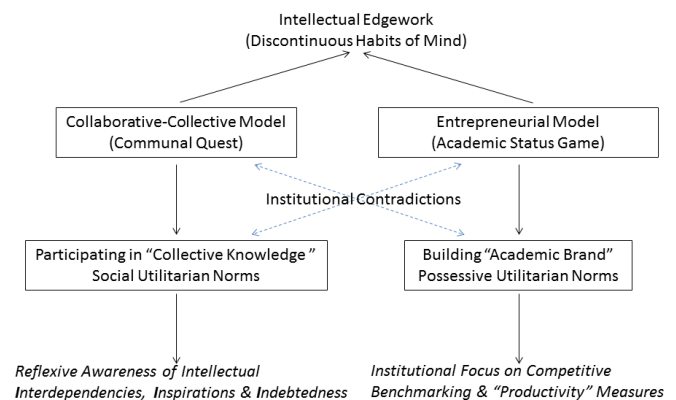


Figure 1

CONSUMER RESEARCH AS A COLLABORATIVE-COLLECTIVE PROJECT

The first cultural model is, in particular times and places, highly valorized in the consumer research field (as well as other spheres of research)—thought it harbors a nexus of meanings and implications that are often incompatible with the bestowment of a career achievement award.

This model cast consumer research as a cooperative and collaborative enterprise. From this perspective, all researchers are participants in a communal project of knowledge generation and working toward a collective goal of attaining a more comprehensive or refined understanding of "consumers," whether in terms of their choice processes or experiences of the marketplace. This model further highlights that a given consumer researcher, in conducting a given study, draws from a socially co-created body of knowledge and practices, and seeks to add his/her humble contribution to the commons.

This collaborative-collectivist model of knowledge production has become an increasingly prominent feature of our cultural land-

scape where knowledge flows across complex peer-to-peer networks and other modes of commons-based production (Bruns 2008). Media studies scholar Pierre Levy (1999) coined the term collective intelligence to describe this dynamic “wikified” web of knowledge generating and sharing relations. Collective intelligence is *universally distributed intelligence*, constantly enhanced, coordinated in real time, and enjoying a continuous expansion of skills and knowledge. This idea is often summarized by the Web 2.0 aphorism—no one knows everything but everyone knows something (Jenkins 2006).

Analysts of such user-generated networked cultures all too often become intoxicated with a feeling of radical difference and disjuncture, suggesting that we have entered into a revolutionary new epoch, that breaks from historical precedents. More often than not, such claims are hyperbolic ones that elide important continuities manifest in these structural changes. And we can say the same pattern holds for social science research. The production of scientific knowledge, has always has flowed across information networks, albeit operating at a more turgid pace, constituted by papers, conferences and analogue communication networks. To invoke less techno-Utopian (Kozinets 2008) tropes, we could describe this collaborative process as a system of sharing relationships or a grand game of pay-it-forward. In academic life, we often hear the phrase, “standing on the shoulder of giants” to acknowledge our intellectual debt to the past (and the collaborative precedents of others). To further calibrate this debt, let’s further acknowledge that these “giants” were equally dependent on the shoulders of many, many others. Thus, their lofty heights in the academic pantheon presuppose a community that has lifted and supported their enshrinement in the intellectual canon. Or to paraphrase an ancient Hindu parable used to represent infinite regress, and famously discussed by Clifford Geertz (1973, 28-29), the production of knowledge is “shoulders all the way down.”

This more abstract epistemological argument that scientific knowledge is a collaborative-collective enterprise is also supported by more immediate forms of experiential validation. Our research is routinely enriched by feedback from colleagues, the investments made by reviewers and editors, and last but not least, the co-creative actions of readers who will subsequently expand upon a given set of ideas and findings and integrate them into a broader web of collectively woven knowledge. Placed in this cultural frame, the conventional tendency to lavish accolades on a specific researcher seems to be an odd misconstrual of the knowledge production process.

Some members of the academic community do, in fact, strive to enact this collaborative-commonly found in the feminist studies literature, though it has found some expression in the consumer research sphere:

VOICE group (2010), “Buying into Motherhood? Problematic Consumption and Ambivalence in Transitional Phases,” *Consumption, Markets and Culture*, 13 (4), 373-397.

Such anonymous designations highlight the collaborative/collective aspects of the academic research and, conversely, subtly disavow the ethos of possessive individualism that underlies the social construction of academic celebrity, instead endorsing one of social utilitarianism and its ideals of cooperative sharing, universal access to knowledge, and embeddedness in a collective commons.

The institutional realities of academic life, of course, place significant constraints on how extensively this strategy can be applied or even how fully it can be implemented. In general, consumer researchers are situated in academic settings where individually scaled measures of “productivity”— via publications, presentations, and citation counts, and other activities that “count” in digital measures

performance monitoring systems—inform annual evaluations and corresponding administrative decisions about a given consumer researchers’ tenure, promotion, salary, research support, and other institutional incentives that govern our professional activities.

Given this institutional reality, the choice to anonymize and collectivize the published presentation of research—as in the VOICE Group example—is more of a symbolic gesture, which is not to say that it is meaningless or inconsequential. Such unconventional actions can inspire a reflexive assessment of status quo conventions and help to precipitate actions and choices which push the boundaries of established institutional values and norms and the constraints they subtly (and not so subtly) manifest, thereby, testing and potentially expanding the boundaries of an ideological system (c.f., Thompson and Üstüner 2015).

A collective-collaborative framing of the research enterprise also problematizes the ACR Fellows award. If we accept the view that a given researcher is situated in the web of collective intelligence, then such an award arbitrarily designates one node in the network as having been more consequential than all the others that enabled the “designated Fellow” to exert a localized influence that reverberates across some segment of the larger system. For example, an alternative approach would be to bestow fellow status on a concept that has mobilized consumer researchers and shaped our discourses, such as decision heuristics, utility maximization, cultural capital, or ritual action and to celebrate these ideas—not as the expression of a given researchers’ individual brilliance (and whose name may be strongly associated with the salient theory)—but by tracing out its genealogy which in most cases, would lead back to Eastern and Western philosophers of the antiquities.

This collective-collaborative model carries a host of positive connotations that have been well-integrated into our disciplinary self-conceptions, particularly when discussing the normative ideals that should guide the research process, such as an altruistic spirit of discovery; a communal sharing of ideas and knowledge; and a transcendence of egotism and self-interest through the disinterested pursuit of knowledge. While supporting a more virtuous framing of the research enterprise, this model is largely discontinuous with the prevailing institutional conditions that shape the professional lives of many, if not most, consumer researchers situated in academic settings. To negotiate these discontinuities, we apply this model very selectively and tend to ignore its democratizing, “wisdom of crowds” (Jenkins 2006) implications when they overtly contradict institutionalized norms that are premised on assessments of individual accomplishment and that engender a corresponding ideological effect: the production (and reproduction) of academic status hierarchies.

CONSUMER RESEARCH AS AN ENTREPRENEURIAL PROJECT

The second prominent cultural model cast the research process as an entrepreneurial project. In this cultural frame, consumer researchers (like other participants in the academic status game) are promoting their respective ideas, methods, papers, and academic “brand” in a competitive marketplace, or stated alternatively, seeking to maximize the market value of their human/intellectual capital (c.f., Becker 1964). In this spirit, for example, *ResearchGate*—the potentially copyright violating, for profit, academic networking site—promotes its services on the grounds that it can “create exposure for your work: share your work from any stage of the research cycle to gain visibility and citations” [<https://www.researchgate.net/>].

Such rationales seem completely unremarkable in their common-sense rationales. Of course, we want to promote our work and

gain more citations and recognition for our efforts. However, this sense of self-evident validity is one means through which orthodox understandings and beliefs serve to block further questioning of their ideological functions and channel action in certain directions, rather than others, and thus, constrain horizons of possibility (Bourdieu 1984).

In discussing this entrepreneurial model, I take an analytic cue from the critical historian Michel Foucault who described his approach to analyzing power relations in the following manner:

My point is not that everything is bad. My point is that everything is dangerous, which is not exactly the same thing as bad. If everything is dangerous, then we always have something to do. So, my position leads not to apathy or enervation but to a hyper and active pessimism (Foucault 1983, 231-232)

So, what dangers lurk in this orthodox framing of consumer researchers as intellectual entrepreneurs? One clue to this question is that it so closely aligns with the neoliberal vision of a society organized by market competitions, among decentralized and functionally independent economic actors, and where the market is both the ultimate adjudicator of value and the guiding force that governs decision about how one invest their time and efforts (Peck and Tickell 2007). In this neoliberal Utopia, there are no distortions of the competitive market mechanism, such as regulations that impede flows of capital or that might artificially constrain or subsidize the market value of an entrepreneurial skill or that would reduce competitive incentives—this latter logic is often leveraged by critics of the academic institution of tenure, deeming it to function as a disincentive to continued productivity over the course of one's career.

Neoliberal doctrines underlie increasingly ubiquitous political demands that institutions of higher learning align their curriculum with the specific “competencies” desired by corporations and corresponding pressures to deliver high levels of customer service to customer-students. This latter neoliberal figuration further entails that these customer-students are empowered to be “informed consumers,” via rankings and more aggressive branding and positioning activities. This responsabilization of the student-customer also is encouraged by a shift toward loan-based funding of such educational investments in one's human capital—which eventually need to be repaid, rather than governmental grants (Ward 2014).

It is perhaps worth noting that this neoliberal, market-competency, customer-driven approach to higher education is a radical transformation of the normative ideals and intellectual orientations that historically guided higher education. For example consider this passage from John Stuart Mill's inaugural address as Rector of the University of St. Andrews (1867):

Universities are not intended to teach the knowledge required to fit men [women] for some special mode of gaining their livelihood. Their object is not to make skillful lawyers, or physicians, or engineers, but capable and cultivated human beings (218).

Mill's statement reflected his adamant belief that an intellectual culture, which encouraged citizens to think critically and beyond their own immediate self-interests, provided needed societal safeguards from the excesses of mercantilism, what we would now call capitalism, and militarism. Of course, the University of Mill's time was a decidedly elitist institution that reproduced a gamut of social inequities. However, as Ward (2014, 464), discusses, the humanistic ideals manifest in this vision of higher learning “also contained the political seeds for the larger democratization of the university that would slowly take place in the twentieth century.” This democratization of higher education was also contingent upon Keynesian-

oriented welfare state policies that heavily subsidized the cost of secondary education. [As a personal aside, I almost certainly would not be an (entrepreneurially successful) college professor, speaking from the institutional position of an ACR Fellow, without the social safety net assistance afforded by a host of federal and state programs that enabled low income students to have access to higher education.]

In today's academic environment, Mill's idealistic pronouncements seem quaint, as much of our pedagogical efforts are institutionally directed toward the instrumental goal of ensuring that our customer-students will be able to quickly and efficiently transition into productive occupations. In the aftermath of disruptive shocks, however, most recently the financial meltdown of 2008, we sometimes do see critical admonishments that business schools should adopt a more socially redemptive pedagogical mission so as to not produce a new legion of greed-driven, selfish mercenaries, as evinced by redemptive statements from leading B-school administrators (quoted in Green 2009):

Wealth creation is about building a better society, and character and integrity are just as important in a manager's capability. I've always had a very strong view that the role of education is not just to give people technical skills: it's there to give people the context of how to be and how they can contribute, not just to their own gain, but to the gain of everybody else.

– Chris Bones, Dean of Henley Business School

Professor Arnoud De Meyer, director of the University of Cambridge's Judge Business School, says that 2008 will be seen as a “watershed year” for the MBA. He argues that future curricula will have to prepare students for the inevitable increase in financial regulation, and should also focus more heavily on how business interacts with society. The schools, he says, will have to become “a bit more academic, independent, curious and interdisciplinary” in their approach to teaching.

But such reflective cautions and calls for educational reform tend to be short-lived and soon enough, business schools returned to their pro-corporate, neoliberal proselytizing status quo as the financial crisis of 2008 faded into distant memory.

Neoliberalism is also restructuring higher education in ways that are compatible with its veneration of efficiency and “flexibility” (neoliberal shibboleths that often correspond to a practice of reducing labor costs by avoiding the obligations of extended labor contracts). To illustrate, in 1969, non-tenure track faculty were an institutional exception, constituting about 20% of the total teaching force in higher education; however, this precarious category of academic works is the institutional norms who now make up over 70% of the instructional faculty (Shulman et al. 2016).

Stories about the neoliberalization of academe are now commonplace in outlets such as the *Chronicle of Higher Education*, *Times Higher Education*, or, on occasion, the *New York Times* and other news media that reporting on these disruptive transformations. These stories illuminate a brave new academic world where tenure protections are being rapidly eroded by hostile state legislators (as in my home institution of the UW-Madison); where departments are increasingly reliant upon a legion of adjunct faculty who toil in the class room for relatively low pay and little, if any long term, security and where tenured and tenure track faculty (to the extent that those classifications have any institutional meaning) face increasing demands to work more efficiently. That is, to assume more teaching and administrative responsibilities while maintaining established, and sometimes intensified, standards of research productivity.

These dramatic shifts reflect a generation of neoliberalizing budget cuts and an increasing reliance on private funds to keep academic institutions viable; money that generally comes with various expectations and requirements, few of which serve a University's research mission (much less practices of critical inquiry). These neoliberalizing forces also ideologically portray public institutions (and tenured faculty who are the functional equivalent of the trade unions so widely condemned in neoliberal doctrine) as a sphere of market-distorting entitlements that need to be reformed through a logic of privatization and the imposition of competitive pressures (and hence incentives for "excellence").

I am not the first to note that these neoliberal trends pose disconcerting threats to hallowed values such as academic freedom, critical inquiry, and intellectual diversity (Ward 2014). For example, the competitive market may support a plethora of courses in finance and marketing but perhaps not so many in Middle Eastern studies or Slavic languages, leading to a truncation of faculty in fields that do not enjoy high market demand. Such market-driven adjustments create a more intellectually homologous system of higher education that becomes increasingly technocratic in its aims and reciprocally, that produces a student-customer who similarly exhibits an instrumental mindset with few predilections to question the neoliberal status quo.

As academics, it is all too easy to lament this process of neoliberalization as an accursed nexus of demands and constraints that are imposed by extraneous economic forces and political actions beyond our immediate control. Yet, as consumer researchers, we also need to recognize that the neoliberal "skids" have been greased by our own well-worn habits of mind and our naturalized tendency to think and act in ways that are in fact quite continuous with the ideals of efficiency and competitiveness used to justify these neoliberal transformations of the University.

The entrepreneurial model hails each and every one of us to build our academic brand (what right minded marketing academic does not have a personal website and a social media presence?); to maximize the efficiency our workdays so as to be able to produce more papers (our proverbial "widgets"); to manage our production "pipelines"; and to see ourselves as relatively autonomous agents ever ready to transfer our human capital/academic brand to wherever it will be most rewarded by market forces.

The same neoliberalized system which produces a class of adjunct faculty negotiating the stresses of economic precarity (Standing 2011) is also the very one which creates academic celebrities, ACR Fellows, and well-compensated chaired professors. In this winner versus losers neoliberal frame, such outcomes are "optimal" ones that directly reflect different degrees of entrepreneurial acumen. From a more critical standpoint, these outcomes reflect structural inequities which confer competitive advantages to some while creating constraints and barriers for others. In other words, it is much easier to pull yourself up by the (competitive) bootstraps when circumstances have endowed you with a jet pack rather than an albatross.

But, my concern is the more specific dangers that lurk within this entrepreneurial-neoliberal habit of mind as it pertains to the conduct of consumer research. As a thought experiment, think of five or six attributes that you believe would be common among ACR Fellows. My expectation is that "productivity" is likely among them. Of course, productivity can function as a shorthand reference for dedication, commitment, perseverance, and other revered traits which contribute to "productive" outcomes. But, if we reflexively acknowledge the institutional conditions that situate and "nudge" our actions, then it becomes difficult to ignore that the disciplinary valorization of "productivity" also places the research process on an instrumental plane. Tangible measures of productivity—publication

counts by journal rankings, presentations, books, and other tangible signs of intellectual productivity—provide key evaluative criteria in performance assessments and hence, determine the distribution of resources via teaching loads, salaries, promotions, awards, and, of course, recognition.¹

This entrepreneurial model also enjoins the interesting evaluative convention of having to quantify one's particular share of contribution for co-authored works, inducing an annual rite of calculation—"I contributed 57% to the theoretical positioning; 48% to the analysis; and 65% to the conclusion, with my aggregate contribution being 56.7%—that would seem preposterous in a world where the collective-collaborative model held institutional sway.

This entrepreneurial model further encourages a truncation of the intellectual enterprise in the name of efficiency. We all know the narrative of harried academic life—there are only so many hours in the day and between teaching, faculty meetings, reviewing, so little time is left for research that we must be focused and efficient in our efforts. But, academic training—not just in marketing and consumer behaviors—but in many academic fields, creates predispositions toward such "adaptive" habits of mind—that is, we are socially conditioned to function in this neoliberalized system and, conversely, to accept it, tolerate it, and even embrace it, when our entrepreneurial efforts are rewarded.

As just one example of this subtle conditioning process, I would surmise that nearly every Ph.D. advisor and nearly every Ph.D. candidate has had a mentoring exchange that hinges on the importance of the "elevator talk"—those 60 second distillations of doctoral dissertation research that every prospective job candidate stands every ready to deliver to a listener/potential employer. And the "elevator talk" has an undeniable instrumental appeal and no small amount of practical value. On the positive side, to make such a synopsis, a researcher must have a clearly defined research question and contribution points that can be represented as a concise set of bullet points on a power point slide. What is not to love?; or stated conversely, what dangers might lurk in training academics to be predisposed to give an elevator talk or on the audience side, to expect that research will be communicated in such efficient and easily comprehended terms?

A successful elevator talk presupposes a rhetorical continuity between presenters and audiences, taking the form of shared communicative expectations, a common base of knowledge and a shared theoretical vernacular. Those continuities also encourage a more homogenous disciplinary discourse. In other words, a Ph.D. student assumes an additional degree of unwanted systemic risks if his/her theoretical vernacular and questions diverge from orthodox conventions. Translation is a far more complex and time consuming process than speaking in a common vernacular, where communication is further aided by shared body of tacit knowledge.

These neoliberal imperatives also enjoin habits of mind that are conducive to a market-oriented fealty to the established taste of our audience and to operate within those comfortably familiar boundaries. In the elevator talk example, this convention demands that a listener not be pushed too far from his intellectual comfort zone. The "good" elevator talk adds a conceptual or empirical twist upon what the listener already knows and hence, the research story, and its points of theoretical distinction, does not deviate from the tacit assumptions that underlie this state of communicative efficiency and sense of intuitive comprehensibility. An ad campaign from the

¹ This description of the increasingly ubiquitous, performance measurement (and governance) tool Digital Measures succinctly summarizes the problems posed by neoliberalism's reduction of academic life to benchmarking measures: "'Digital measures' document everything and reveal nothing, rendering academic practices as calculable rather than meaningful" (Mountz et al. 2015, 1242).

1980's offers a relevant analogy. In the ad, a nattily dressed, generically handsome man is in a formal restaurant accompanied by an equally well-dressed, and generically pretty women; after glancing at the menu, he proclaims in astonishment "I didn't know Michelob made a light!" And here I suggest, we have the commercial personification of the paradoxical state of unremarkable surprise that results from a successful elevator talk.

This neoliberal-entrepreneurial framing of consumer research (and researchers) is manifest in other interactional rituals that are undertaken throughout the course of our professional lives. For example, a standard ice breaking exchange in academic life is the question of "what you are working on?". If you will allow, I would like to make a slight digression. A few years ago, I was invited (required) to attend a social function to honor a wealthy donor who had made a substantial gift to the school. Upon our initial introduction, the benefactor immediately asks "what are you working on?" I soon realized that this query was not an idle or innocent question. Indeed, this donor really wanted to know what I was working on and as I gave a series of elevator talks, though in this case, "interrogation talks" would be a more fitting description, I could see a cost-benefit calculation going on his head. This wealthy benefactor then repeated this interaction ritual with just about every faculty at the reception as he sought to assess the practical relevance and market value of the research that he was helping to underwrite.

Even when academic peers ask "what are you working on" in a more causal manner at conferences and other like settings, the question is no less fraught with normative expectations and ideological demands. What "are you working on?" is often an invitation to briefly review your "research pipeline," a peculiar trope when you think about, implying that one should have a steady flow of research output and that a break in this flow is quite problematic: my god, your pipeline has run dry! But, the ideological effect is most clearly revealed by considering what is *not* normatively expected – perhaps what you are "working on" is not a research project but a book written by another scholar on a topic that you may or may not eventually study but that broadens your perspective or leads to a reflexive questioning of naturalized beliefs (or that you just found interesting). The neoliberal definition of legitimate work discourages such conversations, rendering such non-instrumental uses of one's work time as taboo. In contrast, the equally relevant question of "what have you read?" (or watched or listened to if we broaden the implied frame-of-reference to include enriching aesthetic experiences) is highly unconventional. The entrepreneurial model frames as legitimate work as the ongoing, individuated production of research and all other activities are rendered as suspect (unproductive) uses of one's time.

There is an emotional complement to the "what are you working on?" question. Passion has become the normatively preferred emotional state of neoliberal entrepreneurs or stated conversely, neoliberal ideologies hail workers to recognize themselves as passionate entrepreneurs (Dilts 2011; McRobbie 2015). Passion is an inducement to efface once sacrosanct boundaries between professional and private life as the career sphere now colonizes time once devoted to leisure and family. Given neoliberalism's instrumental prescriptions, we can add thinking and reflection to this list of temporally displaced activities. Indeed, in the ideal neoliberal world, even recreation should, in some way, build human capital that will further enhance our entrepreneurial acumen.

In this entrepreneurial-neoliberal frame, we are therefore ideologically predisposed to regard our work as the activity that most fascinates us; the domain we want to incessantly talk about; the nexus of questions and ideas that fully occupies our minds when not forced

to attend to other responsibilities and distractions; and as our intellectual sustenance and prime source of self-actualization.

Now, let's flip this ideological script around. We are embedded in a heteroglossic intellectual world where people from all research disciplines study a diversity of issues and grapple with fundamental philosophical questions, seek solutions to pressing societal problems, and generate innovative ways of thinking about the world. Sometimes, we really should be more interested in what others are doing. So, perhaps what we celebrate and valorize as "being passionate about one's research" can also betray an institutionalized tendency toward a narcissistic parochialism.

Through an array of institutional norms and conventional practices, neoliberal habits of mind are subtly propagated as the default option for how one should pursue success in the academic game. Consequently, constraints imposed by this orthodoxy can operate in a naturalized and, hence, unquestioned fashion. Like any ideological system, however, the neoliberalized academic game encompasses a range of institutional goals and countervailing discourses that often create internal inconsistencies and disjunctures (i.e., desires for department bonding and collegiality and the normative ideal of being a good departmental citizen—or serving the communal good through service to the field—can conflict with the ethos of entrepreneurial competitiveness). Such structural gaps also create heterodox spaces where the normative constraints of the entrepreneurial-neoliberal model can be contested and unorthodox practices can be enacted, though these challenges may sometimes be more happenstance than strategic. Nonetheless, they can reveal the limitations implicit to naturalized ideological norms.

My own career path illustrates how such happenstance divergences from the institutional enforcement of neoliberal demands can occur (not once but three times in fact) and how subtle pressures to conform can be resisted, though not without risk. During my Ph.D. program at the University of Tennessee, I had a very significant change of heart regarding the direction I wanted to take my career—a shift from a psychometric/methodological orientation to one that explored the symbolic, experiential, and cultural aspects of consumption (Belk, Sherry, and Wallendorf 1988; Holbrook and Hirschman 1982; Levy 1959; McCracken 1986). Fortunately, my faculty advisor was Professor Bill Locander whose career was also in a transitional moment and he afforded me considerable latitude in this exploration which took me deep down the path of Continental philosophy and its more contemporary manifestation in the field of existential-phenomenology (Merleau-Ponty 1962; Sartre 1956)—a journey greatly assisted by the ever generous Professor of Psychology Howard Pollio. For the next few years in my doctoral program—most particularly around the annual review period—I was consistently put on warning for "spending too much time in the library reading and not enough time doing research." Though I never discovered the source from which the faculty gained this knowledge about my unrepentant library patronage, it was an accurate description. This presumed wasteful behavior dramatically contrasted with my peer groups who were actively working with faculty on projects and generating conference papers galore. Ironically enough, and please forgive the blatant self-promotion, I became the most "productive" doctoral student (from a journal publication standpoint) my Ph.D. program had ever produced, aided in large part from the knowledge and viewpoint gained through all that "unproductive" library time.

In hindsight, I fully understand the rationales and well-meant intent behind those orthodox recommendations to become more "productive." There was a system in place for efficiently learning a particular set of research skills and producing a particular kind of research. But, the horizons of opportunity offered by that model were

constrained. Following the normative conventions of being efficient and “productive” cannot get one out of such a proverbial institutional box, it can only anchor one’s habits of mind to those established conditions and the tacit limitations they impose.

Fast forward a few years more, I am embarking on my career as an assistant professor at the University of Wisconsin-Madison. I had become reasonably proficient in a research model oriented around existential-phenomenological methods and related analytic constructs. And, not incidentally, it was one that had gained traction in the academic market of ideas—being very well-suited to the study of consumer identity projects and their implications for consumer-market relationships (e.g., Fournier 1998). However, I had begun to expand my conceptual horizons with readings drawing from feminist and poststructural cultural studies, which sparked a pronounced feeling of limitation in my phenomenological research orientation. This dissatisfaction sparked a two and half year process of conceptual re-tooling and a massive reconceptualization and reanalysis of my dissertation. None of these actions were efficient (much less normatively advisable) from a career management standpoint, as this process led to a significant gap in my research pipeline. Fortunately, the institutional cushion of my prior publications afforded me some degree of institutional leeway. But, my annual reviews were fraught with expressions of concern and warnings about my lack of productivity. Under less forgiving institutional circumstance, my fledgling academic career at a top tier research university could have easily met a premature end.

As indicated by my current status as an ACR Fellow, this re-tooling led to a “productive” phase that carried me through the tenure process. Post-tenure, due in large part to the prodding of my colleague Doug Holt, I became increasingly aware of sociological oversights and elisions that were inherent to my culturally-oriented research. Thus, I undertook another phase of re-tooling and synthesizing that, in turn, led to a substantial gap in my research output. Though in a far less tenuous position than in my assistant professor days, this fallow period nonetheless had costs that accrued across my annual reports but, again, this “unproductive” phase, and the new competencies and perspective it afforded, eventually sparked an array of publications that investigated a much different and broader range of consumption issues than in my previous work.

My various divergences from orthodox norms of “productivity” were not calculated. In hindsight, the divergent paths I pursued during my doctoral program and early assistant professor days were grounded in a blissful ignorance about the potential risks or perhaps a willful disregard for these consequences. To quote former NBA bad boy Charles Barkley, “I am not a role model” and my desultory intellectual approach is absolutely not a template for how young scholars should manage their careers. But, the broader point is that once you take such risks (and let me add see eventual rewards), it becomes much easier to push against the constraints of normative expectations at a future point. My core message is that the neoliberalized academic system has more flex than you may think and that professional and personal value can be gained from critically reflecting on you what you do, why you do it, how you might do it differently in order to expand your horizons of possibility and, sometimes, taking the risk of following the unconventional paths that those reflections point toward.

GOING SLOW AS A REVITALIZING DISCONTINUITY

To foster such discontinuities with neoliberal demands for efficiency and productivity, consumer researchers need a disciplinary license to proclaim, “Right now, I am more interested in what these

other folks are doing;” “the stuff I have been working on just isn’t that interesting to me anymore and I am searching for something else to do or a new way to think.” The orientation manifest in such statements of generalized curiosity or restless intellectual exploration is not an efficient one; it does not directly fill a pipeline with ongoing research; it does not impress administrators charged with monitoring and rewarding annual productivity (and punishing a lack thereof); and it does not confer much immediate value in the academic status game. But, it can make for more interesting thinkers and in the longer run, more innovative researchers.

Let us consider a hypothetical world that would be discontinuous with this neoliberal, entrepreneurial model. For example, what if the guiding trope was not the time constrained elevator talk but the extended dinner conversation. If so, how might academic training change?; what new habits of mind might be formed? Such a conversationalist would need to cultivate a polyvocal fluency, a breadth of intellectual interests, a capacity to see connections among disparate domains and ideas, and a keen interest in learning from others and gaining resources for re-assessing established beliefs and deeply held assumptions (which does not mean that one might necessarily change his/her world-view but would become more critically reflexive toward its contingencies and dangers).

This alternative world scenario is likely to spark a skeptical reaction; it is completely unrealistic; no one has time for such conversational exchanges as a steady-state academic practice because we have “real” work to do; such time-investments in building such polyglot skills would offer little in the way of tangible, timely pay-offs and so on. And therein lies my point, the entrepreneurial model, as an ideological force, governs behavior by constraining our horizons of possibility and naturalizing contingent states of the world as inevitabilities; and to inculcate a belief that “there is no alternative,” to borrow Margaret Thatcher’s famous rhetorical enshrinement of neoliberal policies as the only credible political solution to Britain’s economic problems (McLean 2001).

And indeed, there can be no alternatives, until we create a space for imagining different worlds and different arrangements of academic life. While this dinner conversation trope may be discontinuous with entrepreneurial/neoliberal frame, it is quite continuous with a collaborative-collective-communal one.

Happily, one such alternative is being proposed and pursued in various quarters of the academy. Modeled on the Slow Food movement which aims to liberate consumers’ foodways from the McDonaldized sphere of fast food and to create a more reflexive, socially conscious global community of eaters (Petrini 2007), Slow Scholarship seeks to break the neoliberalizing cycles that are reshaping academic life. It argues that academic freedom necessitates a “freedom to think” (Hartman and Darab 2012, 53) that can only be attained by reclaiming and reconfiguring the institutional spaces, temporalities, and administrative-governance mechanisms that have been co-opted by the corporatization of the University. The goal is to create an academic setting that encourages and legitimates a more deliberate and reflexive mode of scholarship where researchers can do “productive work” by reading and listening to colleagues; undertake longer courses of reflection and study before embarking on research projects; enjoy greater autonomy from instrumental publish or perish pressures; and engage in a host of other communal and intellectually enriching activities that currently necessitate finding ways to subvert the prevailing neoliberal system (See Mountz et al. 2015).

The Slow Scholarship movement is not inimical to instrumental justifications, arguing for example, that their alternative practices are ways to engender more effective—rather than efficient—research, teaching, and mentoring (Meyerhoff, Johnson, and Braun 2011).

Proposals for implementing Slow Scholarship include a significant number “the personal-is-political” changes that can be made in one’s daily work routine—such as exiting the email spiral which can consume one’s day with administrative trivialities and aiming for minimum allowable productivity benchmarks. This latter option is an interesting one because it enjoins researchers to become less sensitive to the immediate pressures of the academic status game and to accept, in the shorter run, the consequences of being deemed “less productive” (though still falling within an acceptable institutional range) so as to gain longer term benefits (such as more impactful research and, not to be overlooked, a more rewarding and enjoyable academic life).

Importantly, however, these individuated actions need to be undertaken in support of collective ones whereby academics push their institutions to create work environments and evaluative systems that are more conducive to this alternative model of academic life and a slower and more thoughtful conception of productivity and value (Mountz et. al 2015). Such unconventional, orthodoxy-challenging actions constitute forms of ideological edgework, or what in this context could be more specifically characterized as intellectual edgework, that tests the boundaries of an ideological system and seeks to gradually expand its zones of tolerability and legitimacy (c.f., Thompson and Üstüner 2015).

Such modes of intellectual-ideological edgework could also help to redress a concern routinely expressed in ACR Fellows addresses (among many other discursive forums such as ACR Presidential addresses)—the field of consumer research is not generating “new” ideas or having a sufficient impact beyond our disciplinary borders. From my standpoint, however, those concerns—though related to the issues addressed here—are somewhat misplaced. The communal model reminds that no idea or theorization is completely original but, rather, it derives from prior conceptions, perhaps applied in a novel way or blended with other concepts to create an innovative hybrid conception. In regard to the proposed interdisciplinary shortfalls, other disciplines are also embedded in the neoliberal academic game and have their own incentives to be insular, or more accurately, to not readily acknowledge sub-disciplines that are seen as holding a lower status position in the grand academic hierarchy. Consumer research’s limited impact on base disciplines, has as much, or more to do, with the sociological conditions that reproduce status hierarchies among social factions as it does the relative merits and novelty of our research.

However, the neoliberal-entrepreneurial model fosters an unreflexive contentment with what you know (i.e., your stock of existing intellectual capital) rather than a restlessness over what you don’t know and the forms of intellectual capital that could be garnered through exploration of the broader, heteroglossic collective intelligence. This habit-of-mind prefers the comfort of well-rehearsed routines and skills (which allow for ready displays of technical proficiency) to the inefficient struggles of acquiring new ones. And it is a habit-of-mind that is continuous with the neoliberalized institutional structures. In contrast, practices of intellectual-ideological edgework can cultivate habits of mind that are discontinuous with these socializing and normalizing structures.

SUBVERSIVE DISCONTINUITIES

Periodically, we do encounter colleagues who, for any variety of reasons, diverge from this entrepreneurial-neoliberal orthodoxy. They may be situated in an institutional space where the reach of neoliberal doctrines have not yet extended or they may have found (or created) a haven where such unorthodox actions could flourish (at least temporarily).

In this spirit, I suspect (and indeed hope) that over the course of your academic life, you have been (or will be) have a colleague who embodies this collaborative-collective model. In my own professional life, I can think of no better example than my dear departed friend Per Østergaard. Per was a voracious and eclectic reader who loved to discuss ideas with doctoral students, other faculty members, and geographically dispersed colleagues such as myself. In most cases, these discussions did not directly relate to any specific research project that Per might have been working on. More commonly, these discussions concerned broader ideas and theoretical debates that Per wanted to share and discuss with others or they were motivated by Per’s insatiable interest helping others negotiate conceptual or methodological road blocks.

Per was a quintessential Slow Scholar long before this term entered the academic parlance. And Per’s deliberately-paced, communal orientation also carried an institutional “cost.” He was not a highly productive scholar in terms of the number of papers he published. However, the research he did publish was innovative, provocative, and boundary spanning (Belk, Østergaard, and Groves 1998; Bode and Østergaard 2013; Jantzen, Østergaard, and Vieira 2006; Jantzen, Fitchett, Østergaard, and Vetner 2012; Lindberg Østergaard 2015; Østergaard and Fitchett 2012). And, Per was a great facilitator of research who never hesitated to provide detailed feedback on a colleague’s paper—often pushing the author to think more broadly about the topic and to find a more interesting question lurking within the research context.

Per’s failure to produce published papers on annual basis did create friction with administrators. However, his home institution, Southern Denmark University, had an established, collectivist tradition of assessing research productivity at a unit level and thus, his role as a facilitator of research could be assigned enough institutional value to keep the administrative wolves at bay. And here we can recognize some degrees of freedom that are afforded when at least some institutional credence is given to the logic of the collaborative-collective model. Of course, such an institutional haven is discontinuous with entrepreneurial-neoliberal model and, as we speak, the Scandinavian academic system is also undergoing its own historically contextualized version of neoliberalization (Steensen 2008).

These neoliberalizing changes to academic life are the consequences of much broader socio-political transformations and, they are quite likely to be the structural conditions academically-oriented consumer researchers will be negotiating (and perhaps resisting at times) for years to come, barring dramatic shifts in the broader political sphere. For this reason, I am not celebrating Per’s communal-collaborative orientation as a normative ideal that other consumer researchers should necessarily emulate or, even, as exemplar of how to resist or defy neoliberal imperatives for efficiency and productivity.

Rather, I want to highlight the synergies that exist when an academic institution is able to find ways to create continuities between the collaborative-collective model and the entrepreneurial-neoliberal one. In the case of Per, his communal orientation could in fact, be legitimately interpreted as enacting a subtle entrepreneurial move but one seeking different rewards than those who play the neoliberal academic game in a more orthodox fashion. Per’s approach to academic life existed in a highly functional, complementary relation to his colleagues who were engaged in the conventional quest to build their research records and external reputations (i.e., academic brands) through passionate productivity.

Looking at this synergy in more general sociological terms, we can say that a communal academic engages in activities (i.e., reading, discussions, participating in seminars, reading groups, etc.) that enrich his/her stock of intellectual capital. However, the goal of such

capitalizing activities is not to gain symbolic capital, or status, in the academic publishing game, but to acquire social capital in an academic field (be it a department or a research community). Reciprocally, whenever such conversions of intellectual capital into social capital aid an entrepreneurially oriented colleague in building his/her publication record, this (collective) achievement enhances the value of the social capital circulating in that particular field.

A related lesson that can be drawn from the career of Per Ostergaard is that neoliberalism is not a unified, hegemonic order, but instead, it is a nexus of ideals and practices that intersect with established institutional conventions and histories to create what political scientists characterize as “actually existing neoliberalisms” (Brenner and Theodore 2002). And these practical adaptations of the neoliberal project often create institutional ambiguities and contradictions. These messy actualities, in turn, also afford greater degrees of freedom than one might realize to engage in intellectual-ideological edgework (c.f., Thompson and Üstüner 2015) and to liberate one’s habits-of-mind from the constraining demands of the neoliberal academic status game.

Such intellectual discontinuities make it more likely that one will be able to draw connections, discern interesting and novel relationships, and recognize limitations in orthodox frameworks that would likely elude those whose habits of mind are continuous with the prevailing institutional doxa. In a more political vein, such intellectual discontinuities also sustain a critical-reflexive perspective toward institutional norms and status quo conventions (including those that are naturalized as unquestionable structural givens). While such a critical-reflexive awareness may not necessarily lead to wholesale structural changes (i.e., some power relations may not be easily surmounted), it does create pathways and incentives for subverting or reshaping institutional conditions in ways that mitigate some of the restrictive demands of neoliberalized academic life.

HOW TO DO “INTELLECTUAL EDGEWORK”

1. Be less instrumental: In pushing against the limits of the neoliberal-entrepreneurial model, a first step would be to pursue research projects that afford opportunities for enriching one’s stock of intellectual capital. This guideline, in turn, suggests that the research process would also have to encompass the inefficiencies posed by the acquisition of new knowledge.

As consumer researchers, we can always say that such learning outcomes are attained (efficiently) from empirical results—(e.g., from this study, I learned that this variable exerts a moderating effect on this process, given this set of mediating conditions). While such empirical discoveries are, indeed, a kind of (quite legitimate) learning, this process entails adding a new node to an existing network; it therefore constitutes an extension of one’s established knowledge base but it does not significantly expand one’s stock of intellectual capital. Conversely, one might choose a project because it requires them to expand their methodological horizons, explore an unfamiliar theoretical domain or develop in depth knowledge about previously unfamiliar social contexts or issues, such as by reading historical analyses or literary portrayals. The end game is not the research output per se; rather, research becomes the means to push the constraints of one’s established habits of mind and to gain a reflexive and critical perspective on institutional conditions that otherwise demand fidelity to an instrumental vision of “productivity.”

Least this suggestion seem Pollyannaish, this boundary expanding orientation can aligned with the demands of neoliberal evaluative standards by producing multiple papers (i.e., products) that draw from this acquisition of new forms of intellectual capital. The key is

to gain institutional recognition that such theoretical innovations do not necessarily follow the mandates of annual reporting conventions. Slower scholarship serves a longer run vision of impact and when institutional norms militate against such activities, we can see a place where the neoliberal model can be challenged on the countervailing grounds of research impact and entrepreneurial innovation. In other words, neoliberal standards can be subverted in ways that serve a goal of institutional transformation.

2. Be more communal: The process of expanding one’s intellectual horizons affords an outstanding opportunity to attend seminars (hosted by other departments and schools at your University); to attend conferences that might be out of your standard portfolio and to meet and discuss issues with researchers who had, heretofore, not been part of your academic social network. [A much wider gamut of recommendations for incorporating more communal practices into one’s academic life are provided by proponents of Slow Scholarship (see Mountz et al. 2015)].
3. Don’t let passion become an excuse to avoid critical reflections: “Loving what you do” does not absolve a consumer researcher from an ethical responsibility to periodically reflect on the reflexive question “is what I do really worth doing?; “whose interests are being served and to what purpose? Are my actions driven by careerism and instrumentalism or am I doing things that are pushing my habituated intellectual boundaries in ways that allow me to engage in creative intellectual edgework?

Though I am clearly advocating for this horizon expanding criterion (and its subversion of the entrepreneurial-neoliberal model) as a normative guide, there are other logics of normative justification that could be deployed in this reflexive assessments, such as helping to redress major social problems and providing knowledge that can lead to a more equitable and sustainable society. The subfield of transformative consumer research (Mick et al. 2012) is oriented around this justificatory logic. Whether a justification is grounded in an ideal of theoretical innovation, civic virtue, or some other normative model (see for example Boltanski and Thévenot 2006), however, reflexive justifications are not rationalizations. The aim of such critical self-appraisals is to critically assess the merits of our chosen criteria and the degree to which our research practices and their outcomes realize those normative aims.

THE INCITEMENTS OF DISCONTINUITY

The institutional discontinuities that frame consumer research can function as incitements to reflection and reflexive assessment, creating potential for change and growth. Habits of mind that align with the entrepreneurial-neoliberal model are not necessarily bad but they harbor hidden dangers when we presume that there is no alternative to such an orientation. Reflexive questioning should engender unrest and unease with patterns set by institutional norms, habits of mind engrained by years of academic training, and the path dependencies established in the course of building one’s academic brand. And, at least some of the time, I suggest that there is much to be gained, institutionally and personally, in diverging from these neoliberal hailings by adopting a more communal, intellectually curious, and non-instrumental approach to scholarship.

I began this decidedly inefficient reflection on the question of “why award an ACR Fellow?” At this juncture, a distinct but related question arises: what does the ACR Fellows Award represent? From a conventional standpoint, this award celebrates achievement and social distinction. ACR Fellows are celebrated for being thought leaders, innovators, and who think differently from the “masses” of

consumer researchers. And this conventional meaning has a mythic function; that is, it masks contradictions and inconsistencies that would otherwise threaten the normative legitimacy unreflexively granted to naturalized institutional norms and practices (Barthes 1972).

This mythic construction obscures that celebrated ACR Fellows are the ideological exceptions who prove the institutionalized norms. This mythic framing suggests that ACR Fellows' inherently possessed discontinuous habits of mind (creative aptitude, intellectual curiosity, penchants for unconventional insights) that enabled them to play the academic more effectively, rather than acknowledging that they were beneficiaries of somewhat anomalous institutional conditions that created opportunities for playing the academic game *differently*. Their distinction hinges on the vast majority of others conforming to the instrumental mandates of the neoliberal-entrepreneurial model. In effect, ACR Fellows have found means to be rewarded for doing parkour while most others are running timed laps around a track.

However, it is possible to subvert the meaning of the ACR Fellows Award and place it in the service of critically assessing the institutional conditions that render these discontinuous habits of mind to be exceptional and in turn, to reconfigure the entrepreneurial-neoliberal status game in ways that would be more conducive to forming habits of mind that are communal, less instrumental in orientation, and predisposed toward critical self-reflection and intellectual edgework. Such institutional shifts would serve to democratize the discontinuous habits of mind, whose currently rarefied distinction now confers distinction in the academic status game.

One could counter this proposal by asking in riposte, "Why make such efforts to diverge from the neoliberal norms that govern our research activities?" Maybe you don't see these dangers as being all the risky and the neoliberal system is working just fine for you. One response, consistent with the ideals of Slow Scholarship, is that such intellectual edgework can afford long term benefits such as building a more diversified portfolio of intellectual capital; generating collaborative connections and synergies; enhancing creativity and afford experiences of enrichment (both experientially and intellectually) that render the (reworked) academic game more meaningful than the atomizing, competitive pressures of the neoliberal-entrepreneurial model.

Another level of response to this question circles back to the first narrative motif of ACR Fellows talks—proposing changes that could potentially enhance the theoretical significance and societal relevance of consumer research. To explain this implication, we also need to look beyond the particularities of the academic status game. And here, I turn to the critical journalist George Monbiot's (2016) discussion of how neoliberal policies—which have helped to generate a radical upward distribution of wealth, rising budget deficits, crisis inducing economic instabilities in global financial markets, and a structural inability to address systemic environmental threats—have retained their hegemonic status in the face of glaring failures:

When laissez-faire economics led to catastrophe in 1929, Keynes devised a comprehensive economic theory to replace it. When Keynesian demand management hit the buffers in the 70s, there was an alternative ready [neoliberalism]. But when neoliberalism fell apart in 2008 there was ... nothing. This is why the zombie walks. The left and center have produced no new general framework of economic thought for 80 years.

While neoliberalism serves the economic interests of those who occupy relatively privileged institutional positions, the destructive

and destabilizing costs of neoliberalism's myriad "externalities" are mounting and becoming more problematic every day. We also stand on the verge of a radical techno-displacement—which is actually well underway—of many conventional occupations as AI and robotic technologies are now becoming capable of performing a wide range of jobs across the blue, pink, and white-collar sectors, encompassing everything from construction work to performing medical diagnoses, legal and financial services, and writing news stories (Keohane 2017). Many technology experts predict that close to 50% of existing jobs will be automated inside of two decades (Morgenstern 2016). The counterbalancing argument is that this in-process technological revolution may generate a surfeit of new jobs whose exact characteristics are difficult to image in the present moment (echoing the historical effects of the industrial revolution) (Whitehouse, Rojanasakul, and Sam 2017). However, the neoliberal political economy, with its commitment to a reduced social safety net, is ill-prepared to the cushion the societal shocks posed by this economic transition (assuming the more optimistic projections hold) and it also harbors the potential to, at least for some time, exacerbate economic inequalities as an elite ownership class profits from low labor costs of production, while a displaced workforce is simultaneously plunged into an impoverished state of perpetual underemployment.

Whether in regard to looming threats of ecological collapse or technodisplacements, these conditions point to a pressing need for new frameworks of economic thought that can offer an alternative to the uncontested hegemonic status of neoliberal doctrines in key policy circles. Such an alternative is not likely to arise so long as social science researchers (including consumer researchers') habits of minds and academic practices mirror these same ideological influences.

Nor can it be piecemeal undertaking from isolated researchers. Neoliberalism arose from a collaborative-communal process of developing an alternative to Keynesian economics, building social capital among policy makers, and diffusing and implementing these ideals through networks of political influence (c.f., Foucault 2008; Giesler and Veresiu 2014). Though still in its nascent stages, an interdisciplinary movement is beginning to coalesce that is seeking to create a viable solutions to the systemic problems (like climate change) that neoliberalism exacerbates through its antipathies toward any regulatory interventions on the market or that its policies have helped to create (such as an ever increasing concentration of the wealth; national debt bombs; hyper volatile investment markets) (see Jones and O'Donnell 2017; Schor 2010). As an interdisciplinary field that studies consumer behaviors as they unfold in market contexts, the consumer behavior field possesses a latent potential to contribute to this communal-collaborative conversation but, to do so, many of our institutionally ingrained, neoliberalized habits of mind will need to be changed. I hope this address might be one small step toward such a change.

And to close on a more personal-retrospective note, the receipt of this ACR Fellow afforded me with an opportunity to reflect on roads taken, those not taken, and perhaps less traveled paths that should be explored. Less than an affirmation, this award has provided instigation and, for that, I will be ever grateful.

REFERENCES

- Bagozzi, Richard P. (994), "ACR Fellow Speech," in *NA - Advances in Consumer Research Volume 21*, eds. Chris T. Allen and Deborah Roedder John, Provo, UT: Association for Consumer Research, 8-11.
- Barthes, Roland (1972), *Mythologies*, trans. Annette Lavers, New York: Hill & Wang.

- Becker, Gary (1964), *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, New York: National Bureau of Economic Research.
- Belk, Russell W. (1995), "ACR Fellow's Address: Awards, Rewards, Prizes, and Punishments," in *NA - Advances in Consumer Research Volume 22*, eds. Frank R. Kardes and Mita Sujjan, Provo, UT: Association for Consumer Research, 9-15.
- Belk, Russell W., John F. Sherry Jr., and Melanie Wallendorf (1988), "A Naturalistic Inquiry into Buyer and Seller Behavior at a Swap Meet," *Journal of Consumer Research*, 14 (March), 449-70.
- Belk, Russell W., Per Østergaard, and Ronald Groves (1998), "Sexual Consumption in the Time of AIDS: A Study of Prostitute Patronage in Thailand," *Journal of Public Policy & Marketing*, 17 (2), 197-214.
- Bode, Matthias, and Per Østergaard (2013), "The Wild and Wacky Worlds of Consumer Oddballs: Analyzing the Manifestary Context of Consumer Culture Theory," *Marketing Theory*, 13 (2), 175-192.
- Boltanski, Luc and Laurent Thévenot (2006), *On Justification: Economies of Worth*, translated by Catherine Porter, Princeton, NJ: Princeton University Press.
- Brenner, Neil and Nik Theodore, (2002), "Cities and the Geographies of 'Actually Existing Neoliberalism'," *Antipode*, 34 (3) 349-379.
- Bruns, Axel (2008), *Blogs, Wikipedia, Second Life, and Beyond: From Production to Prodisage*, New York: Peter Lang.
- Celsi, Richard L., Randall L. Rose, and Thomas W. Leigh (1993), "An Exploration of High-risk Leisure Consumption through Skydiving," *Journal of Consumer Research*, 20 (1), 1-23.
- Dilts, Andrew (2011), "From 'Entrepreneur of the Self' to 'Care of the Self': Neoliberal Governmentality and Foucault's Ethics," *Foucault Studies*, 12 (October), 130-146.
- Engel, James F. (1981), "The Discipline of Consumer Research: Permanent Adolescence Or Maturity?," in *NA-Advances in Consumer Research Volume 8*, eds. Kent B. Monroe, Ann Arbor, MI : Association for Consumer Research, 12-14. [Accessible at <http://www.acrwebsite.org/volumes/9250/volumes/v08/NA-08>]
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343-73.
- Foucault, Michel (1983), "On the Genealogy of Ethics: An Overview of Work in Progress," in Hubert L. Dreyfus and Paul Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*, 2nd ed. Chicago: University of Chicago Press, 229-252.
- _____ (2008), *The Birth of Biopolitics: Lectures at the College de France*, ed. Michael Senellart, trans. Graham Burchell, New York: Palgrave.
- Geertz, Clifford (1973), *The Interpretation of Cultures*, New York: Basic Books.
- Giesler, Markus and Ela Veresiu (2014), "Creating the Responsible Consumer: Moralistic Governance Regimes and Consumer Subjectivity," *Journal of Consumer Research*, 41 (3), 840-857.
- Green, Chris (2009), "Are Business Schools to Blame for the Crisis?," <http://www.independent.co.uk/student/postgraduate/mbas-guide/are-business-schools-to-blame-for-the-credit-crisis-1665871.html>
- Hartman, Yvonne and Sandy Darab (2012), "A Call for Slow Scholarship: A Case Study on the Intensification of Academic Life and its Implications for Policy," *Review of Education, Pedagogy, and Cultural Studies* 34 (1-2), 49-60.
- Hayek, Friedrich A. (1944), *The Road To Serfdom*, Chicago, Ill: University of Chicago Press.
- Hirschman, Elizabeth C. (1996), "ACR Fellow's Address on Being a Female Fellow: My Life As an Oxymoron", in *NA - Advances in Consumer Research Volume 23*, eds. Kim P. Corfman and John G. Lynch Jr., Provo, UT : Association for Consumer Research, 6-9.
- Holbrook, Morris B. (1995), "Seven Pieces of Wisdom on Consumer Research From Sandy, Quarter, Tommy, Matthew, Paul, Dave, and Dolly: a Love Letter to ACR," in *NA - Advances in Consumer Research Volume 22*, eds. Frank R. Kardes and Mita Sujjan, Provo, UT : Association for Consumer Research, 16-20.
- Holbrook, Morris B. and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer, Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9 (September), 132-40.
- Jantzen, Christian, Per Østergaard, and Carla M. Sucena Vieira (2006), "Becoming a 'Woman to the Backbone': Lingerie Consumption and the Experience of Feminine Identity," *Journal of Consumer Culture*, 6 (2), 177-202.
- Jantzen, Christian, James Fitchett, Per Østergaard, and Mikael Vetner (2012), "Just for Fun?: The Emotional Regime of Experiential Consumption," *Marketing Theory*, 12 (2), 137-154.
- Jenkins, Henry (2006), *Convergence Culture: Where Old and New Media Collide*, New York: NYU Press.
- Jones, Bryn and Mike O'Donnell (2017), *Alternatives to Neoliberalism: Towards Equality and Democracy*, Chicago, Ill: University of Chicago Press.
- Keohane, Joe (2017), "What News-Writing Bots Mean for the Future of Journalism," *Wired*, <https://www.wired.com/2017/02/robots-wrote-this-story/>.
- Kozinets, Robert V. (2008), "Technology/Ideology: How Ideological Fields Influence Consumers' Technology Narratives," *Journal of Consumer Research*, 34 (April), 865-881.
- Levy, Pierre (1999), *Collective Intelligence: Mankind's Emerging World in Cyberspace*, Cambridge, MA: Perseus Books.
- Levy, Sidney J. (1959), "Symbols for Sale," *Harvard Business Review*, 37 (July-August), 117-24.
- Lindberg, Frank, and Per Østergaard (2015), "Extraordinary Consumer Wxperiences: Why Immersion and Transformation Cause Trouble," *Journal of Consumer Behaviour*, 14 (4), 248-260.
- Lynch, John G., Jr. (2011), "ACR Fellow's Address: Substantive Consumer Research," in *NA - Advances in Consumer Research Volume 38*, eds. Darren W. Dahl, Gita V. Johar, and Stijn M.J. van Osselaer, Duluth, MN : Association for Consumer Research [accessible at http://www.acrwebsite.org/volumes/v38/acr_v38_16394.pdf]
- McLean, Iain (2001), *Rational Choice and British Politics: An Analysis of Rhetoric and Manipulation from Peel to Blair*, New York: Oxford University Press.
- McCracken, Grant (1986), "Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods," *Journal of Consumer Research*, 13 (June), 71-84.

16 / Consumer Research in the Age of Neoliberal Discontinuities: Incitements to Intellectual Edgework

- McRobbie, Angela (2015), "Is Passionate Work a Neoliberal Delusion?", <https://www.opendemocracy.net/transformation/angela-mcrobbe/is-passionate-work-neoliberal-delusion>
- Merleau-Ponty, Maurice (1962), *The Phenomenology of Perception*, London: Routledge & Kegan Paul.
- Meyerhoff, Eli, Elizabeth Johnson, and Bruce Braun (2011), "Time and the University," *ACME: An International E-Journal for Critical Geographies*, 10 (3), 483-507.
- Mick, David Glen, Simone Pettigrew, Cornelia Connie Pechmann, and Julie L. Ozanne (2012), "Origins, Qualities, and Envisionments of Transformative Consumer Research," in *Transformative Consumer Research for Personal and Collective Well-being*, eds. Mick, David Glen, Simone Pettigrew, Cornelia Connie Pechmann, and Julie L. Ozanne, New York: Routledge, 3-24.
- Mill, John Stuart (1867/1984), "Inaugural Address Delivered to the University of St. Andrews," in *The Collected Works of John Stuart Mill, Volume XXI - Essays on Equality, Law, and Education*, ed. John M. Robson, London, UK: Routledge and Kegan Paul, 215-258.
- Monbiot, George (2016), "Neoliberalism – The Ideology at the Root of all our Problems," <https://www.theguardian.com/books/2016/apr/15/neoliberalism-ideology-problem-george-monbiot>.
- Morgenstern, Michael (2016), "Automation and Anxiety: Will Smarter Machines Cause Mass Unemployment," *The Economist*, <https://www.economist.com/news/special-report/21700758-will-smarter-machines-cause-mass-unemployment-automation-and-anxiety>.
- Mountz, Alison, Anne Bonds, Becky Mansfield, Jenna Loyd, Jennifer Hyndman, Margaret Walton-Roberts, and Ranu Basu (2015), "For Slow Scholarship: A Feminist Politics of Resistance through Collective Action in the Neoliberal University," *ACME: An International Journal for Critical Geographies*, 14 (4), 1235-1259.
- Østergaard, Per, and James Fitchett (2012), "Relationship Marketing and the Order of Simulation," *Marketing Theory*, 12 (3), 233-249.
- Peck, Jamie and Adam Tickell (2007), "Conceptualizing Neoliberalism, Thinking Thatcherism," in *Contesting Neoliberalism*, eds. Helga Leitner, Jamie Peck, and Eric S. Sheppard New York: Guilford Press, 26-50.
- Petrini, Carlo (2007), *Slow Food Nation: Why Our Food Should be Good, Clean, and Fair*, New York: Rizzoli Ex Libris.
- Sartre, Jean Paul (1956), *Being and Nothingness*, New York: Washington Square
- Schor, Juliette (2011), *Plenitude: The New Economics of True Wealth*, New York: Penguin.
- Shulman, Steven, Barbara Hopkins, Robert Kelchen, Sharon Mastracci, Mehmet Yaya, John Barnshaw, and Samuel Dunietz (2016), "Higher Education at a Crossroads: The Economic Value of Tenure and the Security of the Profession," *Academe*, 102 (5), 9-22.
- Standing, Guy (2011), *The Precariat: The Dangerous New Class*, New York: Bloomsbury Academic.
- Steensen, Jette (2008), "Neoliberal Education in Denmark," in *The Global Assault on Teaching, Teachers, and their Unions Stories for Resistance*, eds. Mary Compton and Lois Weiner, New York: Palgrave Macmillan, 43-46.
- Thompson, Craig J. and Tuba Üstüner (2015), "Women Skating on the Edge: Marketplace Performances as Ideological Edgework," *Journal of Consumer Research*, 42 (2), 235–265.
- Ward, Steven C. (2014), "From E Pluribus Unum to Caveat Emptor: How Neoliberal Policies are Capturing and Dismantling the Liberal University," *New Political Science*, 36 (4), 459-473.
- Whitehouse, Mark, Mira Rojanasakul, and Cedric Sam (2017), "Is Your Job About to Disappear?: Quick Take," *Bloomberg Business*, <https://www.bloomberg.com/graphics/2017-jobs-automation-risk/>
- Wright, Peter (1999), "Fellows Award: Marketplace Intelligence: Mindreading, Machiavellianism and Magic," in *NA - Advances in Consumer Research Volume 26*, eds. Eric J. Arnould and Linda M. Scott, Provo, UT: Association for Consumer Research, 1-3.

2017 ACR Fellow Address

The Future History of Consumer Research: Will the Discipline Rise to the Opportunity?

Jagdish Sheth, Emory University, USA

INTRODUCTION

I am both honored and grateful to be inducted as ACR Fellow.

Exactly five decades ago (1967) I published my first paper titled “A Review of Buyer Behavior” in *Management Science*. It was a philosophy of science perspective of the extant knowledge of buyer behavior. The paper concluded that buyer behavior as a discipline resembled more like the proverbial five blind men and the elephant. What it needed was a theory that unified the diverse perspectives and provided explanation of why we buy what we buy.

My doctorate is from the University of Pittsburgh. My major was: Individual and Group Behavior. My minor was social psychology and I chose marketing as my applied field. This led to a life transforming and life long relationship with John A. Howard, who became my advisor and my mentor. He invited me to co-author the book *The Theory of Buyer Behavior*, which was published in 1969. The main focus of the theory was to explain why consumers become loyal to a brand and end up buying by habit. The theory was anchored to learning, perception, and information search constructs from psychology. It came to be known as the Howard-Sheth Theory of Buyer Behavior. John Howard and I left University of Pittsburgh in 1963 and came to Columbia University, where I started my academic career in Consumer Behavior. The Howard-Sheth Theory became the foundation for a large-scale longitudinal research called the Columbia Buyer Behavior Project. It attracted great doctoral students including George Day, and eminent faculty including John Farley from Carnegie Mellon University, and Don Lehman from Purdue University.

I extended the Howard-Sheth theory to industrial buying behavior and also to family buying behavior with a focus on joint decision making and inherent conflict among the family members due to their divergent goals and perceptions.

My next book in consumer behavior was *Consumption Values and Market Choices* (with Bruce Newman and Barbara Gross,) published in 1991. It articulated that all consumer choices can be attributed to functional, social, emotional, epistemic and situational values provided by the product and brand choices at all three levels of consumption: 1. To consumer or not to consume; 2. If yes, what type to consume; 3. Which brand to consume within a type or category. Based on more than 150 studies of students and homemakers, ranging from playing on pinball machines to marijuana smoking to pizza consumption to choosing brands of shampoo and toothpaste, it provided a structured survey instrument with which to predict future behavior. The accuracy of the future choice behavior was in the nineties across different studies and the determinants of choice varied from functional to social to situational values. This theory was extended to voting for political candidates at the local, state, and national elections with excellent prediction of election outcomes.

My research in consumer behavior shifted to relationship marketing and organizational buying behavior. With the establishment of the Center for Relationship Marketing at Emory University, we began research on why customers engage in a relational exchange and develop a strong vendor loyalty. This led to several articles written with my colleague Atul Paravatyar including a *Handbook of Relationship Marketing* published by Sage in 2000.

In the eighties and the nineties, I wrote two papers on consumer research both published in the *Journal of the Academy of Marketing Science* (JAMS). The first one reviewed the spectacular growth of consumer research anchored to multi attribute attitude models and information processing. The paper, titled “Surpluses and Shortages in Consumer Behavior Theory and Research” strongly suggested that the discipline needs to broaden out and focus on “irrational” choices as well as on excessive and deviant consumption.

The second paper titled “Acrimony in the Ivory Tower” was a painful plea to be more inclusive and tolerant of alternative perspectives and methods. It suggested that ideological acrimony and personal attacks were not healthy for the progress of the discipline.

I became the President of ACR in 1984. In that year, I also initiated the first international conference. It was held in Singapore in 1985 and hosted by Professor Tan Chin Tiong at the National University of Singapore (NUS). We invited Jim Engel, the Founder of ACR, to be the keynote speaker. The conference was a great success. I am glad that the tradition of hosting an international conference continues even today.

More recently, I have been doing research on cross-cultural consumption. It is based on gene migration theory and provides an explanation for the cultural differences between Northern and Southern Europeans with respect to basic necessities such as food, clothing, and shelter. However, it also provides an explanation for *why* cultures vary with respect to individualism, punctuality, territorialism, friendship, social status, and material possessions. While we know the dimensions of cultural differences, we don't have an explanation as to *why* cultures vary on those dimensions. My most recent book on this topic, *Genes, Climate, and Consumption Culture: Connecting the Dots* (2017), is published by Emerald Publishing.

I have provided a brief history of my personal journey in consumer research. Now, I would like to provide a brief history of consumption and consumer research. Finally, I will suggest seven new areas of research opportunities.

BRIEF HISTORY OF CONSUMPTION, MARKET RESEARCH, AND CONSUMER RESEARCH

Consumption

Consumption is as old as mankind. In the hunters and gatherers stage of human evolution, consumption was highly individualistic and primarily for day to day survival.

At the farming stage of human evolution, consumption expanded beyond food to shelter and clothing. Also, collective living with others in a community developed social norms on consumptions of basic needs. In other words, consumption became partly driven by personal belief systems and partly by social norms of others.

Consumption also expanded from basic necessities such as food, shelter, and clothing to what we refer to as wants and desires. Consumption went beyond day to day survival and into socially desirable and aspirational possessions of products and artifacts.

As the Industrial Revolution shifted the farm based economies into manufacturing based economies, consumption added many new products and services such as electricity, running water, television,

appliances, and automobiles. Today, with the digital revolution and the cellphone economy, consumption has gone beyond anyone's imagination. Today, cellphones and the Internet are as much a necessity as food, shelter and clothing. Also, consumption has gone global after the liberalization of trade in the nineties. Today, I can buy products and even services from anywhere in the world and I can have choices of products and brands in my supermarket and superstores from all over the world. With the advent of eCommerce and online retailers such as Amazon, Alibaba, and Flipkart, the whole world today can buy products and services virtually from any country.

Finally, with the explosive growth of social media such as Facebook, What's App, WeChat, Instagram and whatnot, consumers today communicate and interact in real time and inform and influence each other about products and services. This peer to peer network of information and influence amounts to word of mouth (WOM) gone wild. WOM has transformed from the local neighborhood to global community and it reaches not just neighbors but also total strangers.

Market Research

While consumption is as old as mankind, market research is less than 150 years old. It became a standard function in companies as a way to gather consumer demographics, activities, interests, opinions, and values.

The origins of market research dates back to sampling and tasting of foods and beverages either as pre-product feedback or as post-product experience. Market research, over time, has evolved into a standalone industry consisting of experts and methods. It has also evolved from understanding the consumer to measuring the impact of advertising and communication as well as calculating Return on Marketing Investments (ROMI) and Customer Lifetime Value (CLV). It has also evolved from qualitative research such as focus groups to highly sophisticated analytical techniques such as stochastic models, multivariate statistics, and predictive analytics. It has become a marketing science. Marketing research is mostly empirical and prides in gaining consumer insights from the feedback and behaviors of consumers. It is devoid of theory and therefore, resembles a discovery science.

Consumer Research

Consumer Research is a very young discipline. It is less than fifty years old. It began with explanatory science by focusing not as much on *what* consumers do or believe but *why* they buy what they buy and *why* they become loyal to brands and products as well as *why* they transcend market transactions as expected by theories of self-interest and maximization of utility.

In the fifties, consumer research also began to distance from economic theories of rational choices and instead focused on psychological theories of emotional choices. The basic proposition was that consumers do not behave logically, but they behave psychologically.

Most scholars and practitioners in consumer behavior belonged to Division 23 (Consumer Psychology) of the American Psychological Association (APA). I was inducted as the APA Fellow in 1975 and became the President of Division 23 in 1979.

The members of the Consumer Psychology Division were mostly psychologists and did consumer research on advertising and communication. It was eventually divested by the APA which led to the formation of the Society for Consumer Psychology (SCP) as a standalone membership organization.

Consumer behavior became a standalone discipline with publication of seminal theories such as the Howard-Sheth Theory of Buyer Behavior and Jim Bettman's Theory of Information Processing. It

divorced itself from market research by establishing its own membership organization called the Association for Consumer Research (ACR). Its founder, James Engel, organized the first workshop in 1970 at Ohio State University and co-opted a few of us to become co-founders of ACR. This separate identity was further cemented by having a separate journal called the Journal of Consumer Research (JCR) dedicated to consumer behavior.

In the early days, consumer behavior was driven by what is referred to as motivation research including subconscious and unconscious motivations. The pioneers such as Ernst Dichter and Sidney Levy developed techniques and tools to understand the psychology of choices of brands and products, and what motivates consumers. These qualitative techniques (in-depth interviews and focus groups) were augmented by physiological (or biological) measures such as pupil dilation, galvanic skin pressure, heart rate, and more recently, brain imaging. Finally, consumer research today focuses on laboratory experiments with the protocol of three research studies similar to what psychologists do in experimental and social psychology.

Five Phases of Consumer Research

Over the years, consumer research has evolved into at least five research traditions. The first is referred to as the multi-attribute attitude models. These models provide explanations of how consumer attitudes are developed and whether prior consumer attitudes and intentions predict future behaviors. Most of the research was based on survey research methods with the use of well-defined survey questions. This was followed by research on information processing led by Jacob Jacoby at Purdue University and Jim Bettman at Duke University. Information processing, as the name implies, focused on how consumers engage in selective exposure, selective attention, and selective retention of information and how consumers engage in active search for information.

Information processing research shifted from survey research to experimental research in behavioral labs located in psychology departments and in business schools. The subjects were students and sample sizes were small compared to household research on multi-attribute attitude models.

Both of these research traditions were challenged because they reflected only partial reality. Also, they focused on the buyers as opposed to the users. It led to the third and the fourth traditions. They are referred to as Odyssey Research and Transformative Consumer Research. Odyssey Research, led by Russel Belk, resembled the anthropological tradition of immersing into and experiencing the cultures of consumption. It believed in theory in use which was anchored to grounded reality; and it resembled more like group safaris. The fourth tradition called Transformative Research began to focus on the world of music and movies and emotive aspects of consumer behavior. This tradition was led by Morris Holbrook and eventually it led to focusing on several other neglected areas in consumer research such as cross-cultural consumer research and consumer policy research.

Behavioral Economics

The fifth and current tradition is what is referred to as behavioral economics. It is mostly experimental research focused on exposure and manipulation of stimuli to evoke hypothesized consumer responses with respect to brand or product choices. It is following the typical protocol of three studies (Study 1, Study 2, Study 3) with scientific rigor to establish a causal relationship between the experimental treatment and the predicted outcome while controlling for moderator variables.

Behavioral economics is also transforming the discipline of economics. Indeed, several non-economists such as Herbert Simon and Daniel Kahneman have been awarded the Nobel Prize in economics for bringing the psychological or behavioral perspectives in the economic behavior of markets, consumers, and organizations. The most recent 2017 award was given to Richard Thaler “for his contributions to behavioral economics.”

Over time, the field of consumer research has become narrow both in its perspective and in its methodology. I refer to this as the *discipline myopia*. In my view, consumer research needs to become more eclectic both with respect to perspective and with respect to methodology. I think the discipline needs to promote the big tent mentality and encourage diverse perspectives and methods.

THE FUTURE OF CONSUMER RESEARCH

There are seven great opportunities to broaden the scope and nature of consumer research. They are depicted in the pie chart below:

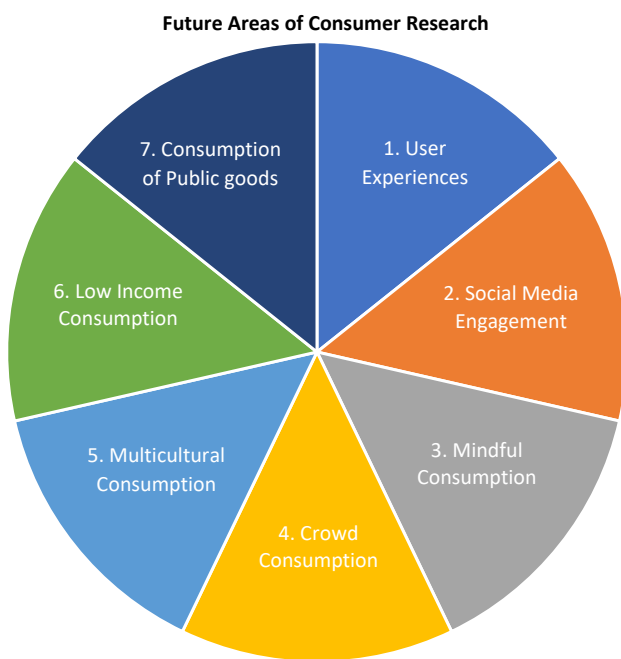


Figure 1. Seven Great Opportunities

User Experiences

First, we need to redefine who is the consumer. The consumer is not just a buyer; he or she is also a user and a payer. Most of consumer research in all five traditions I have described above is focused on the consumer as a buyer. This is due to our roots in marketing that have been primarily interested in the buying behavior. Most consumer research scholars are faculty in the marketing departments.

Consumer as user, however, is a more critical and relevant area to study. It shifts the focus from buying and choice making to usage and post-purchase experience. It is interesting to note that most R&D departments in companies focus on the user and not the buyer whether it is automobiles, appliances, cellphones, or prescription medicine. The customer as user is obvious in service industries where consumer experience matters. This is becoming even more relevant now that users report their experiences on social media.

Similarly, consumer as payer is not studied well. This includes family budgets, credit history, debt obligations and monthly

cash flow management. It was the corner stone of thinking by John Maynard Keynes in what he articulated as propensity to save vs propensity to consume; and how discretionary income, interest rates, and tax rate mattered in propensity to consume. In other words, it is not just the willingness to pay but the ability to pay. Following the micro economics tradition, the discipline of home economics focused on family issues of budgets, savings, and cash flow. It needs to be included and encouraged in consumer research.

Social Media Engagement

The largest nation in the world is not China or India. It is the Facebook nation with a population of more than two billion. In the monarchy era, it would be declared as the largest global empire probably as big, if not bigger than the Roman and the British Empire. This social media nation has global reach with very rich content revolving around consumption, if you define social activities as acts of consumption. The impact of social media and peer to peer information sharing and influencing is key for future research in consumer behavior. It is WOM gone wild and can champion or destroy a world class brand including personality brands. Fortunately, social media data are publicly available for research. It will, however, require learning new methods of analysis and the language of text messages. The evolution of natural language processing (NLP) as a tool is based on cognitive psychology and seems very suitable for research in consumer behavior.

Of course, social media engagement by consumers is not limited to Facebook. You have WeChat, What’s App, Snapchat, Instagram, etc. The masses love social media and social media need the masses to scale up. This symbiotic relationship is likely to last for a long time barring regulation, policy intervention, or anti-globalization sentiments. It will definitely transform consumer behavior in the way we gather information, share our experiences, and transact our buying behavior. It will rekindle consumerism as a movement not led by one person such as Ralph Nader but by the grass root movements. Crowdsourcing of consumerism is an interesting area of new research opportunity.

Mindful Consumption

Mindful Consumption is a growing area of research interest for policy makers as well as marketers. Consumers in advanced countries are beginning to appreciate that carbon footprint is global and borderless. Also, it is simply not possible for mother nature to regenerate itself quickly enough to provide resources for more than three billion people from the emerging markets of China, India, and Africa who all want to buy branded products rather than make them at home.

Mindful Consumption means consciousness about how consumption impacts the environment from the time consumers procure the product, store it for future consumption, and dispose of as waste. It is estimated that more than seventy percent of the carbon footprint happens at home and not in the factory. It is the home, the refrigerator, the freezer, and the automobile which are responsible for increased carbon in the atmosphere. As consumers become more aware of the unintended consequences of their consumption, they are searching for ways they can minimize the side effects of consumption. This is particularly key with respect to the storage of foods, presence of large homes, and inefficient waste collection and disposal.

More companies are realizing that consumers today are looking for meaning in consumption and that they are serving the society through their consumption. It is “doing well by doing good.” Today, therefore, marketers are all trying to associate some social cause with their brands.

Crowd Consumption

The Internet's increased reach is unprecedented. There are no more six degrees of separation. Today, there is no degree or only one degree of separation. Therefore, it is possible to galvanize a crowd on any issue or problem. This has been very evident in crowd sourcing and crowd funding. For example, it was social media and viral marketing that led to the unprecedented success of the Ice Bucket Challenge for increasing awareness and raising funds for ALS.

I believe crowd consumption is a potentially very important area of research. Crowd Consumption is similar to the band wagon effect of the ice cream man who attracts children from the neighborhood. It is more than viral events or unplanned gathering of friends; and its scope is simply massive.

What motivates people to join the crowd? How does crowd consumption get organized? What is the life cycle of crowd consumption? Is it similar to trends in fashion?

Crowd Consumption, like Woodstock in the Seventies and New Year's Eve at Times Square, requires managing supply chain and dynamic pricing.

Multi-Cultural Consumption

As ethnic diversity is rising all over the world, it is becoming increasingly important to study consumption differences between subcultures of a nation. For example, California is already a multicultural state with a non-white majority. So will be Texas and Florida, which are the next two largest states in terms of population size. Therefore, taking the WASP (White Anglo-Saxon Protestant) perspective is becoming increasingly myopic and may lead to missed opportunities. In my own research, I find that, today, minorities are the opinion makers and influence the consumption by the white majority. For example, African Americans lead in music and fashion. In the United Kingdom, fish and chips is replaced with chicken tandoori with increased immigration from South Asia. In the United States, potato chips are replaced by tortilla chips, and ketchup by salsa. Indeed, it seems that minorities gain acceptance in the U.S. by the majority consuming minority culture's products and services and thereby becoming good followers. In other words, opinion leadership theory is turned upside down. Minorities are the new opinion leaders. They now also include Asians such as Korean, Indian, and Chinese consumers.

Low Income Consumption

Low Income Consumers are growing faster than the average as the middle class is shrinking and extreme income groups are rising. The Base of the Pyramid (BOP) market defined as those who earn less than two dollars a day income totally represents a \$5 trillion economy. Low Income Consumers consume products and services just as all consumers do. However, we have not studied their decision-making process. Since their needs and wants are the same, what matters most is, therefore, to study their resource constraints including income, time, and expertise.

What matters most to low income consumers is affordability, accessibility, and awareness to such critical issues as health and economic well-being. As of today, we do not have a well-accepted theory or a paradigm for low income consumers. Scientific research on their brand choices and use of products and services may be very valuable for public policy, economic development, and corporate social responsibility (CSR).

Consumption of Public Goods

Public goods are shared goods. Generally, they are free or heavily subsidized. It is estimated that more than fifty percent of consumption is directly related to public goods. These include highways, airports, schools, education, parks and recreation, arts and cultural festivals, and public health.

Since the market mechanism with price as the mediator between the supply and the demand (at a point in time or at the equilibrium) often fails in public goods, it is important to discover or develop concepts and theories of public goods consumption. For example, how does shared consumption impact consumer attitudes and behaviors? Why do consumers engage in road rage? Is road rage also relevant in air travel or at the grocery store? Is collective consumption culture bound? Why does it do well in Scandinavia and not so well in other cultures? These are just a few areas of research. This research does not have to be just experimental (three studies in a laboratory), it can also be qualitative or empirical in nature.

To conclude, I believe consumer research needs to consciously broaden out from the current narrow focus on three experimental laboratory studies on a microscopic aspect of consumption. Instead, it can dwell on issues that are vastly more impactful and that will benefit society at large from scientific (versus anecdotal) findings.

2017 ACR Fellow Address

Our Collective Journey

Debbie MacInnis, University of Southern California, USA

Thank you for such an amazing introduction Russ. I am deeply honored to stand here with two eminent colleagues (Jag Sheth and Craig Thompson) to give an ACR Fellows address, and I am so happy to have my husband and so many friends here to share in this special occasion.

I thought my ACR Fellows Address would be an appropriate time to take a broad view of the field and look at how we are evolving over time. Our field's founders, people like Jim Bettman, Jag Sheth, Gerry Zaltman, Hal Kassarian, Joel Cohen, Russ Belk, Morris Holbrook, Jack Jacoby and others staked out a view of consumer behavior that was broad and deep.

CONSUMER BEHAVIOR AS DECISION MAKING

Jack Jacoby aptly captures this broad vision in what is now regarded as a widely held definition of consumer behavior. Consumer behavior includes not just decisions about *what* people consume, but also decisions about whether, when, where, why, how, how much and how often people engage in consumption. Importantly, the field of consumer behavior is differentiated from allied disciplines by virtue of its focus on *consumption*, where consumption includes all means of acquiring, using and disposing of marketplace offerings. Consumer behavior is not restricted to the consumption of *products*. It includes myriad entities, including brands, services, ideas, people, places, gifts, and experiences. Decision making units include not just the *decider* but the information gatherers, users, and influencers like friends, family, communities, and other reference groups who exert normative or informational information in person or virtually. Moreover, consumer decision making is conceived as varying *across time*, whether in units of seconds, hours, seasons, or life stages.

If we look carefully at this definition, we realize that at its core, consumer behavior has been defined in terms of *consumption decisions*. That is, while we are interested in a broad array of topics like consumer experiences, emotions, brand relationships, or how consumers are influenced by celebrities and other opinion leaders, the lens through which we view them is the lens of decision making.

This focus on decision making in a consumption context is not surprising. After all, decisions about acquisition, usage and disposition link consumer behavior to marketing and economics. Moreover, consumption provides a rich context in which we can explore decision making from a multidisciplinary perspective. Indeed, our field has been greatly enriched by perspectives from psychology, sociology, anthropology, history and other core disciplines. Nor is it surprising that decision making in a consumption context is a focal part of the definition of the field. Indeed, the birth of the field of consumer behavior coincided with highly influential works by decision making experts inside and outside our field. Consider, for example, Howard and Sheth's *Theory of Buyer Behavior*, Jim Bettman's "*An Information Processing Theory of Consumer Choice*". Kahneman and Tversky's *Judgment under Uncertainty: Heuristics and Biases*, and Herb Simon's work on bounded rationality.

Moreover, we've learned a lot about consumer decision making since the birth of ACR. We've learned that consumers make different *types* of decisions depending on whether they are motivated by functional, symbolic, and hedonic goals. These decisions can be described in terms of a goal hierarchy and they can influence or be in-

fluenced by emotions. We've studied a set of *dimensions* along which decisions can be described, among which include the degree to which decisions are effortful, the degree to which they are objective vs. biased, and the extent to which they are made with a greater vs. a lower sense of decision commitment. We've learned that consumer decisions span a *journey* that includes myriad processes like search, attention, sensory perception, categorization and more. We've learned that decisions can have *paradoxical outcomes* or effects, as when the decisions we make in the short term can have negative effects over the long term. Or when reliance on a technological product can make us feel powerful when it works but powerless when it doesn't. We've studied how the *portfolio* of products consumers have like special possessions, collections, and heirlooms reflect one's identity. Moreover, once they are owned, we may be reluctant to part with them, and demand a higher selling price than what they are objectively worth. And we've learned that consumer decisions are *contingent*. They're impacted by, among other things, the physical environment consumers are in, the physical states of their bodies, who they are with, and the socio/cultural context in which they've embedded.

A NEW/OLD FOCAL DOMAIN: CONSUMER BEHAVIOR AND RESOURCES

These insights are obvious to us. But what may be less obvious is I think field is rallying around another focal domain. And one that also has a great bearing on consumption decisions. Like consumer decision making, this domain can also be described in terms of dimensions, processes, paradoxes and portfolios. But because work in this other domain is sometimes done in circles of influence that don't always intersect, it may not be immediately obvious to people that this other domain is becoming more and more focal. What is this focal domain? It's centered around the idea of "Resources". What is a resource? One definition is that a resource is "an asset that helps to achieve a desirable end state".

The concept of resources is not new. In fact, it's been relatively foundational to marketing. Specifically, consumers enter the marketplace spending time and money in return for a good or service that provides value. This perspective underlies our concepts of willingness to pay, willingness to spend, and value. Moreover, when it comes to consumption decisions, consumers give up resources so as to gain other resources. Resources given up, and those gained can occur at any stage of the consumption cycle, from acquisition, to usage, to disposition.

But as I see it, the concept of a resource is gaining greater attention and it is being conceptualized more broadly. As case in point, Zaltman and Zaltman's recent book on marketing metaphor suggests that the concept of "resources is one of the 7 deep metaphors that guides consumers' thinking. What is a deep metaphor? It's a way of thinking about the world that serves as a lens for which we look at everything. Although these deep metaphors are largely unconscious, they influence how we express our thoughts and feelings, and they influence how we think and respond to things emotionally. It's interesting to consider that while the academic study of consumer behavior uses the lens of decision making, consumers view their own world through the lens of resources.

Zaltman and Zaltman identify things beyond money, goods, services, and time that consumers think about as resources. Among them include brands/companies, wisdom, or the mind, the environment, relationships and health. Yet, I think we, as a discipline are considering an even broader set of factors that consumers might regard as resources. Among them include status and power, information, attention, access, physical space, and more.

Resources and Markets

What makes this more expanded view of resources interesting? First, a more expansive view of resources can more readily accommodate the types of markets that consumers find themselves in. That is, those in which they give something with the expectation of return. Clearly, we have markets that include the market for goods and services, the health care market, and the financial services market. But an expanded view of consumer resources includes other types of markets, including those that might not always be so obvious to us. Among them include the dating marketing, the market for experimental drugs, the spirituality market, and the philanthropy market. This expanded view of resources also extends to markets where what the “giver” gives may be non-monetary. Examples include the endorser market, the organ donor market and the volunteer market. But what else does a more expansive view of “resources” offer our field?

Resources as A Big Tent for Consumer Researchers

A resource view also accommodates various perspectives on the different types of relationships consumers have with brands. As my dear friend and colleague CW Park noted in his ACR Fellows address last year, when consumers are attached to brands they devote resources like time, money and reputation to the brand, and they also co-opt the brand’s resources as their own. Moreover, if we take a look at the content of our journals, it is clear that many of us are studying resources. But because our field is broad, people who study one type of resource, for example time, might not look at papers published by others who focus on a different resource—say attention, or power, relationships or technology. But thinking broadly about all of these entities as “resources” makes the notion of “resources” a construct that can link disparate research areas. *It makes the construct of resources highly foundational to consumer behavior.*

New Areas of Study

Moreover, in the same way that decisions can be described in terms of dimensions or processes so too can resources be similarly described. In fact, we, as a field are learning more and more about these foundational dimensions and processes associated with resources. *Thinking broadly about what constitutes a “resource” allows us to ask comparative questions that can help us understand whether all resources operate in similar ways.* For example, not having enough money makes us plan and stretch our resources, which we see as rather painful and costly. Yet, not having enough money can also increase creativity, as it requires us to think more broadly about how we can get what we want given the money we have. One wonders, do we observe similar effects when the resource that is scarce is health, or peace of mind?

Some of our most vulnerable populations—the poor, the illiterate the homeless -- are characterized by a lack of resources and a dependency on others for access to resources. Are there other vulnerable populations. Or consider the elderly, who might have a lifetime of goods, insurance that gives them peace of mind, and all the time in the world. But these populations are vulnerable in different ways—lack of access to transportation, declining knowledge, failing health, and a tendency to view technology as a curse vs. a blessing.

Can vulnerability be used broadly to describe any population characterized by a lack of resources and dependency on others? Is the college graduate, who lives at home and who is dependent on parents for money, and goods, while also having limited privacy, space, and power also a member of a vulnerable population?

Whereas being dependent on others for resources sounds like a bad thing, communities of consumers, like the long-distance running community, are preserved when community members depend on community members for social and economic support. Are there other contexts where resource dependencies create stability in consumption contexts?

We know that we’re more likely to buy impulsively, eat more and exercise less when our physical and mental resources, are depleted. Does the same principle hold when resources like power or hope are depleted? Is sharing of information motivated by similar or different things than sharing money, sharing time, or power?

Consumers behave differently depending on how resources are categorized. We behave differently when we categorize time as “work time”, “leisure time”, “personal time”, or “family time”. We budget differently when we categorize a year as involving 12 months or 365 days. Categorizing relationships as “communal” vs “exchange” has a huge impact on whether we expect immediate reciprocity from an exchange partner or not, as well expectations of reciprocity of the same resource vs. a different one. Do consumers have mental categories for things like nature, technology, or status? How would these categories change their consumption behavior?

ACR is a perfect time to talk about ACR’s new journal JACR. As many of you have undoubtedly seen, Chris Janiszewski and Luc Warlop co-edited a special issue of this journal focusing on the topic of how consumers *value resources*. Understanding resource valuation is critical to understanding consumer decision making. What influences how one resource is valued vis a vis another? While time is money, what makes people value time more than money? How does one compare the value of having health vs. having power? When will consumers value nature over technology?

Resources (or lack thereof) As Drivers of Consumer Decision Making

But more fundamentally, while an understanding of resources is foundational to decision making, I think a resource perspective focuses our attention less on the offering than on consumers themselves. It makes the lens through which consumers are viewing the world more focal. Our classic choice models show that consumers’ choices are focused on comparing brands along a set of features or attributes, with attribute importance being a driver of choice. But I’m not sure we’ve given enough attention to *the portfolio* of the consumer’s resources and *how it affects their choices*. In fact, it’s easy to imagine various consumer choices that have nothing to do with the characteristics of a brand or even the competitive landscape in which that brand operates. A consumer may refuse to buy a new car and to instead get around using Lyft and public transportation. This decision is not based on the fact that there are no good brands on the market. Rather, it’s based on the fact that from the consumer’s standpoint, this decision gives her more resources, time, money, and perhaps greater feelings of power and control. I think that the world is changing in such a way that it is forcing consumers to think more deeply about the resources they have and don’t have. *As a result, I think that resource considerations are figuring more prominently into consumers’ decisions.*

Resource Paradoxes and Trade-offs

One reason why is that these resources can have paradoxical effects on other resources. For example, it's clear that investment in technology can make us more connected to others in a virtual environment. However, such investments can come at a cost of weakening other resources, like personal relationships. Having more stuff also means having less space. Having more space to accommodate all the stuff means bigger houses on larger lots, which, in turn, means less opportunities to form relationships with neighbor, not to mention greater outlays of money. Acquiring information on the web often means giving up aspects of our privacy, which can leave us feeling less secure. Acquiring information from the news should make us more informed. But stories about fake news make us wonder. Moreover, the content of that information, like nuclear threats, unstable political leaders, and stories about powerful men who abuse women is definitively reducing the resource of peace of mind. I think these tradeoffs are causing consumers to take more categories of resources into consideration in their decision making. As such, consumer decision making may be becoming more and more complex.

Resource Portfolios. Moreover, we've historically thought about resources *in terms of a specific transaction*—that is, what the consumer is willing to give up in order to get a resource in return. We've focused on things like willingness to pay, search costs, and the like. But maybe what we really need to focus on is what drives consumers to the market in the first place. Perhaps what drives consumers to the marketplace are the resources in which they feel deficient. Maybe we will learn more about decision making if we consider the portfolio of resources consumers have and the resource domains in which they feel flush or constrained. Resource constraints bring people to the marketplace, while resource surpluses may influence what we're willing to exchange to obtain that resource.

Resources and Other Deep Metaphors

Zaltman and Zaltman's work on metaphors identifies other deep metaphors that guide consumers' thinking. These metaphors are

shown in red here. For example, consumers regard having *connections* to others as a foundational resource. Having resources provides consumers with some sense of *control*. Consumers keep resources in a *container*, whether that container is a bank, a wallet, or a mental account. Consumers' *journey* to the marketplace and make decisions that have the potential to *transform* them. This transformation results in a state of *balance*, perhaps by rectifying a resource deficiency. Thinking about how all of these deep metaphors operate on consumers thoughts about consumption is quite interesting.

Resources and Happiness

Thinking about consumer behavior in terms of one's portfolio of resources also has the potential to help us understand what it means to be happy. Whereas one might argue that we are most happy when we have a surplus of all types of resources, the paradoxical nature of resources that I just described suggests that such a state is impossible to achieve. Maybe happiness is not a state marked by having more of every resource. It's a state of equilibrium where one's current portfolio of resources leaves us not wanting for more.

Final Thought

Let me leave you with one final thought that brings my presentation full circle. Looking back on the definition of consumer behavior, coupled with the increasing attention being devoted to resources makes me wonder...Should consumer behavior be more broadly defined so as to explicitly include resources and their influence on decision making? Should our definition of consumer be changed in such a way to reflect the totality of decisions about the allocation of resources regarding the consumption of an offering by decision making units over time

While I wish I could say more, my time is up, my own resources are depleted, and, just as we've benefitted greatly from Craig's remarks, I know that Jag will undoubtedly have incredibly interesting thing say. Thank you for the resources you have given me—most notably, your time and attention. Thank you!

Special Session Summaries

It's Not About What You Do, But How You Do It: The Impact of Technology-Enabled Modalities

Chair: Melanie S. Brucks, Stanford University, USA

Paper #1: When Touch Interfaces Boost Consumer Confidence: The Role of Instrumental Need for Touch

Johannes Hattula, Imperial College Business School, UK
Walter Herzog, WHU-Otto Beisheim School of Management, Germany
Ravi Dhar, Yale University, USA

Paper #2: How the Kinesthetic Properties of a Response Scale Affect Judgment

Melanie S. Brucks, Stanford University, USA
Jonathan Levav, Stanford University, USA

Paper #3: Understanding the Psychology of Smartphone Usage: The Adult Pacifier Hypothesis

Shiri Melumad, Columbia University, USA
Michel T. Pham, Columbia University, USA

Paper #4: When Speech Reflects Mind: Natural Paralinguistic Cues in Voice Convey Presence of Mind

Juliana Schroeder, University of California, USA
Alicea J. Lieberman, University of California, USA

SESSION OVERVIEW

Recent advancements in hardware and software provide consumers with new forms of interaction with companies and products. People can now consume the same products and information across different electronic devices (e.g., laptop, touch-based smartphone, or text-to-speech reader), and companies can assess consumer preferences through different elicitation modes (e.g., providing either a sliding scale or a fill-in-the-blank box to indicate price preference in a search). Yet, there is little research investigating if or how these different technology-enabled modalities impact consumer behavior.

The aim of this session is to bring attention to and discuss the underlying psychological mechanisms at play when consumers use these prevalent, new modalities. We will begin our session with physical interactions afforded by technology—touch-based interface and slider scales—and examine how these factors can influence judgments and decision-making as well as metacognitive outcomes. Next, we will shift our focus to the downstream consequences of using different technology-enabled modalities, investigating the role of these modalities in emotion (as attachment objects) and communication (via paralinguistic cues).

First, Hattula, Herzog, and Dhar examine how using touch-based computer interfaces can influence a diverse set of consumer judgments and decisions. Across five studies, they demonstrate that using a touch-based interface causes less choice deferral, increased propensity to take risks, and higher perceptions of credibility due to increased confidence, especially among consumers who have high instrumental need for touch. In the second paper, Brucks and Levav propose that the kinesthetic properties of responding can induce corresponding psychological processes used to generate the response. In four experiments, they demonstrate that the sensorimotor action of dragging a cursor to an answer prompts the momentary consideration of each value passed by the cursor, leading to responses that are closer to the scale endpoint and reduced confidence. In the third pa-

per, Melumad and Pham examine the role of smartphones as attachment objects. In two lab experiments and a large correlational study involving smoking cessation, they show that using one's smartphone (vs. PC) can induce feelings of comfort and provide relief from stress, and that the device can serve as a substitutive source of stress relief for consumers highly susceptible to stress: people who recently quit smoking. Lastly, Schroeder and Lieberman find that communication modalities impact impressions of the communicator. Through four studies, they demonstrate that paralinguistic cues can convey the communicator's mental capacities, and thus, modalities that contain and enhance paralinguistic cues (e.g., speech, headphones, etc.) can lead to more favorable impressions of the communicator.

By demonstrating that the way in which a consumer experiences and interacts with content has important and diverse implications, these papers suggest that the different modalities afforded by technology are not interchangeable. Drawing from a wide array of literature including haptic and sensorimotor information processing, constructed preferences, attachment theory, and linguistics, this session exposes important underlying psychological processes embedded in technology use. Given the ubiquity of technology in consumption, we believe that this session has both theoretical and practical relevance and will attract a broad audience, cultivating collaborations and innovative research.

When Touch Interfaces Boost Consumer Confidence: The Role of Instrumental Need for Touch

EXTENDED ABSTRACT

Touch-enabled computer interfaces have become prevalent in consumers' lives and increasingly substitute traditional interfaces such as mice and keyboards. For instance, consumers use touch-screen-based devices (e.g., smartphones, tablets) for online shopping or ordering food in restaurants. Similarly, new hybrid computer devices (e.g., Lenovo Yoga) enable consumers to easily switch from non-touch to touch-type interfaces to interact with computers. Despite growing interest in understanding how touch-based devices affect consumers' decision processes, only few studies have empirically examined this relationship.

We add to this body of research by exploring meta-cognitive consequences of using touch-based computing devices. Specifically, we find that touch (vs. non-touch) interfaces can increase consumer confidence in multiple judgment and decision making contexts. For example, when consumers navigate on a touchscreen to shop online, they are less likely to defer purchase decisions and they tend to be more confident in product choices. Similarly, users of touch interfaces are more inclined to take risks because of the touchscreen-induced inflation in confidence.

We propose that the touchscreen-induced inflation in confidence occurs because consumers do not sufficiently distinguish between touching evaluation objects in physical contexts (e.g., products in a store) and touching screens of computing devices which merely display evaluation objects (cf. Brasel and Gips 2014; Shen, Zhang, and Krishna 2016). In physical contexts, consumers touch objects

to examine their haptic properties and thus to derive confidence in their judgments about these objects. In contrast, in a digital context, consumers touch the screen of computing devices merely to operate the devices and they do not generate relevant haptic information on the displayed evaluation object; hence, their judgmental confidence regarding the object should remain unchanged. However, as consumers do not sufficiently distinguish between physical and digital contexts, we hypothesize that the mere use of touch (vs. non-touch) interfaces may nevertheless increase their confidence level (e.g., their confidence in choosing among products online). Moreover, our rationale of a parallel between physical and digital contexts implies that the extent to which consumers develop confidence when using touchscreen devices is directly linked to the extent to which they develop confidence when touching physical evaluation objects—that is, their instrumental need for touch (INFT, Peck and Childers 2003). Hence, we hypothesize that high INFT consumers are more likely to show the touchscreen-induced confidence inflation than low INFT consumers. We test this prediction in four different decision making contexts to show the robustness of the hypothesized effect.

In Study 1, we use the likelihood of making (vs. deferring) a choice as a confidence measure (Dhar 1997). $N=243$ US-based MTurk consumers used either touch or non-touch interface devices when completing a choice task. They were provided with two pen alternatives and as in normal purchase situations, they had the option of choosing a pen (high confidence) or not choosing either of the two alternatives (low confidence). Supporting our theorizing, a positive interaction between type of interface and INFT on participants' likelihood of choosing a pen emerged ($\beta=.45$, $z=2.10$, $p<.04$). Spotlight analysis at one standard deviation unit above (high INFT) and below (low INFT) the mean of INFT revealed no significant difference between touch and non-touch interface when INFT is low (non-touch: 70%; touch: 61%; $p>.35$). However, when INFT is high, the likelihood of making a choice increased significantly from 65% for non-touch interface users to 81% for touchscreen users ($p<.05$).

In Study 2, we experimentally assigned consumers to touch-based and non-touch interface conditions to enhance the causal validity of our findings. Applying a forced choice setting, participants ($N=188$) made a choice between two video game consoles and indicated their confidence in their choice. In support of our theorizing, a significant interaction effect between interface type and INFT emerged ($\beta=.49$, $t=1.91$, $p<.06$), such that high INFT consumers reported more confidence in their choice when using a touchscreen (vs. non-touch) interface ($M_{\text{highINFT,non-touch}}=5.07$, $M_{\text{highINFT,touch}}=5.99$; $\beta=.92$, $t=2.30$, $p<.02$). No such difference was found for low INFT ($M_{\text{lowINFT,non-touch}}=5.34$, $M_{\text{lowINFT,touch}}=5.18$; $\beta=-.16$, $t=.41$, $p>.69$).

In Studies 3 and 4, we propose that the touchscreen-induced confidence inflation also gets manifest in a higher propensity for risk-taking. This proposition builds on research showing that confidence-inducing (vs. unconfidence-inducing) emotions increase individuals' risk-taking preference (Lerner and Keltner 2001) and that overconfident investors hold riskier portfolios (Odean 1998). In Study 3, 155 participants—randomly assigned to touch-based or non-touch interfaces—were asked to participate in one out of two lotteries (Duclos et al. 2013; safe option: 80% chance of winning \$100, 20% chance of receiving nothing; risky option: 20% chance of winning \$400, 80% chance of receiving nothing). Supporting our predictions, we again found a significant interaction between interface condition and INFT ($\beta=.59$, $t=2.20$, $p<.03$) on risk preference, such that high INFT consumers were more inclined to choose the risky option when using a touch (vs. non-touch) interface ($M_{\text{highINFT,non-touch}}=1.91$, $M_{\text{highINFT,touch}}=2.80$; $\beta=.88$, $t=2.28$, $p<.02$). No significant difference

was found for low INFT ($M_{\text{lowINFT,non-touch}}=2.84$, $M_{\text{lowINFT,touch}}=2.54$; $\beta=-.30$, $t=-.83$, $p>.41$).

In Study 4, 150 participants were free to use a touchscreen-based or non-touch interface device to complete a financial investment task. They were asked to invest in one of two possible stock portfolios with the same expected utility but asymmetrical risk (safe option: 90% chance of returning £18,000, 10% chance of losing £37,000; risky option: 50% chance of returning £50,000, 50% chance of losing £25,000). Again, a significant interaction between the type of interface and INFT ($\beta=.89$, $t=2.04$, $p<.04$) emerged. High INFT consumers were more likely to invest in the risky option when they used a touchscreen-based (vs. non-touch) device (non-touch: 78%, touch: 95%; $p<.02$) to complete the task. We find no significant difference for low INFT (non-touch: 79%, touch: 70%; $p>.44$).

Overall, our research provides further support that consumers do not sufficiently distinguish between touching objects in physical contexts and touching digital representations on computer screens. We extend recent work to meta-cognitive experiences and show that using touch-based interface devices can boost consumers' confidence level in multiple contexts. This effect is particularly pronounced among high INFT consumers who derive confidence from touching physical objects and (mistakenly) apply the touch-confidence relationship to a digital context.

How the Kinesthetic Properties of a Response Scale Affect Judgment

EXTENDED ABSTRACT

The physical ways in which consumers can respond to a question or indicate a preference have multiplied with the growth of new technologies (e.g., swiping on Tinder, scanning a finger print with Apple Pay, or sliding on a scale in a consumer satisfaction survey). The present research investigates how these kinesthetic properties of responding can induce different psychological processes used to generate the response and thus, change the response itself.

We rely on a long tradition of literature (Prinz 1987) that suggests that how people process information is grounded in physical experiences (Barsalou 2008). We often use our bodies to guide and orient processing, like counting with our fingers (Wilson 2002) and using gestures (Kita, Alibali, and Chu 2017). Because of this connection between sensorimotor function and cognition, research demonstrates that physical actions can influence processing (e.g., Labbro and Nielsen 2010; Wells and Petty 1980). In line with these findings and drawing on work showing that preferences and judgments are partially determined by tasks that influence the information attended to when responding (Fischhoff 1991; Payne and Bettman 1992), we hypothesize that the physical motion of responding can impact how information is processed, changing the judgment or decision made.

Specifically, we embark on this investigation in the context of radio button and slider multiple choice scales, which differ in the kinesthetic nature of their responses. For radio buttons, the respondent must click the cursor directly on the desired response; for a slider, the respondent must hold the cursor down and drag past other possible selection options. By restricting the slider to the exact same discrete responses as the radio buttons, the only difference between these two scales is the movement required to provide a response. Importantly, these two scale types are used ubiquitously (and oftentimes interchangeably) in research, and thus constitute a meaningful context to begin our empirical exploration into the impact of response kinesthesia.

We propose that the sensorimotor action of dragging the cursor to an answer prompts a corresponding psychological process of se-

rial hypothesis testing (Tversky and Kahneman 1974). Specifically, we predict sliding past each value on the scale elicits the momentary consideration of that value, leading to the selection of the first response that fits within the latitude of acceptance (i.e., the first to seem suitable), which produces responses that are closer to the scale endpoint and decreases confidence.

We conducted four studies to examine the impact of physical movements on judgments using the slider and radio button scales. In Study 1, as an initial test of the effect of scale type and its generalizability, 6017 participants were randomly assigned to use a radio button or slider scale to respond to questions regarding personality, numerical estimates, moral judgments, willingness to pay, attitudes, net promoter score, consumer satisfaction and philosophical standing across three batches of data collection. Each scale had the same discrete options available and, to control for anchoring, both scales were preset on a non-option of “0” (see appendix). Merging the data across all tasks, we observe a small, robust effect of scale type on response: participants using a slider ($M = 4.66$) responded with significantly lower values than participants using radio buttons ($M = 4.86$, $p < 2 \times 10^{-16}$). This effect consistently emerged for each individual task when analyzed separately.

We predict that using a slider lowers the response because participants select the lowest value that falls within their range of plausible responses. If this is the case, the slider effect should be reversed if participants begin at the highest value of the scale and drag the cursor past lower values. To test this, in Study 2, participants entered a 2 (slider vs. radio button) \times 2 (side: left vs. right) design where they made numerical estimates. All participants selected a value from 1-8, but participants assigned to the left (right) side had the non-option of “0” (“9”) preselected as a holding place. We observe a significant interaction of scale type and side ($p < .0001$), such that participants assigned the left side replicated Study 1 ($p < .001$) but participants assigned the right observed a flip: responding via slider yielded higher values than responding via radio buttons ($p < .001$).

Study 3 extends the generalizability of the effect to an incentive-compatible context and tests process in a new way. Specifically, serial hypothesis testing stipulates that participants will select the response at the edge of their latitude of acceptance. If this is the case, participants that have more knowledge about the question context (i.e., a narrower latitude of acceptance), should exhibit an attenuated slider effect. To test this, in Study 3, 2016 participants watched a trailer for the movie “Office Christmas Party,” estimated how much money the movie would make during its opening weekend using either the slider or radio buttons, and then indicated self-reported knowledge of movie box office revenue. Estimates closest to the actual value earned them an extra 50 cents. We replicate the scale effect: participants responding via slider reported a lower estimate than participants using radio buttons ($p = .003$). Importantly, this effect was moderated by knowledge ($p < .10$), such that the effect of scale type was significant among people with low knowledge (1SD below), but not among participants who were knowledgeable (1SD above).

If the slider scale induces serial hypothesis testing, then participants using this scale should feel less confident in their response as they satiated by stopping at the boundary of their latitude of acceptance rather than generating the number that is most reflective of the latent value in their head. To test this, in Study 4, we had 2014 participants estimate numerical values and after each estimate, we asked them about their confidence in the estimate. As expected, not only were the estimates on average lower in the slider condition compared to the radio button ($p < .001$), but participants were also less confident in their responses ($p = .001$).

These findings provide initial evidence for the hypothesis that the kinesthetic properties of a response scale can impact people’s judgments.

Understanding the Psychology of Smartphone Usage: The Adult Pacifier Hypothesis

EXTENDED ABSTRACT

Consumers are officially spending more time on their smartphones than on any of their other electronic devices, and in 2015 the amount of time spent on the device increased by 35% from 2014 alone (Yahoo! Insights 2015). While not clinically recognized as a behavioral dependence (American Psychiatric Association 2013), the term “smartphone addiction” has been commonly used to describe consumers’ seemingly nonstop use of their device (e.g., The Guardian 2016). Although common wisdom largely assumes that this apparent addiction is driven by the functionalities offered on the device (e.g., email, web browsing) (e.g., Aoki and Downes 2003), in reality the features available on smartphones are available across many other electronic devices. Yet, we continue hear about consumers’ apparent “addiction” not to their laptops or tablets, but to their smartphones in particular.

What might account for many consumers’ persistent increase in smartphone use? While the marketing implications of mobile platforms are receiving emerging attention in the marketing modeling literature (e.g., Danaher et al. 2015; Ghose et al. 2013), still very little is known about the consumer psychology of smartphone usage. The purpose of this research is to investigate why consumers often have such a strong drive to engage with their smartphones. We advance the hypothesis that this phenomenon is driven in part by a general and developmentally primitive psychological mechanism: namely, that smartphones can often fulfill the role of an “attachment object” or “adult pacifier” for many consumers—which we refer to as the Adult Pacifier Hypothesis. Specifically, we propose that insight into the psychology of smartphone usage can be found in the developmental literature on attachment theory, which describes how children form strong emotional attachments to certain objects that come to represent a source of security and comfort for them (e.g., Winnicott 1953). These “attachment objects” tend to contain two key physical properties: they are often tactile in nature, and small or lightweight enough to be carried around for use across different contexts (e.g., Lehman et al. 1992). In addition to these characteristic physical properties, attachment objects involve a set of defining behavioral patterns (e.g., Litt 1986). In this research we report results from three studies, including two controlled lab experiments and one large correlational study, showing that smartphones can exhibit at least two of the defining behavioral patterns associated with attachment objects.

Specifically, one defining pattern of attachment objects is that owners feel heightened comfort as a result of engaging with the possession (e.g., Bowlby 1982). The purpose of Study 1 was to examine whether using one’s smartphone increases felt comfort to a greater extent than using a comparable device: one’s personal computer. To test this, participants were randomly assigned to browse content on either their smartphone or their laptop, and were asked to indicate their situational feelings – including their feeling of comfort – at two points in the study: Prior to using their assigned device, and after using their device.

The results of Study 1 show that, holding the content consumed across devices constant, participants assigned to use their smartphone reported a greater increase in felt comfort relative to participants assigned to use their laptop. Moreover, participants did not

differ along any of the other situational feelings measured. In other words, the results show that smartphone use distinctly impacts feelings of comfort in particular, which is central to the argument that the device can serve as an attachment object.

Another primary characteristic of attachment objects is that they are comforting enough to provide relief from a stressful situation (e.g., Mikulincer and Shaver 2007). Building off of this, in Study 2 we tested the hypothesis that, holding everything else constant, using one's smartphone provides a faster recovery from stress than using one's PC. Participants in Study 2 first underwent a stress induction, and were then randomly assigned to browse the same content either on their smartphone or on their laptop. Participants' felt comfort was measured at three points throughout the study: (1) prior to the stress induction, (2) after the stress induction/before device usage, and (3) after using their assigned devices.

The results of Study 2 reveal that, after undergoing stress, participants showed a greater increase in their felt comfort after smartphone usage than after PC usage, such that participants who used their smartphone (vs. PC) felt significantly greater comfort immediately after use of the device. Further, whereas participants who used their PC recovered to their baseline level of comfort upon arrival to the study, participants assigned to use their smartphone reported *greater* comfort than they did when they first arrived to the study. Again, none of the other situational feelings differed across conditions as a function of time. The results of Study 2 therefore confirm that engaging with one's smartphone can be comforting enough to provide relief from stress, which is another defining characteristic of attachment objects.

Study 3 builds on the findings of Study 2 to test a corollary real world prediction that using one's smartphone will be particularly appealing to consumers who are particularly vulnerable to anxiety or stress – for example, people who have recently quit smoking cigarettes. Research has shown that cigarettes can serve as a source of stress and tension relief for smokers and that, soon after they quit smoking, people crave a substitutive means through which to relieve feelings of anxiety (e.g., Burr 1984). If the recent cessation of smoking is a source of stress and anxiety, people who have recently quit smoking may more intensely engage with their smartphone as a substitutive source of comfort. Study 3 therefore compared smartphone usage patterns among participants who either recently quit smoking cigarettes or who were still smoking at the time. The results show that the drive to use one's smartphone becomes especially pronounced among consumers who have recently quit smoking relative to consumers who are still currently smoking, which provides further evidence suggesting that smartphones contain tension-relieving properties.

Taken together these findings provide insight into the psychology underlying smartphone usage, supporting the proposition that smartphones can often serve as an attachment object for many consumers.

When Speech Reflects Mind: Natural Paralinguistic Cues in Voice Convey Presence of Mind

EXTENDED ABSTRACT

Language is used as a tool to communicate one's mind and can be expressed via voice or text (Pinker & Bloom, 1990). Beyond the semantic content of such communication, the voice itself contains natural paralinguistic cues that convey emotion and intention (McAlear, Todorov, & Belin, 2014; Scherer, Banse, & Wallbot, 2001). As such, hearing someone's thoughts via speech (versus text) provides greater insight into their mental states (Kruger et al., 2005)

and, at least under certain circumstances, makes the communicator seem more mentally capable because the paralinguistic cues signal mindfulness (Schroeder & Epley, 2015, 2016). These prior findings suggest that systematically removing natural paralinguistic cues in voice could reduce impressions of a communicator. To test this, we ran four experiments in which we removed or distorted natural paralinguistic cues in voice and measured impressions of communicators. To manipulate paralinguistic cues we either removed them entirely (i.e., via text, Study 1), reduced them using actors' voices (Studies 2 and 4), or subtly distorted them by changing the medium by which they were observed (headphones vs. speakers, Studies 3 and 4).

In an initial experiment, we test whether listeners perceive the mental capacities of a communicator differently if they listen to a message *with* paralinguistic cues (speech) versus the same message *without* paralinguistic cues (text). Critically, the actual words were the same in both conditions. We taped communicators ($n=20$) talking about an experience that involved decision-making. Participants ($n=231$) then listened (audio condition) or read (text condition) one of these speeches and rated the communicator on a battery of items measuring perceptions of the communicator's mental capacities. As predicted, participants believed communicators were more capable thinkers—more competent, thoughtful, and more uniquely human—when they listened to the speeches than when they read them, $t(227)>3.29$, $ps<.01$. Participants also reported higher impressions of communicators they heard ($M_{\text{voice}}=2.84$, $SD=1.17$) than those they read, ($M_{\text{text}}=2.32$, $SD=1.25$), $t(227)=2.66$, $p<.01$. In this experiment, we provide initial evidence that removing paralinguistic cues in voice (i.e., via text) can reduce impressions of a communicator. However, this manipulation presents confounds: the act of reading is different from the act of listening in many ways.

In a second experiment, we used a different manipulation to reduce paralinguistic cues; we asked professional actors to read a written statement “as if the words had no meaning” (mindless voice condition) and to read the same statement naturally, “imbuing the words with the thoughts and feelings of the writer” (mindful voice condition). In this way, speeches from the mindless voice condition lacked natural paralinguistic cues. Analyses of the paralinguistic cues in each of these voices revealed meaningful differences; the mindful voices had higher average pitch and amplitude, and greater variance in pitch and amplitude ($ps<.01$). We then asked a separate sample of evaluators ($n=359$) to either listen to a mindful voice, listen to a mindless voice, or read the original text, and then evaluate the communicator. As predicted, participants who listened to a mindless voice perceived the communicator as significantly less intelligent ($M=3.97$, $SD=1.24$) than participants who listened to a mindful voice ($M=4.70$, $SD=0.97$), $t=5.12$, $p<.001$, and than participants who read the text ($M=4.39$, $SD=1.07$), $t=2.91$, $p<.001$. We also conceptually replicated the finding in Study 1 such that participants who listened to mindful voices believed communicators were more intelligent than those who read text, $t=2.23$, $p=.027$.

In a third experiment we test a more subtle manipulation by making it slightly harder for listeners to hear the paralinguistic cues in the voice. Headphones deliver noise directly into the ear, allowing the listener to pick up on nuances in the voice, while speakers provide reflections of sound, masking some of its subtle detail. By dampening the listener's ability to detect the paralinguistic cues, we predicted that listening to someone's voice through speakers will make the communicator seem less thoughtful and competent than when heard through headphones. Participants ($n=1132$) listened to a clip using either headphones or speakers of a mother and daughter telling their true story of being homeless. Participants then rated the communicators on 10-items rating their warmth and competence,

which we combined into a single scale measuring communicator impression ($\alpha=.84$). Consistent with our hypothesis, participants who listened to the message via speakers reported a less positive impression of the communicators ($M_{\text{speakers}}=5.13$, $SD=0.87$) than those who listened via headphones ($M_{\text{headphones}}=5.23$, $SD=0.84$), $\beta = -.10$, $t(1130)=1.99$, $p=.047$, although this effect was smaller than effects observed in prior studies.

In a final experiment, we demonstrate that listening to a communicator via headphones versus speakers only affects impressions of the communicator when there are natural paralinguistic cues to observe. Participants ($n=1,001$) again listened to a clip either via headphones or via speakers. Half of the participants heard the same clip of the mother and daughter from the previous experiment, while the other half heard a recreation of the clip that contained the same semantic content but was read mindlessly by two actors. Consistent with the results from Study 3, participants who listened to the original (mindful) clip via speakers perceived the communicators as less warm and competent ($M_{\text{speakers}}=5.21$, $SD=0.78$) than those who listened via headphones ($M_{\text{headphones}}=5.43$, $SD=0.91$), $\beta = -.22$, $t(512)=2.91$, $p=.004$. Conversely, participants who heard the mindless clip reported no difference in impression when heard via speakers versus headphones ($p=.795$).

These findings make a significant contribution to understanding the power of the voice on interpersonal perceptions and how these judgments can be influenced by the media in which speech is consumed. Our results provide novel insights into the psychological consequences of auditory media consumption and perceptions, applicable to communicators and consumers alike.

REFERENCES

- American Psychiatric Association (2013), *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.), Arlington, VA.
- Aoki, Kumiko and Edward J. Downes (2003), "An Analysis of Young People's Use of and Attitudes Toward Cell Phones," *Telematics and Informatics*, 20 (4), 349-64.
- Barsalou, Lawrence W (2008), "Grounded Cognition," *Annual review of psychology*, 59(1), 617-45.
- Bowlby, John (1982), "Attachment and Loss: Retrospect and Prospect," *American Journal of Orthopsychiatry*, 52 (4), 664.
- Brasel, S. Adam and James Gips (2014), "Tablets, Touchscreens, and Touchpads: How Varying Touch Interfaces Trigger Psychological Ownership and Endowment," *Journal of Consumer Psychology*, 24 (2), 226-33.
- Burr, Ralph G. (1984), "Smoking Among US Navy Enlisted Men: Some Contributing Factors," *Psychological Reports*, 54 (1), 287-94.
- Danaher, Peter J., Michael S. Smith, Kulan Ranasinghe, and Tracey S. Danaher (2015), "Where, When and How Long: Factors that Influence the Redemption of Mobile Phone Coupons," *Journal of Marketing Research*, 52 (5), 710-25.
- DePaulo, Bella M., Kelly Charlton, Harris Cooper, James J. Lindsay, and Laura Muhlenbruck (1997), "The Accuracy-Confidence Correlation in the Detection of Deception," *Personality & Social Psychology Review*, 1 (4), 346-57.
- Dhar, Ravi (1997), "Consumer Preference for a No-Choice Option," *Journal of Consumer Research*, 24 (2), 215-31.
- Duclos, Rod, Echo Wen Wan, and Yuwei Jiang (2013), "Show Me the Honey! Effects of Social Exclusion on Financial Risk-Taking," *Journal of Consumer Research*, 40 (1), 122-35.
- Fischhoff, B (1991), "Value Elicitation: Is There Anything in There?," *American psychologist*, 46 (8), 835-847.
- Ghose, Anindya, Avi Goldfarb, and Sang-Pil Han (2013), "How is the Mobile Internet Different? Search Costs and Local Activities," *Information Systems Research*, 24 (3), 613-31.
- Kita, Sotaro, Martha W Alibali, and Mingyuan Chu (2017), "How Do Gestures Influence Thinking and Speaking? the Gesture-for-Conceptualization Hypothesis.," *Psychological review*, 1-23.
- Kruger, J., Epley, N., Parker, J., & Ng, Z. W. (2005). Egocentrism over e-mail: Can we communicate as well as we think?. *Journal of personality and social psychology*, 89(6), 925.
- Labroo, Aparna A and Jesper H Nielsen (2010), "Half the Thrill Is in the Chase: Twisted Inferences From Embodied Cognitions and Brand Evaluation," *Journal of Consumer Research*, 37(1), 143-58.
- Lehman, Elyse B., Susanne A. Denham, Margo H. Moser and Sally L. Reeves (1992), "Soft Object and Pacifier Attachments in Young Children: The Role of Security Attachment to the Mother," *Journal of Child Psychiatry*, 33 (7), 1205-15.
- Lerner, Jennifer S. and Dacher Keltner (2001), "Fear, Anger, and Risk," *Journal of Personality and Social Psychology*, 81 (1), 146-59.
- Litt, Carole J. (1986), "Theories of Transitional Object Attachment: An Overview," *International Journal of Behavioral Development*, 9, 383-99.
- McAleer, P., Todorov, A., & Belin, P. (2014). How do you say 'Hello'? Personality impressions from brief novel voices. *PloS one*, 9(3), e90779.
- Mikulincer, Mario and Phillip R. Shaver (2007) "Boosting Attachment Security to Promote Mental Health, Prosocial Values, and Inter-Group Tolerance," *Psychological Inquiry*, 18 (3), 139-56.
- Odean, Terrance (1998), "Volume, Volatility, Price, and Profit When All Traders Are above Average," *Journal of Finance*, 53 (6), 1887-934.
- Payne, J W and J R Bettman (1992), "Behavioral Decision Research: A Constructive Processing Perspective," *Annual review of psychology*, 43(1), 87-131.
- Peck, Joann and Terry L. Childers (2003), "Individual Differences in Haptic Information Processing: The "Need for Touch" Scale," *Journal of Consumer Research*, 30 (3), 430-42.
- Pinker, S., & Bloom, P. (1990). Natural language and natural selection. *Behavioral and brain sciences*, 13(04), 707-727.
- Prinz, W "Ideo-Motor Action," (1987) in *Perspectives on Perception and Action*, eds. H Heuer and A F Sanders, Hillsdale, NJ, 47-76.
- Scherer, K. R., Banse, R., & Wallbott, H. G. (2001). Emotion inferences from vocal expression correlate across languages and cultures. *Journal of Cross-cultural psychology*, 32(1), 76-92.
- Schroeder, J., & Epley, N. (2015). The sound of intellect speech reveals a thoughtful mind, increasing a job candidate's appeal. *Psychological science*, 0956797615572906.
- Schroeder, J., & Epley, N. (2016). Mistaking minds and machines: How speech affects dehumanization and anthropomorphism. *Journal of Experimental Psychology: General*, 145(11), 1427.
- Tiedens, Larissa Z and Susan Linton (2001), "Judgment under Emotional Certainty and Uncertainty: The Effects of Specific Emotions on Information Processing," *Journal of Personality and Social Psychology*, 81 (6), 973-88.

30 / It's Not About What You Do, But How You Do It: The Impact of Technology-Enabled Modalities

- Tversky, A and D Kahneman (1974), "Judgment Under Uncertainty: Heuristics and Biases," *Science*.
- Wells, G L and R E Petty (1980), "The Effects of Over Head Movements on Persuasion: Compatibility and Incompatibility of Responses," *Basic and Applied Social Psychology*.
- Wilson, M (2002), "Six Views of Embodied Cognition," *Psychonomic Bulletin & Review*.
- Woginrich, Jenna (2016), "How I Quit My Smartphone Addiction and Really Started Living," *The Guardian*, (February 11) (accessed on February 14) [available at: <https://www.theguardian.com/technology/2016/feb/11/smartphone-technology-addiction-facebook-twitter>].
- Winnicott, D. W. (1953), "Transitional Objects and Transitional Phenomena," *International Journal of Psycho-Analysis*, 34, 89-97.
- Yahoo! Insights (2015), "Media, Productivity & Emojis Give Mobile Another Stunning Growth Year" (January 2016) [available at <http://flurrymobile.tumblr.com/post/136677391508/stateofmobile2015>].

To Be, or Not to Be (Me)? Role of Identity in Creating Custom Products

Chair: Jennifer K. Lee, University of Southern California, USA

Paper #1: Making Meaning: How Consumers Build Their Identity Into Their Own Creative Outcomes

Kelly B. Herd, University of Connecticut, USA

Page Moreau, University of Wisconsin, USA

Paper #2: Being Unique Makes Us Similar: How Example Designs and Their Creators Influence How We Customize

Jennifer K. Lee, University of Southern California, USA

Kristin Diehl, University of Southern California, USA

Lisa A. Cavanaugh, University of British Columbia, Canada

Paper #3: When “Valentino” Gets Personal: Is Customization the New Luxury?

Silke Hieke, WU Vienna University of Economics and Business, Austria

Page Moreau, University of Wisconsin, USA

Martin Schreier, WU Vienna University of Economics and Business, Austria

Paper #4: How Cultural Identity Drives the Effectiveness of Mass Customization

Emanuel de Bellis, University of St. Gallen, Switzerland

Christian Hildebrand, University of Geneva, Switzerland

Kenichi Ito, Nanyang Technological University, Singapore

Andreas Herrmann, University of St. Gallen, Switzerland

Bernd Schmitt, Columbia University, USA

SESSION OVERVIEW

The customization of products is generally regarded as a way to match one's preferences with one's identity (e.g., Franke and Schreier 2008; Mugge, Brunel, and Schoormans 2011). When football fans customize apparel with team colors or coffee aficionados create custom coffee blends, the customization literature has considered this mostly a *reflection* of their identities. However, few studies have considered that consumers' identities are inherently *intertwined with* the customization process. The papers in this session take this novel perspective and ask: how do identities interact with and shape the customization process? Specifically, they examine how different aspects of the customization process interact with consumers' identities, from more micro-level aspects (e.g. whether resources are constrained or examples of customized products are provided, papers 1 & 2) to more macro-level aspects (e.g. the industry or cultural context, papers 3 & 4) of the customization process. Jointly these papers highlight a theoretically and substantively important relationship between identity and the customization process that was previously overlooked.

Herd and Moreau examine how consumers' creations are affected by salient identities. Products created when a familiar identity is active are seen by consumers as less creative and less meaningful. However, when resource inputs are constrained during the creation process, consumers with activated identities exert more effort and create products that are more meaningful.

Lee, Diehl, and Cavanaugh examine how a consumer's design decisions are affected by customization examples of other consumers, specifically the identity of the example creator (i.e., close vs. distant social other). Customized examples by a close other suggest that target consumers should express uniqueness. In order to express uniqueness, consumers make customization choices that are actually more dissimilar to close others relative to distant others.

Hieke, Moreau, and Schreier examine customization decisions in the luxury context. When consumers integrate their identities into luxury products, the designer's identity or essence inherent to the product is diminished. Their findings suggest an optimal self- to designer-essence ratio, where customized products are perceived as having both the consumer's essence and the luxury brand's essence, can maximize purchase intent of customized luxury products.

De Bellis, Hildebrand, Ito, Herrmann, and Schmitt examine how cultural aspects of identity affect customization. Because cultural background influences how individuals think and process information, the choice architecture of customization decisions should be tailored to consumers' culture-specific processing styles. The findings show that congruence between a customization choice interface and consumers' culture-specific processing style increases mental simulation of and satisfaction with customized products.

Together, these papers examine how consumer identities are not merely reflected by customization decisions but in fact crucially shape customization decisions. All papers are at an advanced stage of completion with multiple studies completed. This session will provide novel insights to a wide range of researchers, notably those interested in customization, product design, and creativity as well as those examining the role of individual and group identities and identity-based motivation in consumer contexts.

Making Meaning: How Consumers Build Their Identity Into Their Own Creative Outcomes

EXTENDED ABSTRACT

When consumers engage in a creative task – whether scrapbooking or customizing a sneaker – often one of their key goals is to develop or reinforce their self-identity and to express aspects of themselves (Dahl and Moreau 2007). However, identity domains are often chronically accessible simply because they are used to guide behavior so frequently. This accessibility can be a detriment in the context of creativity (Aarts and Dijksterhuis 2000; Rietzschel et al. 2006). Because of this possibility, we propose that consumers whose identity is activated will exert more effort and create more meaningful outcomes when resource inputs are constrained. When identity is not activated, however, input constraints will not yield a significant effect on the meaning of the outcome.

In our first study ($N = 110$), we manipulated two factors between participants: identity prime (present vs. absent) and constraints (high vs. low). All participants were asked to create a desktop wallpaper using Microsoft Paint. Participants in the “identity prime” condition were asked to think about how their design could represent or reflect something interesting or important about them. Those in the “no identity prime” condition were asked to think about the types of products that could have a background wallpaper like the one they were designing. We manipulated input constraints by providing participants with either limited or extensive shape/ color inputs. Participants evaluated their drawings on four 7-point scales which captured how much their design reflected who they are, how much it expressed aspects of their identity, how proud they were of it, and how much they would like to show it to others (Richins 1994; $\alpha = .91$).

The results revealed a main effect of identity prime ($M_{\text{identity}} = 3.84$ vs. $M_{\text{no identity}} = 2.96$; $F(1, 105) = 8.88, p < .01$) and a significant interaction ($F(1, 105) = 5.42, p < .05$). When an identity prime was

present, participants designing with fewer inputs created outcomes they judged to be more meaningful than those who had more inputs at their disposal; this effect was attenuated when the identity prime was absent.

In addition to identifying the process underlying the effects observed in study 1, the next study is designed to replicate these effects in a new context and to test a boundary condition: the structure of the task. In the next study ($N = 302$), three factors were manipulated between-participants: identity prime, constraints, and task structure. All participants received a blank piece of white paper and a closed pencil box containing (either 6 or 15) colored pencils. The identity manipulation was similar to the manipulation used in study 1. In the “unstructured” task environment, participants were not given any specific directions regarding how to approach the task. As in study 1, we simply told them to begin drawing whenever they were ready. In the “structured” task environment, they were provided step-by-step instructions (e.g., “When thinking about your design, you might find it helpful to focus on the specific elements of your drawing such as shapes, colors, lines, symmetry”). The same items used to capture meaning in study 1 were used in this study ($\alpha = .85$). We also captured self-reported effort. Participants responded to three 7-point scales indicating the extent to which they put a lot of effort into the task, were engaged in the task, and felt it important to create a good design ($\alpha = .82$).

The results revealed both the expected main effect of the identity prime as well as the predicted three-way interaction on meaning. As in study 1, participants primed with their identity prior to the task rated their drawings as more meaningful than those who did not receive an identity prime ($F(1, 294) = 6.28, p < .02$). When the creative task was unstructured, the results from study 1 replicated. When the creative task was structured, there were no significant effects of identity prime, input constraints, or their interaction. A similar pattern emerged for effort and moderated mediation analyses revealed that input constraints’ direct effect on meaning was moderated by identity prime and input constraints’ indirect effect on meaning was mediated by effort and moderated by identity prime with a 95% confidence interval excluding zero (-.77 to -.02), but not in the no identity condition with a 95% confidence interval excluding zero (-.12 to .50; Hayes 2012).

In our third study ($N = 181$) we manipulated identity prime and input constraints. All participants read a news article. Those in the identity condition were asked to think about how that article relates to their identity and how they could integrate those ideas into their drawing; those in the no identity prime condition were asked to think about what came to mind when they read the article and how they could integrate those ideas into their drawing; those in the control condition read the article and no further directions were provided in relation to their drawing. The meaning measure from the previous studies was adapted to fit the context ($\alpha = .82$). The results revealed a main effect of the prime ($F(1, 181) = 10.04, p < .01$), which was qualified by a significant interaction $F(1, 181) = 3.13, p < .05$. Participants in the identity prime condition created more meaningful designs when inputs were constrained ($M_{\text{identity, low constraint}} = 3.79$ vs. $M_{\text{identity, high constraint}} = 4.31$; $F(1, 181) = 4.54, p < .05$), but no significant difference emerged across the other prime conditions.

In this research, we contribute to the growing creativity literature by highlighting the importance of identity activation on consumers’ evaluations of their own creations. We find that while identity may motivate creative behavior, activating a familiar identity can lead consumers to generate familiar ideas. When constraints are introduced, consumers generate more meaningful creations. In doing so, we reconcile the opposing findings across the creativity and cus-

tomization literatures which have shown that constraints can enhance (e.g., Moreau and Dahl 2005; Sellier and Dahl 2011) or inhibit (e.g., Franke et al. 2010) evaluations of a consumer’s creative outcome.

Being Unique Makes Us Similar: How Example Designs and Their Creators Influence How We Customize

EXTENDED ABSTRACT

To aid and inspire consumers during the customization process, marketers often provide examples of how other consumers customized their products. Yet, providing such examples can seem incongruous given that a primary reason people customize is to express uniqueness (Lynn and Snyder 2002). We examine how customization examples shape the target consumer’s customization decisions. We particularly focus on the target consumer’s relationship with the example creator, namely whether the creator is a close or distant other.

Previous findings suggest that people often exhibit greater choice similarity with close (versus distant) others as a means of affiliation (Bearden and Etzel 1982; Mead et al. 2010). When consumers learn which product a close (versus distant) other purchased, consumers frequently choose something similar to affiliate with the close other. However, these findings are based on learning about others’ *ready-made* product choices - products with pre-set designs, unaltered by consumers. We argue that affiliation with close others will manifest differently when encountering *custom-made* products - products with designs created or altered (i.e., customized) by the consumer.

Customization and expressions of uniqueness are closely intertwined (Lynn and Snyder 2002). Hence, we suggest that encountering examples of customized products highlights the need to express uniqueness. Because individuals want to affiliate more with close (versus distant) others, individuals who see close (versus distant) others express their uniqueness via customization will be more inclined to also express their own uniqueness. This situation parallels findings that when a group’s objective is to be creative and original, people who want to affiliate with the group generate more divergent ideas (Bechtoldt et al. 2010). Hence, unlike the ready-made context, here, consumers will *not* make the same customization choices as the close other (i.e., choice similarity decreases). Notably, we expect that people want to affiliate more with close (versus distant) others in situations involving ready- and custom-made products, but *how* this affiliation manifests in their choices differs based on the decision context. When close others *customize* products on the basis of expressing uniqueness, individuals will affiliate by also expressing uniqueness through making divergent choices.

Three experiments test these predictions. All experiments used product examples pre-tested to have appealing designs to mitigate the possibility that choice dissimilarity with the product example was due to unappealing designs.

Study 1 ($N=290$) tested whether example type (ready- versus custom-made) and example creator (close versus distant other) influenced individuals’ propensity to make customization decisions similar to the example. Participants imagined running into either a *close friend* or *distant acquaintance* wearing a backpack. They then viewed an image of this backpack (i.e., the product example), which was decorated with eight different patches. The backpack design was held constant, but participants in the ready-made condition were told the backpack was designed by the retailer whereas participants in the custom-made condition were told the backpack was designed by their *close friend* [distant acquaintance]. All participants then customized a backpack by adding eight of 24 patch options onto their backpack. The number of selected patches that matched those on the example

backpack served as our measure of choice similarity. A significant interaction of example type and example creator ($F(1, 286)=9.52, p<.003$) was found. For the ready-made backpack example, encountering a close other's ($M=3.87$) backpack increased choice similarity with that example compared to seeing a distant other's ($M=3.28; F(1, 286)=5.57, p<.02$). However, for custom-made backpack examples, encountering examples by close others ($M=3.03$) decreased choice similarity relative to distant others ($M=3.49; F(1, 286)=3.98, p<.05$).

While Study 1 was scenario-based, participants in **Study 2** ($N=186$) actually created and kept their customized products. All participants saw an example notebook customized with emojis. Again, this example was attributed to either a close or distant other. Participants then customized their own notebook with emojis. We replicate our finding that custom-made examples by close others ($M=3.04$) led to decreased choice similarity relative to examples by distant others ($M=3.48; F(1, 185)=6.18, p<.02$).

Study 3 ($N=802$) tested an alternative explanation for our findings. White and Argo (2011) found that people react negatively when their individuality has been compromised (e.g., copied) for high acquisition possessions (e.g., customized products). Thus, participants in our studies may have made dissimilar choices preemptively to avoid potential negative reactions from close others who had customized their products. To test this possibility, we manipulated whether one's customization decisions (i.e., their product design) were private or public. When others are unaware of one's customization decisions, individuals will not need to avoid negative reactions (by making dissimilar choices) from close others who customized.

Participants encountered an example tissue box design that was either ready- or custom-made and attributed to either a close or distant other. Before participants customized their own box, they were told that their design (i.e., their customization decisions) would be shared with the example creator, either publicly with their name attached or privately without their name. We replicate our previous interaction effect of example type and example creator ($p<.001$), but find no difference between the public and private conditions (three-way interaction: $F<1$). That is, even when designs were private, individuals made more dissimilar choices when the custom-made examples they saw were from a close ($M=1.71$) versus distant other ($M=2.13; F(1, 794)=6.18, p<.02$). Moreover, regardless of example type, participants anticipated greater negative reactions for copying distant ($M=4.04$) rather than close ($M=3.76; F(1, 794)=4.86, p<.03$) others, suggesting that anticipated negative reactions do not account for our effects.

While marketer-provided examples may seem at odds with customization, providing examples from close others can increase customization as consumers affiliate with expressions of uniqueness.

When “Valentino” Gets Personal: Is Customization the New Luxury?

EXTENDED ABSTRACT

New product development in luxury fashion used to be the exclusive responsibility of professional designers. Luxury fashion designers appear to dictate what fashion really is. Moreover, consumers believe designers have some sixth sense about aesthetics and that designers transfer their essence into the luxury products they design. Consequently, consumers highly value this designer essence, as they view the designer as sublime in taste and fashion-expertise. Indeed, Fuchs et al. (2013) found that leaving the designer aside, by labelling luxury fashion products as crowdsourced, can backfire as consumers perceived these luxury products to be lower in quality and fail to

signal high status. These findings would then recommend refraining from customization in the luxury sector.

In sharp contrast, innovation is increasingly being democratized and consumers across industries are taking on an active role in the new product development process (von Hippel and Katz 2002). For example, consumers using mass customization technology are enabled to self-design their own products, which the company then produces. Extant research has highlighted the numerous positive effects of self-customization (Franke, Schreier, and Kaiser 2010). By designing a product, the consumer's self-essence is transferred into the product.

This leaves the question of how well self-customization resonates with customers of luxury brands. In order to optimize purchase intent, should brands maximize the designer's essence or should consumers be able to customize and transfer their self-essence into luxury products? Despite the promising findings in the non-luxury sector, little research has addressed the effects of mass customization for luxury fashion products.

In Study 1 ($N=127$), a repeated-measures ANOVA revealed that consumers' purchase intent for Valentino sneakers differed significantly as a function of design source (professionally-designed, self-customized, and crowdsourced; $F(2, 125)=49.73, p=.00$). This study shows a clear consumer preference for customized products ($M_{\text{customized}}=5.06$) over purely designer-designed, standard products in the luxury fashion context ($M_{\text{professionally-designed}}=4.32, t=-4.16, p=.00$). Additionally, we replicate the findings of Fuchs et al. (2013) with respondents indicating the least preference for crowdsourced luxury products ($M_{\text{crowdsourced}}=3.23$).

Study 2 ($N=324$) revealed that an increase in solution space (low vs. medium solution space), that is, the range of design options provided to the consumer, results in higher purchase intent ($M_{\text{low}}=4.25, M_{\text{medium}}=4.65$). We obtain similar results when treating respondents' purchase intent for their selected standard shoes merely as a control variable (i.e., adding it as a covariate to a simple ANOVA on respondents' purchase intent for their self-customized shoes). In contrast to our purchase intent results, an ANOVA on perceived designer essence reveals a significant negative effect of the treatment. Respondents with medium solution space feel that there is less designer essence in their customized shoes ($M=4.85$) compared to those with low solution space ($M=5.25, F(1, 315)=9.07, p<.01$). A noteworthy finding is that perceived designer essence is positively related to respondents' intent to buy their self-customized shoes ($b=.22, SE=.09, p<.05$).

This raises the question if, besides designer essence, the contribution of the consumer's self-essence also drives his or her preferences for customized luxury fashion products. Hence, an optimized relation between self- and designer essence might result in an increase in purchase intent.

Study 3 ($N=366$) builds on these ideas and extends the pattern of results of Study 2 by documenting an inverted U-shape effect of solution space (low vs. medium vs. high). Importantly, this effect was mediated by the ratio of self- to designer essence: the “essence-ratio”. An ANOVA on self- in relation to designer essence (essence-ratio), reveals that the solution space manipulation has a linear effect on this variable ($F(2, 353)=38.94, p<.001$); respondents in the high solution space condition indicate to perceive more self- in relation to designer essence in the customized product ($M=2.66$) compared to those in the medium solution space condition ($M=2.14, F(1, 237)=4.59, p<.05$) who themselves indicate to perceive more self- in relation to designer essence than those in the low solution space condition ($M=1.50, F(1, 239)=11.03, p<.001$). In order to test for the predicted inverted U-shape relationship between the essence-ratio

and the value of self-customization in the context of luxury fashion brands, we ran a hierarchical quadratic regression model. Critically, we find that the addition of the squared term of the essence-ratio significantly increased the explanatory power of the model (change in $F(1, 352)=14.89, p<.001$). As predicted, we find a negative effect of essence-ratio squared ($\beta = -.58, t = -3.86, p<.001$). Interestingly, this pattern of results does not emerge for either of the two essence measures if analyzed separately.

The theoretical insight here is that at first, an increase in self-essence adds more value than what the simultaneous decrease in designer essence detracts in value. However, further increases in self-essence may add less value as designer essence continues to decrease. Thus, there is a point in the essence-ratio beyond which increases in self-essence negatively relate to preference.

Many of the customization tools currently offered equip consumers with very low levels of design freedom. Our findings indicate that incrementally increasing the solution space might create incremental value for consumers. Critically, managers need to identify the sweet spot on the solution space continuum to allow consumers to imbue enough self-essence into the product while simultaneously maintain enough designer essence; the optimal essence-ratio thus brings about self-customized products that are seen by consumers as both designed by themselves and designed by the luxury brand's designers.

Furthermore, we have shown that perceptions of designer essence are important in understanding consumer preferences. In other words, consumers not only buy luxury fashion products for their superior product quality or to signal high status (Berger and Ward 2010; Han, Nunes, and Drèze 2010; Rucker and Galinsky 2009), but also because they value the designer "being in the product." Finally, our research qualifies the recommendations made by the extant literature on user involvement in the luxury brand context. While Fuchs et al. (2013) find that consumers are not very excited when other consumers are involved in the design of luxury fashion brands (e.g., "Prada designed by consumers"), our research demonstrates that, under certain conditions, consumers want to see themselves in their custom luxury products.

How Cultural Identity Drives the Effectiveness of Mass Customization

EXTENDED ABSTRACT

One important factor that shapes people's identity is the culture they live in (De Mooij and Hofstede 2011). Prior research revealed that one's cultural background determines how individuals think and how they process information. For instance, Easterners share the belief that different pieces of information coexist interdependently and thus process visual information more holistically, whereas Westerners share the belief that each item exists autonomously and therefore process information more analytically (Nisbett and Masuda 2003). Firms that provide similar user interfaces to consumers across markets do not take these important cross-cultural differences into account and may not market their products most effectively (Haig 2011).

This shortcoming is particularly pronounced for mass customization (MC) systems that allow consumers to express their unique preferences (Simonson 2005). While the popularity of such systems is increasing among consumers, manufacturers still employ nearly identical interfaces around the globe. For example, consumers configuring an automobile at Audi's country-specific websites in North America, Europe, or Asia always walk through exactly the same

configuration process: first they select a model, an exterior color, and their preferred rims, followed by a number of interior features and add-ons. We propose, and find based on both lab and field data, that such attribute-by-attribute customization (Valenzuela, Dhar, and Zettelmeyer 2009) is not uniformly beneficial to all consumers; they may be effective for Western consumers but less so for East Asians, given their habitual, more holistic processing style.

In study 1, which examined whether conventional attribute-by-attribute customization may be suboptimal for East Asian consumers (e.g., Chinese or Singaporeans), we collected field data in cooperation with a large European car manufacturer. The key dependent measure was the conversion rate of customers when configuring a car online. The dataset comprised 31,271,002 unique page visitors who configured their car using the company's online car configurator in 17 markets. In line with our proposition, we found significantly lower conversion rates for consumers in Eastern ($M=3.11\%$) versus Western markets ($M=6.62\%$; $t(15)=-3.20, p=.006$), a finding that could not be explained by differences in economic status or familiarity with the interface. These results provide a first hint toward conventional MC systems being less beneficial to East Asian consumers. However, the reported findings have limitations: they are based on correlational data and do not necessarily indicate causation. Subsequently, we examined the effect and underlying process in three follow-up cross-cultural experiments.

Our key hypothesis was that consumers experience greater mental simulation of product use and therefore evaluate their customized product more favorably if an MC system matches consumers' habitual processing style. To test these predictions, we designed three experiments involving prospective car buyers in Singapore and Germany. In our experiments, participants configured a car using a mock-up configurator of a large European car manufacturer. Participants were randomly assigned to one of two predominant choice architectures: attribute-by-attribute customization versus choosing from prespecified alternatives. In the former architecture, participants customized their car sequentially, selecting an option for each of three attributes. In the prespecified condition, participants chose a car from a set of already prespecified alternatives. We controlled for the overall attribute space such that the prespecified alternatives resembled all possible attribute combinations of the attribute-by-attribute architecture. Before consumers configured their preferred car, they completed the Kimchi similarity task (Kimchi and Palmer 1982) to assess their culture-specific habits of information processing.

In line with our predictions, study 2 ($N=175$) revealed that when Easterners (vs. Westerners) used the prespecified (vs. attribute-wise) architecture, they experienced an increased ability to mentally simulate using the car ($F(1,171)=9.55, p=.002$) and were more satisfied with their choice ($F(1,171)=9.41, p=.003$). As expected, these effects were moderated by consumers' processing styles such that the influence of a prespecified architecture was amplified for consumers with a more holistic processing style and vice versa ($b=-.10, SE=.04, CI_{95}=[-.19;-.03]$). Thus, a congruence between the interface and consumers' culture-specific processing style proved beneficial.

In study 3 ($N=456$), we tested whether priming consumers with their habitual processing style (i.e., priming Easterners holistically and Westerners analytically using the Navon letters task; Förster 2009) may offset the detrimental effects of an attribute-by-attribute architecture. As indicated by a significant interaction between priming and market for mental simulation ($F(1,448)=8.84, p=.003$) and satisfaction ($F(1,448)=6.27, p=.01$), study 3 showed that priming Easterners with a holistic processing style before using the attribute-by-attribute architecture increased mental simulation as well as

choice satisfaction. For Westerners, priming them with an analytic processing style before using the prespecified architecture also increased mental simulation and choice satisfaction. In other words, priming consumers with their habitual processing style positively affected their experience with an otherwise poorly matching choice architecture.

In study 4 (N=166), we aimed to replicate the previous findings by employing a more realistic priming technique. We therefore created two 45s videos based on the partner company's TV commercials. The "holistic video" included scenes that are closely related to holistic perceptions by focusing on overall broad-based characteristics of a car. In contrast, the "analytic video" included scenes highlighting single product items. A pretest (N=84) confirmed the intended priming effect of the videos on the Kimchi similarity task ($t(82)=2.17, p=.03$). Using these realistic stimuli, study 4 replicated the previous effects as indicated by a significant interaction between priming and market for mental simulation ($F(1,162)=10.87, p=.001$) and purchase intention ($F(1,162)=6.93, p=.009$). Hence, the priming of habitual processing styles increased consumers' mental simulation as well as their intention to purchase the car if they used a choice architecture that is not tailored to their habitual style of information processing.

This research provides evidence that firms can benefit from tailoring the provided choice architecture to customers' culture-specific processing styles, therefore contributing to the emerging fields of cross-cultural consumer psychology and marketing (Burton 2009). Importantly, we show that consumers' cultural identity constitutes an important boundary condition for the success of MC systems in international markets. Given the increasing individualization of East Asian markets and the constant rise of MC, the current research provides a new lens on how culture-specific information processing can be aligned with interactive choice environments.

REFERENCES

- Aarts, Henk and Ap Dijksterhuis (2000), "Habits as Knowledge Structures: Automaticity in Goal-directed Behavior," *Journal of Personality and Social Psychology*, 78 (1), 53-63.
- Bearden, William O. and Michael J. Etzel (1982), "Reference Group Influence on Product and Brand Purchase Decisions," *Journal of Consumer Research*, 9 (2), 183-194.
- Bechtoldt, Myriam N., Carsten K. W. De Dreu, Bernard A. Nijstad, and Hoon-Seok Choi (2010), "Motivated Information Processing, Social Tuning, and Group Creativity," *Journal of Personality and Social Psychology*, 99 (4), 622-37.
- Berger, Jonah, and Morgan Ward (2010), "Subtle Signals of Inconspicuous Consumption," *Journal of Consumer Research*, 37(4), 555-569.
- Burton, Dawn (2009), *Cross-Cultural Marketing: Theory, Practice and Relevance*, New York, NY: Routledge.
- Dahl, Darren W. and C. Page Moreau (2007), "Thinking Inside the Box: Why Consumers Enjoy Constrained Creative Experiences," *Journal of Marketing Research*, 44 (3), 357-69.
- De Mooij, Marieke and Geert Hofstede (2011), "Cross-Cultural Consumer Behavior: A Review of Research Findings," *Journal of International Consumer Marketing*, 23 (3-4), 181-92.
- Förster, Jens (2009), "Relations Between Perceptual and Conceptual Scope: How Global Versus Local Processing Fits a Focus on Similarity Versus Dissimilarity," *Journal of Experimental Psychology: General*, 138 (1), 88-111.
- Franke, Nikolaus and Martin Schreier (2008), "Product Uniqueness as a Driver of Customer Utility in Mass Customization," *Marketing Letters*, 19 (2), 93-107.
- Franke, Nikolaus, Martin Schreier, and Ulrike Kaiser (2010), "The 'I Designed It Myself' Effect in Mass Customization," *Management Science*, 56 (1), 125-40.
- Fuchs, Christoph, Emanuela Prandelli, Martin Schreier, and Darren W. Dahl (2013), "All That Is Users Might Not Be Gold: How Labeling Products as User Designed Backfires in the Context of Luxury Fashion Brands," *Journal of Marketing*, 77 (5), 75-91.
- Haig, Matthew (2011), *Brand Failures: The Truth About the 100 Biggest Branding Mistakes of All Time*, Sterling, VA: Kogan.
- Han, Young Jee, Joseph C. Nunes, and Xavier Drèze (2010), "Signaling Status with Luxury Goods: The Role of Brand Prominence," *Journal of Marketing*, 74 (4), 15-30.
- Kimchi, Ruth and Stephen E. Palmer (1982), "Form and Texture in Hierarchically Constructed Patterns," *Journal of Experimental Psychology: Human Perception and Performance*, 8 (4), 521-35.
- Lynn, Michael and C.R. Snyder (2002), "Uniqueness Seeking," *Handbook of Positive Psychology*, 395-410.
- Mead, Nicole L., Roy F. Baumeister, Tyler F. Stillman, Catherine D. Rawn, and Kathleen D. Vohs (2011), "Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation," *Journal of Consumer Research*, 37 (5), 902-919.
- Moreau, C. Page and Darren W. Dahl (2005), "Designing the Solution: The Impact of Constraints on Consumers' Creativity," *Journal of Consumer Research*, 32 (1), 13-22.
- Mugge, Ruth, Brunel, Frederic F Brunel, and Jan P. Schoormans (2011), "Consumer Response to Aesthetic Mass Customization," *Journal of Creative Management*, 4 (3), 3-33.
- Nisbett, Richard E. and Takahiko Masuda (2003), "Culture and Point of View," *Proceedings of the National Academy of Sciences of the United States of America*, 100 (19), 11163-70.
- Richins, Marsha L. (1994), "Valuing Things: The Public and Private Meanings of Possessions," *Journal of Consumer Research*, 21 (3), 504-21.
- Rietzschel, Eric F., Bernard A. Nijstad, and Wolfgang Stroebe (2006), "Productivity is not enough: A comparison of interactive and nominal brainstorming groups on idea generation and selection," *Journal of Experimental Social Psychology*, 42 (2), 244-51.
- Rucker, Derek D., & Adam D. Galinsky (2009), "Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behaviour," *Journal of Experimental Social Psychology*, 45(3), 549-555.
- Sellier, Anne-Laure and Darren W. Dahl (2011), "Focus!! Creative Success Is Enjoyed Through Restricted Choice," *Journal of Marketing Research*, 48(6), 996-1007.
- Simonson, Itamar (2005), "Determinants of Customers' Responses to Customized Offers: Conceptual Framework and Research Propositions," *Journal of Marketing*, 69(1), 32-45.
- Valenzuela, Ana, Ravi Dhar, and Florian Zettelmeyer (2009), "Contingent Response to Self-Customization Procedures: Implications for Decision Satisfaction and Choice," *Journal of Marketing Research*, 46(6), 754-63.
- Von Hippel, Eric, and Ralph Katz (2002), "Shifting Innovation to Users via Toolkits," *Management Science*, 48(7), 821-833.
- White, Katherine and Jennifer J. Argo (2011), "When imitation doesn't flatter: The role of consumer distinctiveness in responses to mimicry," *Journal of Consumer Research*, 38(4), 667-680.

Risk Perception and Control in Consumer Healthcare Decisions

Chair: Yimin Cheng, Monash University, Australia

Paper #1: Stigmatized Risk Factors in Health Messages: The Defensive Influence of Moral Identity

Chethana Achar, University of Washington, USA
Lea Dunn, University of Washington, USA
Nidhi Agrawal, University of Washington, USA

Paper #2: The Burden of Social Proof

Preyas Desai, Duke University, USA
Mary Frances Luce, Duke University, USA
Janet Schwartz, Tulane University, USA

Paper #3: The Protestant Work Ethic and Preference for Natural Healthcare

Yimin Cheng, Monash University, Australia
Anirban Mukhopadhyay, HKUST, Hong Kong

Paper #4: Unbiased Presentation of Options in Preference-based Medical Decisions

Tatiana Barakshina, University of Illinois at Chicago, USA
Alan Malter, University of Illinois at Chicago, USA
Dimitrios Mastrogiannis, MD, University of Illinois at Chicago, USA

SESSION OVERVIEW

Healthcare is a huge industry. In 2012, U.S. healthcare expenditures were \$3 trillion and growing by 4% annually (Munro, 2012). Healthcare decisions are extremely important because they are crucially related to people's physical and mental wellbeing, and even lives. However, in many cases, healthcare decision makers are ordinary consumers who lack domain expertise and are easily influenced by psychological factors. In this special session we investigate (1) what are the novel aspects of healthcare decisions that have been under-investigated in the existing literature (stigma messages, social proof, naturalness, and risk presentation method), and (2) what psychological factors influence consumer reactions to these aspects (moral identity, reactance, the Protestant Work Ethic, and pre-existing preference).

In paper 1, Achar, Dunn and Agrawal examine how and when the presence of stigmatized sources of risk (e.g., unsafe sex) influences health persuasion. Whereas past literature has demonstrated many positive outcomes of moral identity, three studies show that salient moral identity triggers defensive responses (e.g., self-positivity bias) to health appeals that implicate stigmatized behavior. Normalizing the stigmatized behaviors reduces the negative effect of moral identity.

Consumers are defensive not only to stigma-induced ego-threats, but also to persuasion by social proof. In paper 2, Desai, Luce and Schwartz find that the effectiveness of social proof in encouraging medical screening tests is short-lived and may be attenuated when the medical test is very threatening. Moreover, high social proof causes more felt pressure and lower confidence in the accuracy of the test, a negative consequence that is rarely seen in other unthreatening contexts.

In paper 3, Cheng and Mukhopadhyay find that the Protestant Work Ethic, a work-related core belief, can spill over and influence naturalness preference in healthcare decisions (e.g., natural childbirth vs. C-section). Combining publicly available data with experimental data, four studies show that individuals (and countries) who believe strongly in the PWE prefer relatively natural healthcare options, due to stronger dislike of external interventions.

While first-time childbirth decisions are influenced by core beliefs, second-time childbirth decisions are further affected by emotional and medical outcomes of previous delivery experiences. In paper 4, Barakshina, Malter and Mastrogiannis studied VBAC versus repeat C-section decisions using 64 longitudinal, dyadic interviews with 40 pregnant women and their physicians. They find that strong pre-existing preferences shaped by fear and other factors biased patients against objective risk/benefit information on delivery choices presented by physicians. Physicians' own biased preference for different presentation modes exacerbated the problem. Based on these findings, a new patient decision aid was developed to improve objective risk assessment.

The proposed session presents emerging topics in consumer healthcare research and identifies key psychological factors. Our studies examine both hypothetical and real healthcare behavior (Paper 2, Study 3; Paper 3, Study 1; and Paper 4) and employ diverse methodologies (experiments, secondary data, depth interviews). Healthcare is a high-impact area which is relatively under-investigated by consumer researchers. Our session features novel approaches to study consumer healthcare decisions, raises important questions for debate and discussion, and should appeal to a wide range of ACR attendees.

Stigmatized Risk Factors in Health Messages: The Defensive Influence of Moral Identity

EXTENDED ABSTRACT

Extant research in psychology suggests that social stigma is so threatening that the mere implication of a stigmatized risky behavior may discourage individuals from seeking healthcare solutions (Young et al. 2007). In contrast, research in health suggests that communications that do not sensationalize stigma provide individuals with solution and self-efficacy (Ditto et al. 1988; Block and Keller 1995; Lundgren and McMakin 2013) should be effective. The current research integrates these two literatures and finds a novel moderator to the impact of perceived stigma on health message effectiveness: moral identity. Salient moral identity – individuals' self-concept organized around moral traits (Aquino and Reed 2002) - has generally been shown to have outcomes such as increased charitable behaviors (Reed et al. 2007), time donations (Reed, et al. 2015), ethical behavior (Reynolds and Ceranic 2007), and well-being (Hardy et al. 2013). The current research illuminates that moral identity may not always result in such welfare outcomes. Specifically, we consider the cases where a stigmatized behavior (e.g., engaging in unprotected sex) is implied as a source of health risk.

Our central premise is that there is an inconsistency between a salient moral identity and acknowledgement of engaging in a stigmatized risky behavior. This inconsistency stems from the facet of morality as norm conformity (Forsyth 1985; Aquino and Reed 2002) and the facet of stigma as indicating an undesirable deviance from norms (Archer 1985). Thus, among those with a strong self-concept of being moral, the implication of engaging in a stigmatized behavior (i.e., a behavior that violates a societal norm) will be an ego-threat. In such a scenario, in contrast to the previously documented healthy behaviors (Hardy et al. 2013), moral identity might motivate ego defense against health messages. Unlike previous research in health messaging which shows ego defense being triggered by risk perceptions (Kunda 1987; Raghurib and Menon 1998), this is a case where

the source of defense against health messages stems from a threat to one's salient identity, not from threat to one's health. This research shows contrasting effects of salient moral identity; in general, high (vs. low) moral identity leads to healthy consumption, but backfires when the healthy consumption implies engagement in a stigmatized risky behavior. Further, based on our premise that this ego defense is driven by norm-conformity of moral identity and norm-deviance of stigma, we posit that 'normalizing' the stigmatized behavior should attenuate this effect. A series of three experiments establish this moderating effect of moral identity, demonstrate the underlying process, and present an intervention.

Basic Effect and Underlying Process

In studies 1 and 2, participants were shown a health message that briefly described three potential factors that could lead to a disease and presented a preventive vaccination. Stigma associated with the infection was manipulated in the third risky behavior listed on the message. The risk factors were: 1) being of age 16 – 45 years, 2) sharing food and beverages with others and 3) not using the hand sanitizer regularly (*low stigma condition*) OR having multiple sexual partners (study 1) or having

In study 2, participants were primed with moral identity to address any concerns about measured personality correlates. A panel of online participants ($n=171$) were assigned to one of the four conditions in a prime (moral vs. neutral) \times message stigma (high vs. low) design. Individuals' defensive processing of the health message was measured through their perceptions of disease risk to themselves versus an average other. Defensiveness was operationalized in the form of self-positivity (tendency to see self as less susceptible to risk than an average other). As predicted, participants primed with moral (vs. neutral) identity exhibited greater self-positivity bias in their perceptions of disease risk after seeing a high (vs. low) stigma vaccination message, which mediated vaccination intentions.

Intervention

We reasoned that use of vernacular phrasing de-stigmatizes a risky behavior by making it appear more 'normal'. For this purpose, we developed an 'intervention' health message which described the same stigmatized behavior in study 2, but used vernacular language to describe it. In study 3, students in an introductory nutrition course were randomly assigned to read a health pamphlet about a disease in a prime (moral vs. neutral) \times behavior framing language (formal vs. vernacular) design. Those primed with moral (vs. neutral) identity indicated greater willingness to pay for a vaccination when they were presented a health message that indicated a stigmatized behavior, but used vernacular (vs. formal) language.

This work makes several interesting contributions to the field. First, we contribute to the understudied topic of stigma in consumer behavior by demonstrating how and when the mere implication of engaging in a stigmatized behavior could influence the effectiveness of health persuasion. Second, we show that moral identity can have a negative influence on health outcomes through a defensive mechanism. Finally, we develop and test a theory-based intervention to reduce the negative interaction of stigma and moral identity.

The Burden of Social Proof

EXTENDED ABSTRACT

A proliferation of insights from the behavioral sciences has recently been called upon for public service. Appeals to be healthier, wealthier, and more environmentally aware have been bolstered by well-documented phenomena such as framing (Tversky and Kahn-

man 1984), defaults (Johnson and Goldstein 2003), and social influence (Cialdini 1984). These insights are leveraged to create more effective behavioral interventions, and mainly capitalize on evidence that behavior is often shaped by peripheral environments rather than by exclusively individual motivations. The success of this approach has been well-received, especially in the case of challenging public policy problems where behavioral change can be taxing. Additionally, many of these insights work as interventions because they align people's behaviors with already positive attitudes and intentions—many want to be healthier, wealthier, safer, and more environmentally aware, but they lack the necessary tools to bridge the intention-behavior gap. To that end, subtle changes to the physical or rhetorical decision making environment can "nudge" (Thaler and Sunstein 2008) people along what is ostensibly a desired path.

Relatively little attention has been paid, however, to situations in which people are being persuaded to do something that is threatening. That is, behaviors that people might be strongly inclined to avoid, even though they are ultimately beneficial. These situations present a dual problem in that consumers need to be motivated to make positive changes but they also must be able to cope with or otherwise overcome the threats associated with the advocated behavior. Research has shown that people can be particularly avoidant in situations that produce negative emotions (Luce 1998), such as when they are required to make difficult trade-offs or may receive negative information. This research seeks to better understand how one form of persuasion, social proof (Sherif, 1935), influences aversive decisions and the tendency of some to avoid acting. Medical screening tests are a timely example, as most people are aware that early detection and treatment of disease can prevent it from worsening. At the same time, submitting to these tests can, for many people, be unpleasant and anxiety provoking.

Study 1

Participants ($N = 408$ adults) were randomly assigned to conditions in a 2 (disease severity = Multiple Sclerosis or Migraine headaches) \times 2 (social proof = 75% or 25% get tested) \times 2 (symptom onset = sooner or later) experimental design. They were asked to imagine they had recently been feeling unwell and their doctor suspects the problem could be Multiple Sclerosis (Migraine headaches) that could become worse very soon (in several years). The participants were then told that 75% (25%) of people in their situation opt for a test to confirm the diagnosis and went on to rate how likely they would be to take the test on a scale of 1 to 7 where higher numbers indicated a greater willingness to test. Social proof was least effective in the most threatening situation (early onset MS).

Study 2

We attempted to attenuate the initial reactance to the threat of a serious medical diagnosis with a longitudinal design that allowed participants ($N = 551$ adults) to think for one week about whether to get tested to confirm MS. The results showed that social proof was even less effective over time—meaning that participants in the high social proof condition were significantly more interested in testing than those in the low social proof condition, but only at Time 1 ($p < .01$). One week later, there were no differences between the high and low social proof groups in terms of likelihood to get tested. This suggests that social proof has a limited shelf-life, and can be over-ridden with deliberation.

Study 3

Study 3 attempted to capitalize on the limited shelf-life of social proof by giving people ($N = 289$ adults) a chance to take a real medi-

cal screening test (for Type 2 diabetes) immediately. High versus low social proof was effective in getting people to take the test, however, those in the high proof condition felt significantly more pressured and significantly less confident in the accuracy of the test to diagnose Diabetes than people in the low proof condition ($p < .001$ for both analyses). This suggests while social proof can increase a desired behavior, it exerts unpleasant influence and can even undermine belief in the accuracy of the results.

Taken together, our results from both hypothetical and real medical testing situations show that social proof has a modest impact on increasing medical testing intentions and actual testing behavior. This power degrades as the situation becomes more threatening and with time. Although it may be possible to capitalize on the limited shelf-life of social proof, changing people's behavior via this channel of persuasion can lead to feelings of pressure and reduced confidence in the accuracy of the test's results.

The Protestant Work Ethic and Preference for Natural Healthcare

EXTENDED ABSTRACT

Science and technology have substantially changed the way healthcare is delivered, by introducing numerous new options that never existed before in the world. While herbal remedies have a history as long as mankind, the modern pharmaceutical industry relies more on chemical synthesis, bioengineering, and computer-aided drug design. Similarly, although natural delivery remains the choice of the majority for giving birth, Cesarean section rates in the U.S. increased by about 60% from 1996 to 2009 (Martin et al. 2012).

Consumers may not have the expertise to evaluate the scientific qualities of these modern methods, and it is unclear whether their healthcare decisions are always made rationally. So what determines people's preferences for natural healthcare? Not much research addresses this question, and the results are mixed. Some researchers have found that consumers have a strong naturalness preference for food but not for medicine (Rozin et al. 2004). In contrast, others have found that worries about new technology make consumers prefer natural health products to those with synthetic additives (Deveich, Pedersen and Petrie 2007). In this paper, we investigate one psychological antecedent of preferences for natural healthcare, namely, belief in the Protestant Work Ethic (Weber 1905).

Sociologist Max Weber first introduced the Protestant Work Ethic (henceforth PWE) to explain the historical rise of western capitalism. Psychologists have since developed psychometric scales to measure PWE (e.g., Mirels and Garrett 1971) and treated PWE as a secular concept that describes the extent to which a person believes in hard work, asceticism, frugality and self-reliance (Cheng, Mukhopadhyay and Schrift 2017; Furnham 1990; Miller, Woehr and Hudspeth 2002). People high in PWE tend to engage in work-related activities during trips to and from their workplaces (Greenberg 1978) and to blame the unemployed for their laziness (Furnham 1985). Up till now, however, most psychological research on PWE has tested its consequences only in work-related domains (Cheng et al. 2017 as an exception). Because PWE is a core value (Hsu 1972), we suggest it may spill over and influence work-unrelated consumer behaviors, such as naturalness preference in healthcare decisions.

Why would people high in PWE prefer natural healthcare options? An important component of PWE is self-reliance. Previous literature suggests that the strong emphasis on self-reliance makes high-PWE people dislike external intervention. For example, Moen (1978) found that American elderly who were likely influenced by the PWE tended to refuse assistance and social welfare, even

thought they were old, poor, sick and disable. Similarly, Furnham (1983) found that those believe strongly in the PWE are more likely to oppose taxation externally imposed on them. Because high-PWE people dislike external intervention and naturalness represents the absence of external intervention (Rozin 2005, 2006; Spranca 1992), higher PWE may lead to stronger preference for natural options. In four studies, we tested our central hypothesis that high PWE is associated with stronger naturalness preference. We also provided evidence that this effect is driven by the stronger dislike of interventions among high-PWE people.

Study 1 used publicly available survey data to test whether country-level PWE predicted country-level Cesarean-section rates. We obtained C-section rates from UNICEF and WHO reports, and assessed country-level PWE using 13 questions in the *World Values Survey*. Regression analysis was performed on 41 countries with no missing data between 2005 and 2009. As predicted, countries with higher PWE have significantly lower C-section prevalence. This effect held when GDP per capita and religiosity were statistically controlled for.

As C-section and natural delivery differ in multiple dimensions other than naturalness, study 2 was designed to disentangle these dimensions. Childless women who planned to have children in the future ($N=137$) imagined being pregnant and expecting babies. Participants read short descriptions of vaginal deliveries and C-sections. In the three framing conditions, participants read one additional sentence, "*It is commonly believed that... vaginal deliveries are more NATURAL than C-sections are /... vaginal deliveries are more PAINFUL than C-sections are / ... vaginal deliveries require more EFFORT from mothers.*" PWE was measured using a scale (Mirels and Garrett 1971). Only in the "naturalness salient condition", women with higher PWE evaluated vaginal delivery as better for their and their baby's health than C-section. Higher PWE did not predict stronger preference for vaginal delivery in the other two conditions. This result suggests that high-PWE women's preference for vaginal delivery was due to their preference for naturalness rather than their preference for effort or pain.

Studies 3a and 3b directly manipulated the degree of external intervention to test the underlying mechanism. Study 3a asked MTurkers ($N=133$) to evaluate the relative efficacy of ginseng harvested in the wild versus farmed on farmlands. Farming ginseng was framed as involving either high or low external intervention. PWE was measured as before. Higher PWE is associated with less favorable efficacy judgment for farmed ginseng only when farming ginseng involved high external intervention, but not low external intervention. Study 3b (MTurkers= 122) replicated study 3a. Higher PWE was associated with less favorable efficacy judgment of lab-synthesized paclitaxel (a chemotherapy medicine) relative to tree-derived paclitaxel only when the lab synthesis process was framed as involving high external intervention, but not low external intervention.

Although naturalness is a ubiquitous concept in branding and promotion, it has only started to be researched recently (Rozin 2005, 2006; Rozin Fischler and Shields-Argeles 2012; Rozin et al. 2004) and most studies are in domain of food. Existing research has successfully documented an overall pattern of preference for naturalness, and the current research contributes by identifying important individual heterogeneity in these preferences as a function of the Protestant Work Ethic. Our findings have practical implications as well. For example, international healthcare organizations should put more effort in educating individuals (and countries) low in PWE about the benefits of natural childbirth. Pharmaceutical companies that emphasize natural manufacturing processes may want to target consumers high in PWE.

Unbiased Presentation of Options in Preference-based Medical Decisions

EXTENDED ABSTRACT

Healthcare services are associated with higher uncertainty and more serious risks for consumers, compared to other credence services (Mitra, Reiss, Capella 1999; Ngamvichaikit and Beise-Zee 2013). Among medical services, some treatment decisions are more risky and uncertain than others. The classification of medical decisions into evidence-based and preference-based is directly related to uncertainty (Edwards and Elwyn 2009). While a patient (at least formally, in U.S. healthcare) makes the decision on her treatment, the choice between available options is clearer when medical evidence supports one treatment over another. Yet, for many decisions, patient choices are preference-based, meaning one option is not definitively better than another. In such instances, a patient's personal values, preferences and beliefs may heavily influence the final choice.

Due to logistical and resource constraints, many studies in consumer behavior, medical decision-making, and patient counseling examine the patient or physician perspective, but rarely a 360-degree view. Perception of risk by patients and physicians and confirmation bias on both sides have been studied broadly in consumer behavior, mostly in experiments using student or online subject pool samples (Khan and Kupor 2017; Mittal and Griskevicius 2016; Yan and Sen Gupta 2013). Research using participants who have actually made the focal medical decisions is rare (exceptions include Thompson 2005; Morris et al. 1994).

In our research, we interview both patients and their physicians in the clinic immediately following consultations. Consumer behavior scholars have long noted the need to empirically study doctor-patient interactions (Friedman and Churchill 1987) but few consumer studies have ever studied the actual interaction. Obtaining the perspective of each decision participant adds real-life context and dynamic complexity of the environment where physicians and patients interact. Direct examination of the patient-physician dyad enhances theoretical understanding, provides more actionable, relevant recommendations and can improve the interaction process.

Specifically, we examine three important aspects of the decision-making process. First, in the initial interaction between provider and patient, does either party have a pre-existing preference towards one option (driven by experience, subjective information, or personal beliefs)?

Second, how are the risks/benefits of alternatives presented by the provider, and is this presentation biased by a pre-existing preference? Medical uncertainty can be presented in three ways: verbal, visual, and experiential. In the verbal approach, patients will vary in how they understand verbal probabilities. Stating probabilities linguistically or numerically were found to yield different perceptions of risk (Budescu, Weinberg and Wallsten 1988). Patient risk was better understood as frequencies than percentages (Ancker et al. 2006; Fagerlin et al. 2007; Waters et al. 2016). An even more effective way to communicate low, yet considerable probabilities, is the experiential approach (Sandman et al. 1994), in which a physician references life situations from a familiar environment (to perceive riskiness of a "3% risk," ask the patient whether she would board a plane if it had a 3% chance of being hijacked).

Third, how is risk/benefit information perceived and processed by a medical services consumer: Are the explained risks and benefits heard and understood, and how are they interpreted?

In sum, our study focuses on two key research questions: How do pre-existing preferences influence a patient's ability to perceive risk/benefit information for treatment options, and which risk pre-

sentation method used in actual consultations yields minimally biased, well-informed patient choice?

We employ a grounded theory approach in a clinical field setting. Our study domain is childbirth decisions, specifically delivery decisions by women following a previous C-Section. These women must choose between a repeat Cesarean or attempted natural childbirth (VBAC), a decision defined by the medical community as preference-based (Bernstein et al. 2012).

Methodology. We report 64 longitudinal, dyadic in-depth interviews, which elicit both patient and physician perspectives on the decision process. Initial interviews were conducted with 40 pregnant women at a Women's Health clinic in Chicago, all of whom had a C-Section on a previous delivery and now faced a choice of repeat C-section or VBAC. Interviews were conducted immediately after a regular routine pregnancy visit with an OB/GYN physician. A second patient interview was conducted closer to delivery to obtain a "decision journey" perspective, and to track how the delivery decision evolved during the pregnancy. Each patient interview was matched to a brief interview with the counselling physician immediately after the patient visit.

Our findings compare patient and physician perspectives. First, we turn to the patient view. Many patients showed a strong pre-existing delivery preference, which made them less receptive to understanding and processing risk/benefit information provided by the physician. This, in turn, prevented an unbiased consideration of both options. We find that pre-existing preference for one delivery option (C-section or natural) formed early in or even prior to pregnancy, shaped mainly by fear factors from the previous C-section delivery experience (fear of anesthesia, fear of longer recovery, etc.).

From the physician perspective, the main finding involves how physicians choose to present decision options to patients. Each physician has a preferred method of risk presentation, not a holistic approach. The effects of different tactics used by physicians to present risk/benefit information are compounded by the patient's varying understanding of risks. As a result, most patients develop a clear understanding of the benefits of their preferred delivery option, while never fully understanding or outright disregarding the benefits of the alternative option.

Our research has theoretical and practical implications. On a theoretical level, we contribute to understanding how pre-existing patient preference (driven by need to cope with fear associated with previous experience, as discussed in Luce 2005) is expressed by patients, and what approaches to presenting risks and benefits will result in a less biased choice. On a practical level, we use the findings to develop a decision aid that offers a comprehensive visual approach to more easily present and compare risks and benefits across both delivery options. Our future research will focus on improving the decision aid via a series of experiments (O'Connor et al. 2007) testing its effect on healthcare decisions and emotional outcomes.

REFERENCES

Session Overview

Munro, Dan. (2012), "U.S. Healthcare Hits \$ 3 Trillion," *Forbes*.
<http://www.forbes.com/sites/danmunro/2012/01/19/u-s-healthcare-hits-3-trillion/>

Paper 1

Aquino, K., and Reed II, A. (2002), "The Self-Importance of Moral Identity," *Journal of Personality and Social Psychology*, 83(6), 1423.

- Archer, D. (1985), "Social Deviance," in *Handbook of Social Psychology*, ed. Gardner Lindzey and Elliot Aronson, New York: Random House, 743-804.
- Block, Lauren G., and Punam Anand Keller (1995), "When to Accentuate the Negative: The Effects of Perceived Efficacy and Message Framing on Intentions to Perform a Health-Related Behavior," *Journal of Marketing Research*, 32 (2), 192-203.
- Ditto, Peter H., John B. Jemmott III, and John M. Darley (1988), "Appraising the Threat of Illness: A Mental Representational Approach," *Health Psychology*, 7 (2), 183-201.
- Forsyth, D. R. (1985), "Individual Differences in Information Integration during Moral Judgment," *Journal of Personality and Social Psychology*, 49 (1), 264.
- Hardy, S. A., Francis, S. W., Zamboanga, B. L., Kim, S. Y., Anderson, S. G., and Forthun, L. F. (2013), "The Roles of Identity Formation and Moral Identity in College Student Mental Health, Health-risk Behaviors, and Psychological Well-Being," *Journal of Clinical Psychology*, 69 (4), 364-82.
- Kunda, Ziva (1987), "Motivated Inference: Self-serving Generation and Evaluation of Causal Theories," *Journal of Personality and Social Psychology*, 53 (4), 636-47.
- Lundgren, Regina E., and Andrea H. McMakin (2013), *Risk Communication: A Handbook for Communicating Environmental, Safety, and Health Risks*, John Wiley and Sons.
- Raghubir, Priya, and Geeta Menon, (1998), "AIDS and Me, Never the Twain Shall Meet: The Effects of Information Accessibility on Judgments of Risk and Advertising Effectiveness," *Journal of Consumer Research*, 25 (1), 52-63.
- Reed II, A., Kay, A., Fimmel, S., Aquino, K., and Levy, E. (2015), "I Don't Want the Money, I Just Want Your Time: How Moral Identity Overcomes the Aversion to Giving Time to Prosocial Causes," *Journal of Personality and Social Psychology*, 110 (3), 435-57
- Reed, A., Aquino, K., and Levy, E. (2007), "Moral Identity and Judgments of Charitable Behaviors," *Journal of Marketing*, 71 (1), 178-93.
- Reynolds, S. J., and Ceranic, T. L. (2007), "The Effects of Moral Judgment and Moral Identity on Moral Behavior: An Empirical Examination of the Moral Individual," *Journal of Applied Psychology*, 92 (6), 1610.
- Young, Sean D., A. David Nussbaum, and Benoît Monin (2007), "Potential Moral Stigma and Reactions to Sexually Transmitted Diseases: Evidence for A Disjunction Fallacy," *Personality and Social Psychology Bulletin*, 33 (6), 789-99.

Paper 2

- Cialdini, R. B. (1984), *Influence: How and Why People Agree to Things*, New York: William Morrow and Company.
- Kahneman, Daniel, and Amos Tversky (1984), "Choices, Values, and Frames," *American Psychologist*, 39 (4), 341.
- Johnson, Eric J., and Daniel G. Goldstein (2003), "Do Defaults Save Lives?" *Science*, 302, 1338-39.
- Luce, Mary Frances (1998), "Choosing to Avoid: Coping with Negatively Emotion-Laden Consumer Decisions," *Journal of Consumer Research*, 24 (4), 409-33.
- Sherif, Muzafer (1935), "A Study of Some Social Factors in Perception," *Archives of Psychology* (Columbia University).
- Thaler, Richard and Cass R. Sunstein (2008), *Nudge. The Politics of Libertarian Paternalism*. New Haven.

Paper 3

- Cheng, Yimin, Anirban Mukhopadhyay and Rom Y. Shrift (2017), "Do Costly Options Lead to Better Outcomes? How the Protestant Work Ethic Influences the Cost-Benefit Heuristic in Goal Pursuit," *Journal of Marketing Research*, In-Press.
- Devcich, Daniel A., Irene K. Pedersen and Keith J. Petrie (2007), "You Eat What You Are: Modern Health Worries and the Acceptance of Natural and Synthetic Additives in Functional Foods," *Appetite*, 48, 333-37.
- Furnham, Adrian (1983), "The Protestant Work Ethic, Human Values and Attitudes Towards Taxation," *Journal of Economic Psychology*, 3 (2), 113-28.
- _____ (1985), "The Determinants of Attitudes towards Social Security Recipients," *British Journal of Social Psychology*, 24 (1), 19-27.
- _____ (1990), *The Protestant Work Ethic: The Psychology of Work-Related Beliefs and Behaviours*, London: Routledge.
- Greenberg, Jerald (1978), "Protestant Ethic Endorsement and Attitudes toward Commuting to Work among Mass Transit Riders," *Journal of Applied Psychology*, 63, 755-58.
- Hsu, Francis L. K. (1972), "American Core Values and National Character," in *Psychological Anthropology*, ed. Francis L. K. Hsu, Cambridge, MA: Schenkman, 241-62.
- Martin, J. A., Hamilton, B. E., Ventura, S. J., Osterman, M. J., Wilson, E. C., and Mathews, T. J. (2012), "Births: final data for 2010," *National Vital Statistics Reports*, 61(1), Hyattsville, MD: National Center for Health Statistics, 1-72.
- Miller, Michael J, David J. Woehr, and Natasha Hudspeth (2002), "The Meaning and Measurement of Work Ethic: Construction and Initial Validation of a Multidimensional Inventory," *Journal of Vocational Behavior*, 60 (3), 451-89.
- Mirels, Herbert L. and James B. Garrett (1971), "The Protestant Ethic as a Personality Variable," *Journal of Consulting and Clinical Psychology*, 36 (1), 40-44.
- Moen, Elizabeth (1978), "The Reluctance of the Elderly to Accept Help," *Social Problems*, 25 (3), 293-303.
- Rozin, Paul (2005), "The Meaning of 'Natural': Process More Important than Content," *Psychological Science*, 16, 652-58.
- _____ (2006), "Naturalness Judgments by Lay Americans: Process Dominates Content in Judgments of Food or Water Acceptability and Naturalness," *Judgment and Decision Making*, 1 (2), 91-97.
- Rozin, Paul, Claude Fischler and Christy Shields-Argelès (2012), "European and American Perspectives on the Meaning of Natural," *Appetite*, 59, 448-55.
- Rozin, Paul, Mark Spranca, Zeev Krieger, Ruth Neuhaus, Darlene Surillo, Amy Swerdlin, and Katherine Wood (2004), "Preference for Natural: Instrumental and Ideational/Moral Motivations, and the Contrast between Foods and Medicines," *Appetite*, 43, 147-54.
- Spranca, Mark D. (1992), "The Effect of Naturalness on Desirability and Preference in the Domain of Foods," master's thesis, University of California, Berkeley, CA.
- Weber, Max (1905), *The Protestant Ethic and the Spirit of Capitalism*, Translated by Talcott Parsons in 1930, London and New York: Routledge.

Paper 4

- Ancker, Jessica S., Yalini Senathirajah, Rita Kukafka, and Justin B. Starren (2006), "Design Features of Graphs in Health Risk Communication: A Systematic Review," *Journal of the American Medical Informatics Association*, 13 (6), 608-18.

- Bernstein, S. N., Matalon-Grazi, S., and Rosenn, B. M. (2012), "Trial of Labor versus Repeat Cesarean: Are Patients Making an Informed Decision?," *American Journal of Obstetrics and Gynecology*, 207 (3), 204. e201-204. e206.
- Budescu, David V., Shalva Weinberg, and Thomas S. Wallsten (1988), "Decisions Based on Numerically and Verbally Expressed Uncertainties," *Journal of Experimental Psychology: Human Perception and Performance*, 14 (2), 281.
- Edwards, Adrian, and Glyn Elwyn (2009), *Shared Decision-making in Health Care: Achieving Evidence-based Patient Choice*, Oxford University Press.
- Fagerlin, A., Ubel, P. A., Smith, D. M., and Zikmund-Fisher, B. J. (2007). "Making Numbers Matter: Present and Future Research in Risk Communication," *American Journal of Health Behavior*, t1(Supplement 1), S47-S56.
- Luce, Mary Frances (2005), "Decision Making as Coping," *Health Psychology-Hillsdale then Washington DC*, 24 (4), S23.
- Mitra, Kaushik, Michelle C. Reiss, and Louis M. Capella (1999), "An Examination of Perceived Risk, Information Search and Behavioral Intentions in Search, Experience and Credence Services," *Journal of Services Marketing*, 13 (3), 208-28.
- O'Connor, Annette M., John E. Wennberg, France Legare, Hilary A. Llewellyn-Thomas, Benjamin W. Moulton, Karen R. Sepucha, Andrea G. Sodano, and Jaime S. King (2007), "Toward the 'Tipping Point': Decision Aids and Informed Patient Choice," *Health Affairs*, 26 (3), 716-25.
- Sandman, Peter M., Neil D. Weinstein, and Paul Miller (1994), "High Risk or Low: How Location on a "Risk Ladder" Affects Perceived Risk," *Risk Analysis*, 14 (1), 35-45.
- Waters, Erika A., Angela Fagerlin, and Brian J. Zikmund-Fisher (2016), "Overcoming the Many Pitfalls of Communicating Risk," In *Handbook of Health Decision Science*, 265-277. Springer, New York.

The Ups and Downs of Uncertainty: Novel Antecedents and Consequences of Uncertainty in Consumer Judgment and Choice

Chair: M. Yavuz Acikalin, Stanford University, USA

Paper #1: Guilt-Free Indulgence at the Cost of Certainty

M. Yavuz Acikalin, Stanford University, USA
Uzma Khan, University of Miami, USA
Baba Shiv, Stanford University, USA

Paper #2: Know Thyself Financially: How Financial Self-Awareness Benefits Consumers

Nivriti Chowdhry, Rice University, USA
Utpal Dholakia, Rice University, USA

Paper #3: The Persuasive Advantage of Change

Daniella Kupor, Boston University, USA
Jayson S. Jia, University of Hong Kong, Hong Kong
Zakary L. Tormala, Stanford University, USA

Paper #4: How does risk sound? The Fit Between Harsh (Soft) Names and Uncertainty (Certainty)

Keith Botner, Lehigh University, USA
Arul Mishra, University of Utah, USA
Himanshu Mishra, University of Utah, USA

SESSION OVERVIEW

Consumers deal with uncertainty on a regular basis: They have to navigate uncertainty in their preferences, process uncertain marketing information, make decisions that could have uncertain outcomes, and even make choices under the influence of incidental feelings of uncertainty. Given the ubiquitousness of uncertainty in consumer environments it is imperative to understand how individuals deal with uncertainty and how their decisions are affected by it in order to gain a comprehensive understanding of consumer behavior.

The papers in this session showcase a variety of novel antecedents and consequences of uncertainty in consumer contexts. Furthermore, the session sheds light on how consumers and marketers may use uncertainty strategically to their benefit. Covering a wide range of important implications such as increasing persuasiveness of marketing communications, improving consumer welfare through better financial decision making, reducing consumer guilt, and improving product names, the research presented here provides rich and multifaceted contributions.

In paper 1, Acikalin, Khan, and Shiv illustrate that consumers can strategically choose uncertain options over certain options. The finding is contrary to prior research arguing that consumers are uncertainty averse. Authors show that choosing uncertain options over certain ones make consumers feel less guilty about the outcome.

In paper 2, Chowdhry and Dholakia demonstrate how uncertainty about one's own financial situation negatively impacts financial decisions. They show that increased self-awareness reduces uncertainty, which increases self-efficacy, allowing improved performance on financial management with increasing levels of financial literacy.

In paper 3, Kupor, Jia, and Tormala establish that the mention of changes about a product induces uncertainty in the form of a perceived knowledge gap. They illustrate that this uncertainty sparks curiosity, which boosts processing of information about the changed product when consumers receive a message containing compelling information.

In paper 4, Botner, Mishra, and Mishra find that amidst decisions associated with higher uncertainty or volatility, consumers elicit a preference for (brand or product) names with lower phonetic

comfort. Grounded in linguistics and decision theory, their results illuminate how the seemingly uninformative yet inescapable factor of the sound of a word influences consumer decisions.

Taken together, these papers showcase how uncertainty can be studied in many different consumer contexts to answer both theoretically and managerially important questions. In doing so, the session offers novel insights into how uncertainty influences consumer judgement and choice, raising fundamental questions such as "How can we improve consumer welfare by intervening in how consumers deal with uncertainty?", "When do consumers benefit from the presence of uncertainty?", "How can marketers strategically increase and reduce uncertainty to their benefit?", and "How can marketers capitalize on uncertainty when they have no control over it?". The session not only advances the theoretical understanding of how uncertainty drives judgment and behavior, but also generates novel hypotheses for further research. The session is likely to appeal to a broad audience, as the papers investigate the role of uncertainty in a variety of popular consumer behavior contexts such as persuasion, brand and product choice, and financial decision making.

Guilt-Free Indulgence at the Cost of Certainty

EXTENDED ABSTRACT

Past research has documented that consumers are averse to uncertainty (Gneezy, List, and Wu 2006; Simonsohn 2009). In this research, we propose that consumers may counterintuitively choose uncertain options over certain options. We build on the notion that consumers often find themselves in situations where they would like to choose a particular option, but they do not want the responsibility associated with the choice. For instance, choosing an indulgent, hedonic, vice, or even more expensive alternative can induce guilt (Dahl, Honea, and Manchanda 2003; Dhar and Wertenbroch 2000; Khan and Dhar 2006; Kivetz and Simonson 2002). In such contexts, where consumers anticipate feeling guilty as a result of a choice, we posit that they may demonstrate a preference for uncertain options.

We postulate that choosing an uncertain (or stochastic) option (e.g., 90% chance to get the unhealthy option and 10% chance to get the healthy option) reduces responsibility and thus the guilt arising from the choice. We further predict that individuals are relatively insensitive to the amount of uncertainty, where even a small amount of uncertainty can reduce guilt. Thus, compared to a fair coin flip, consumers may prefer stochastic options that make receiving the preferred outcome more likely. In other words, these options may not only relieve the guilt associated with the decision, but also maximize the chances of receiving the preferred, otherwise guilt-inducing outcome. We test these predictions and provide process evidence across three studies (S1-S3).

In S1 participants (N=101) were asked to make a choice between two \$20 gift cards (GC): a GC to a hedonic ice-cream store and a GC to a utilitarian juicery (Options in all studies were pretested to be relatively hedonic or utilitarian. Hedonic options were perceived as less healthy and more guilt inducing for all stimulus sets, $p < 0.001$). Participants received the following options and were entered into a lottery for a chance to receive a GC based on their choice.

Receive a...

A) \$20 GC to Rick's Ice Cream with 100% probability.

- B) \$20 GC to Rick's Ice Cream with 70% probability and a \$20 GC to Pressed Juicery with 30% probability.
- C) \$20 GC to Pressed Juicery with 70% probability and a \$20GC to Rick's Ice Cream with 30% probability.
- D) \$20 GC to Pressed Juicery with 100% probability.
- E) \$20 GC to Pressed Juicery with 50% probability and a \$20GC to Rick's Ice Cream with 50% probability.

Results revealed that a significant proportion of participants chose stochastic options (B and C) over both certainty (A and D) and indifference (E; $p < 0.0001$), showing a preference for uncertain options over certain ones. Participants choosing stochastic options (B and C) while an indifference option (E) is present indicates that the observed preference for uncertain options is not simply due to indifference. Moreover, the difference in guilt ratings between the two options significantly increased the likelihood of choosing a stochastic option ($\beta_{\Delta\text{Guilt}} = 0.40$, $z = 2.13$, $p = 0.033$). In other words, anticipating more guilt as a result of the choice increased the preference for an uncertain option.

In S2 ($N=500$), participants chose between a set of more hedonic or utilitarian snack bars. The design was similar to S1. After the choice, participants reported how guilty they felt about their choice. They also completed the Test of Self-Conscious Affect (Tangney 1990). This allowed us to uncover individual differences in how people deal with guilt. If individuals choose uncertain options to attribute a guilt-inducing outcome on "chance" and hence feel less guilty, then those with a stronger tendency to blame negative self-conscious emotions on external factors should prefer stochastic options more. Results were consistent with this logic: A significant proportion of participants chose a stochastic option, and this choice was associated with the perceived guilt difference between options. Moreover, individuals with higher tendencies to blame external factors for negative self-conscious feelings were in fact more likely to choose a stochastic option (but not indifference; $\beta_{\text{Blame-Guilt}} = 0.46$, $z = 3.55$, $p = 0.00039$). This provides further evidence for uncertainty serving as a guilt reduction mechanism. Moreover, those choosing a stochastic option reported less guilt associated with the decision ($\beta_{\text{DecisionGuilt}} = -0.75$, $t = -2.89$, $p = 0.0041$), suggesting that choice of an uncertain option is an effective guilt-reduction mechanism.

S3 ($N=132$) further tests the suggested guilt-reduction process. The choice was similar to S1, with the exception that this time we manipulated whether participants choose among mixed (healthy and unhealthy) or homogeneous (healthy- or unhealthy-only) choice-sets consisting of 25\$ GCs. If the preferences for uncertain options are driven by a motive to reduce guilt, then people should be more likely to choose uncertain options in mixed choice-sets as compared to homogenous choice-sets, because the anticipated guilt is larger when choosing an unhealthy option over a healthy one, compared to choosing among various unhealthy options (Dhar and Wertenbroch 2012). As predicted, participants were more likely to choose stochastic options (and not indifference) from mixed as opposed to homogeneous choice-sets, ($\beta_{\text{MixedvsHomogeneous}} = 1.02$, $z = 2.05$, $p = 0.04$) supporting the hypothesized guilt-reduction role of uncertainty in this choice context.

Despite the ubiquitousness of uncertainty aversion in consumer choice, we demonstrate a context where consumers elicit a preference for uncertainty. Our work contributes to several streams of literature: We contribute to self-control and guilt literatures by showing that consumers can strategically use uncertainty as a guilt-reduction mechanism. Our results also contribute to research on self-signaling by showing that individuals take diagnostic costs of their choices into account while making a decision. Finally, we find that by choosing stochastic options that reveal one of the options to be

preferred, consumers systematically violate stochastic dominance, a fundamental axiom of choice.

Know Thyself Financially: How Financial Self-Awareness Benefits Consumers

EXTENDED ABSTRACT

To combat financial challenges faced by Americans such as low savings rates, high rates of impulsive spending and debt levels, one approach that has been pursued vigorously is greater financial education. Current methods focus on teaching consumers basic economic and financial concepts such as interest rates, inflation, and differences between individual stocks, bonds, and mutual funds. However, despite years of spending princely sums on financial education programs (\$670 million was spent in 2012 alone), evidence regarding its beneficial effects on financial behaviors is shaky. For example, a recent meta-analysis of 201 studies examining the relationship between financial knowledge and financial behaviors found virtually null effects, leading the study's authors to conclude that "financial education as studied to date has serious limitations" (Fernandes, Lynch, and Netemeyer 2014, p.1861). Further, despite an abundance of financial tips and recommendations on broadcasts and in books, consumers are confused and frustrated about how to handle the many different aspects of their personal finances (Neiser 2016).

In this research, we propose a different approach. Specifically, instead of general knowledge about financial concepts, we propose that a more effective way to encourage prudent financial behaviors is by reducing uncertainty and raising consumers' self-awareness regarding their own current financial situation. We refer this to this type of certainty and self-knowledge as "Financial Self-Awareness" (FSA), defining it as certainty about one's current financial assets, liabilities, and spending patterns. Our central thesis is that a higher level of FSA will be associated with more positive downstream financial behaviors for the consumer. Our research thus makes the important conceptual distinction between two types of consumer knowledge regarding personal finances: a general understanding of economic and financial principles (i.e., financial literacy), and the specific understanding of one's own current financial condition (i.e., FSA).

We expect that the positive effects of FSA on downstream financial behaviors will be mediated by perceptions of efficacy about handling personal finances, which we call financial self-efficacy (FSE). This prediction is based on existing research showing that self-efficacy, defined as beliefs regarding one's capabilities for a particular task, is positively related to performance only when uncertainty is low (Schmidt and DeShon 2010). In the context of our research, FSA reduces uncertainty by improving consumers' clarity regarding their personal financial situation. The basis of this hypothesis is that higher levels of self-awareness, which also correspond with lower uncertainty, will increase the individual's confidence in one's abilities to handle personal finances (Bandura and Cervone 1983).

We also distinguish between three categories of financial outcomes: financial satisfaction, spending decisions, and saving and investing decisions. We hypothesize that the consumer's financial literacy will moderate the direct effect of FSA only on saving and investing decisions via response efficacy. Long-term financial decisions are inherently complex; consequently, we expect that having factual understanding of economic and financial principles will contribute to making better choices (e.g., Lusardi and Mitchell 2011) and channeling one's self-control into more effective actions (Gibson, Wardle, and Watts 1998) when the consumer is aware of his or her current financial condition. Financial literacy is not needed to evaluate financial satis-

faction or make spending decisions – FSA is enough to evaluate both financial satisfaction and spending decisions.

We test these hypotheses in a series of seven studies. Studies 1A-1C create and validate our measure of FSA and test the hypothesized mediating role of financial self-efficacy. Study 2 tests the main effect of FSA and moderating effect of financial literacy on saving and investment. Study 3 extends the findings of study 2 to financial satisfaction and spending, while also establishing test-retest validity of our FSA measure. In study 4, we manipulate the effects of FSA and investigate the differential effects of low (vs. high) FSA on saving, investment, and spending decisions. In study 5, we test our full conceptual model with financial satisfaction and patterns of spending and saving. In our sixth and final study, we use data from the 2015 National Financial Capability Study, a largescale national survey (of over 27,000 people) to test our hypotheses and provide external validity. The findings of these studies provide consistent support for our hypotheses and help to generate new insights into the role played by consumers' financial knowledge in affecting their downstream behaviors.

The findings of these studies provide consistent support for our hypotheses and help to generate new insights into the role played by consumers' financial knowledge in affecting their downstream behaviors. In conclusion, by demonstrating the importance of greater certainty and awareness about one's current financial condition and by providing a practical approach to measure consumers' financial self-awareness, this research offers a straightforward and effective way of promoting prudent financial behaviors among consumers. Its results also clarify the role of consumers' financial literacy in affecting downstream financial behaviors, specifically by showing that financial literacy amplifies the positive effect of FSA on saving and investment decisions. However, financial literacy has no effect on financial satisfaction or spending decisions. We thus take a step forward in reconciling the mixed results regarding the effectiveness of financial literacy found in earlier research and identify a new construct that may complement financial education programs.

The Persuasive Advantage of Change

EXTENDED ABSTRACT

Which would prompt more purchases: An advertisement highlighting a product's long-standing health benefits, or an advertisement for an equivalent product that frames these health benefits as the result of an ingredient change? Which would generate greater support: An advertisement highlighting the long-standing advantages of a policy, or an advertisement for the equivalent policy noting that the advantages arose from a change? Across these contexts, both messages describe equivalent alternatives with the same attributes; however, one message frames them as the result of a change while the other message does not. Does merely mentioning that something has changed affect the persuasiveness of a message promoting it?

Previous research suggests that consumers often prefer the status quo over change, and suggests that consumers' preference for familiarity contributes to this preference. In fact, consumers prefer the exact same object when they perceive it to be familiar or the current state of affairs compared to when they perceive it to be less familiar or a deviation from the current state (Bornstein 1989; Zajonc 2001; Kahneman, Knetsch, and Thaler 1991). Despite consumers' frequent aversion to change from the status quo, we theorize that references to change can promote preference in the context of persuasion. In particular, we theorize that a reference to change prompts a meta-cognitive awareness of a knowledge gap regarding the etiology and likely consequences of that change, which in turn sparks curiosity.

We further predict that this heightened curiosity leads people to more deeply process information regarding the changed product, which can increase the information's persuasive impact (e.g., consumers' real purchase decisions) under specifiable conditions. We test these predictions in five studies.

In Study 1, participants from a community college read strong arguments promoting a chocolate, and were randomly assigned to read that it had either changed or not; all other information was kept constant. Participants who read that the chocolate changed purchased more chocolates ($M = 2.83$) than participants who did not ($M = 1.73$; $t(97) = 2.76, p = .007$).

If this effect occurs because change increases processing, then it should be largest among consumers low in Need for Cognition (NFC). This is because interventions which operate by increasing processing have their largest effect among low-NFC (vs. high-NFC) consumers (Cacioppo et al. 1984). We tested this prediction in Study 2. Participants read information containing strong arguments promoting granola that was framed as having (vs. not having) changed. An interaction emerged between change condition and consumers' NFC ($b = 1.02, t = 2.20, p = .03$): The change effect emerged among low-NFC individuals ($p = .001$) but not high-NFC individuals ($p = .927$).

Increased processing increases sensitivity to information quality (Petty and Cacioppo 1979). Therefore, if messages referencing change prompt greater processing, then strong (vs. weak) arguments should (vs. should not) boost persuasion in response to those arguments. Study 3 tested this possibility. Participants were randomly assigned to read either that granola had changed or not, and to read either strong or weak information promoting the granola. Analysis revealed the predicted 2 (Argument Strength: Strong vs. Weak) \times (Granola: Changed vs. Unchanged) interaction on participants' attitudes towards the granola, and their desire to purchase it, $F_s(1, 347) > 6.33, p_s > .010$: Among participants who read strong arguments promoting the granola, participants who did (vs. did not) read that the granola changed had more favorable attitudes towards it, and were more likely to purchase it, $F_s(1, 347) > 6.03, p_s < .010$. In contrast, change had no impact among participants who read weak arguments, $F_s(1, 347) < 1.35, p_s > .247$.

Study 4 examined our prediction that change increases processing by sparking curiosity. Participants read strong arguments regarding the health benefits of minerals in Alaska's tap water. The current level of minerals was the same across conditions, but participants read that this level had either changed or not, with no mention of previous levels. Change resulted in more favorable attitudes, $t(200) = 2.53, p = .012$, greater processing, $t(200) = 2.06, p = .040$, and greater curiosity, $t(200) = 3.60, p < .001$. A serial mediation model with bootstrapping showed that referencing change increased the strong information's persuasive impact because it fostered curiosity, which increased processing, which fostered more favorable attitudes (95% CI: .0247, .1587).

Because references to change increase processing, Study 5 finds that change references promote greater attitude certainty. Attitudes held with greater certainty are more persistent over time and are more resistant to persuasive attack (Rucker, Tormala, Petty, and Briñol 2014). Participants read about a sports team that either extended Player A's contract (in the no change condition) or added Player A to its roster (in the change condition). All participants read strong arguments regarding Player A's skills. Participants in the change condition had more favorable attitudes towards Player A, processed the information more deeply, and were more curious about it, $t_s(198) > 2.32, p_s < .021$. The same serial mediation documented in Study 4 replicated in Study 5 (95% CI: .0199, .1346). In addition, change also boosted attitude certainty ($t(198) = 2.87, p = .005$), and this ef-

fect persisted when controlling for attitude extremity ($F(1, 197) = 4.23, p = .041$). A serial mediation showed that change increased certainty because it fostered curiosity, which increased processing and then boosted certainty (95% CI: .1010, .3106).

Together, we find that referencing a change can increase the persuasive impact of information. Mediation and moderation designs provide converging evidence that this occurs because mention of change sparks curiosity, which boosts information processing. These results are the first to demonstrate that references to change in persuasive messages can play an important and generalizable role in shaping consumers' attitudes, preferences, and real purchase decisions. Besides having numerous applications for marketing promotion, our findings contribute to the curiosity literature by uncovering a previously undocumented antecedent to curiosity—the awareness of change. Our findings also contribute to the literature examining people's preference for familiarity and the status quo by uncovering systematic conditions in which the reverse preference emerges.

How Does Risk Sound? The Fit Between Harsh (Soft) Names and Uncertainty (Certainty)

EXTENDED ABSTRACT

The words we use, while simply a composition of sounds, profoundly influence decisions and experiences. The linkage between sound and meaning—known as sound symbolism (Hinton, Nichols, and Ohala 1994)—has been shown to influence such perceptions as shape (Köhler 1947), density (Koriat and Levy 1977), brightness (Newman 1933), and size (Sapir 1929). Moreover, the perceived fit between a product's attributes and its name is believed to influence preference (Klink 2000; Lowrey and Shrum 2007).

In this research, we propose that the sound of a word—an unavoidable but uninformative factor inherent in decision-making—affects the level of investment when a decision is made under uncertainty. For instance, imagine two investment stocks equivalent on all objective criteria, differing only by name; e.g., *Kiki* and *Bouba* (borrowing from Köhler's (1947) example). While normative theory would predict indifference between these two options, we predict that *Kiki* (*Bouba*)—a name shown to result in a more volatile (well-rounded) perception—would be preferred in more uncertain (certain) decision scenarios. Specifically, we develop a coding schema that places names on a comfortable–uncomfortable continuum, adapted from extant research (Smith 1998) and referred to as *phonetic comfort score* (PCS). We suggest that softer-sounding (i.e., high-PCS) names are likely to be preferred in more certain scenarios, whereas harsher-sounding (i.e., low-PCS) names will be preferred amidst greater uncertainty. Importantly, we differ from past work that focuses on just one aspect of a name; rather, we consider it in totality, increasing applicability of our findings.

We propose such a pattern is attributed to the perceived fit (Slooman 1996; Tversky and Kahneman 1974) between a harsher-sounding (softer-sounding) name and a more uncertain (certain) situation. We posit that such a fit is derived from differences in the perceived variance of possible outcomes when the same decision (e.g., a horse race wager) appears with a harsh versus soft name. We find that a harsh-sounding name makes the entity appear more volatile, such that the possible outcomes are perceived as having greater variance (i.e., a wider range). Conversely, a soft-sounding name makes the entity appear less volatile, with the possible outcomes perceived as having less variance (i.e., a narrower range). Based on one's tendency to seek risk (avoid failure) when the probability of winning is low (high), we propose that one is likely to use the upper (lower) bound of possible perceived outcomes as a cue when making a decision.

Therefore, amid greater uncertainty (certainty), we expect to find greater preference for harsher-sounding (softer-sounding) names.

We first use data from thoroughbred racing (Kentucky Derby) to examine wagering as a function of PCS (of the horse's name) and odds of winning (set by odds-makers). Our analysis finds that high (low) PCS is preferred in the context of high (low) chances of success. Second, we find that in times of uncertainty (we use public debt as a proxy for volatility), people have elected presidential candidates with names lower (rather than higher) on PCS. Third, after testing our propositions with real world data, we validated them in a controlled lab setting. We presented participants with names and certainty (odds of winning) in a double-randomized fashion, and measured the amount wagered over five simulated races. Fourth, in order to examine the theoretical proposition that low-PCS names signal greater variance of outcomes, participants provided projected finish position for horses with low-PCS or high-PCS names as one of twelve (equiprobable) entrants in a series of ten horse races. We find greater volatility (in the form of mean absolute deviation) in the estimated finish for names low (vs high) on PCS.

Fifth, we procure process evidence using physical response data from a simulated horse race using a hand grip dynamometer. We measure static force applied to “power” a horse, and examine how this force might differ based on PCS (high or low) and odds (favorite/more certain or long shot/uncertain). With extant research on optimism linking increased confidence to effort (Carver and Scheier, 1998, 2014), we would expect to find greater force for low (high) PCS for long shots (favorites). Results indicate greater force applied when PCS is low (high), suggesting greater optimism for low (high) PCS amidst greater uncertainty (certainty). Finally, we propose that if our theorizing is correct—i.e., if this effect occurs because of the fit between harsh (soft) names and uncertainty (more certainty)—then we should find that this pattern reverses when the scenario changes from the gain (e.g. winning) to the loss (e.g., preventing a loss) domain. We utilize hurricane data made available through Jung et al. (2014) that measures select variables relating to fatalities from past US hurricanes. We calculate the PCS of the hurricane name and predict storm fatalities as a function of PCS, storm severity, and their interaction. Consistent with our theorizing, we find evidence that low-PCS (high-PCS) names are perceived as more of a reality—and thus see greater compliance—amidst higher (lower) risk scenarios.

In sum, the seemingly uninformative yet inescapable factor of the sound of a name influences decisions under uncertainty. Our findings have significant implications. Marketers can seek to align brand names with product usage perceptions; e.g., a more certain (uncertain) product may be better suited for a high-PCS (low-PCS) name. Moreover, consumers can use these findings as an aid in decision making, ensuring greater reliance on informative, objective criteria relating to certainty of a product's success, and less reliance on the uninformative, subjective factor of name. Finally, policy makers can use this information to better predict adoption, raise awareness, or maximize compliance of a given public initiative based on its name and expected chance of success.

REFERENCES

Paper #1

- Bodner, Ronit and Drazen Prelec (2003), “Self-Signaling and Self-Control,” in *Time and Decision: Economic and Psychological Perspectives on Intertemporal Choice*, G. Loewenstein, D. Read, and R. Baumeister, eds., Russell Sage Foundation, 277–98.

- Dahl, Darren W., Heather Honea, and Rajesh V. Manchanda (2003), "The Nature of Self-Reported Guilt in Consumption Contexts," *Marketing Letters*, 14 (3), 159–71.
- Dhar, Ravi and Klaus Werthenbroch (2000), "Consumer Choice Between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (1), 60–71.
- Dhar, Ravi and Klaus Werthenbroch (2012), "Self-Signaling and the Costs and Benefits of Temptation in Consumer Choice," *Journal of Marketing Research*, 49 (1), 15–25.
- Gneezy, Uri, John A. List, and George Wu (2006), "The Uncertainty Effect: When a Risky Prospect Is Valued Less than Its Worst Possible Outcome," *Quarterly Journal of Economics*, 121 (4), 1283–1309.
- Hsee, Christopher K. and Bowen Ruan (2016), "The Pandora Effect: The Power and Peril of Curiosity," *Psychological Science*, 27 (5), 659–66.
- Khan, Uzma and Ravi Dhar (2006), "Licensing Effect in Consumer Choice," *Journal of Marketing Research*, 43 (2), 259–66.
- Kivetz, Ran and Itamar Simonson (2002), "Earning the Right to Indulge: Effort as a Determinant of Customer Preferences Toward Frequency Program Rewards," *Journal of Marketing Research*, 39 (2), 155–70.
- Mijović-Prelec, Danica and Drazen Prelec (2010), "Self-Deception as Self-Signalling: A Model and Experimental Evidence," *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 365 (1538), 227–40.
- Simonsohn, Uri (2009), "Direct Risk Aversion: Evidence from Risky Prospects Valued Below Their Worst Outcome," *Psychological Science*, 20 (6), 686–92.
- Tangney, June Price (1990), "Assessing Individual Differences in Proneness to Shame and Guilt: Development of the Self-Conscious Affect and Attribution Inventory," *Journal of Personality and Social Psychology*, 59 (1), 102–11.

Paper #2

- Bandura, Albert and Daniel Cervone (1983), "Self-evaluative and Self-efficacy Mechanisms Governing the Motivational Effects of Goal Systems," *Journal of Personality and Social Psychology*, 45 (5), 1017–28.
- Fernandes, Daniel, John G. Lynch Jr, and Richard G. Netemeyer (2014), "Financial Literacy, Financial Education and Downstream Financial Behaviors," *Management Science*, 60 (8), 1861–83.
- Neiser, Brent (2016). "Financial Stacking: A Modern American Burden," National Endowment for Financial Education. Retrieved from <http://www.nefe.org/Press-Room/NEFE-Digest/NEFE-Digest-2016/Sept-Oct-2016/Land-of-Confusion>
- Schmidt, Aaron M. and Richard P. DeShon (2010), "The Moderating Effects of Performance Ambiguity on the Relationship between Self-efficacy and Performance," *Journal of Applied Psychology*, 95 (3), 572–81.
- Schwarzer, Ralf, and Matthias Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in Health Psychology: A User's Portfolio. Causal and Control Beliefs* (pp. 35–37). Windsor, UK: NFER-NELSON.

Paper #3

- Bornstein, Robert F. (1989), "Exposure and affect: Overview and meta-analysis of research, 1968–198," *Psychological Bulletin*, 106(2), 265–289.
- Cacioppo, John T., Richard E. Petty, and Chuan Feng Kao (1984), "The efficient assessment of need for cognition," *Journal of Personality Assessment*, 48(3), 306–307.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), "Anomalies: The endowment effect, loss aversion, and status quo bias," *The Journal of Economic Perspectives*, 5(1), 193–206.
- Petty, Richard E. and John T. Cacioppo (1979), "Issue Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses," *Journal of Personality and Social Psychology*, 37(10), 1915–1926.
- Rucker, Derek D., Zakary L. Tormala, Richard E. Petty, and Pablo Briñol Turnes (2013), "Consumer conviction and commitment: An appraisal-based framework for attitude certainty," *Journal of Consumer Psychology*, 24(1), 119–136.
- Zajonc, Robert B. (2001), "Mere exposure: A gateway to the subliminal," *Current Directions in Psychological Science*, 10(6), 224–228.

Paper #4

- Hinton, Leanne, Johanna Nichols, and John J. Ohala (1994), "Introduction: Sound Symbolic Processes," in *Sound Symbolism*, Leanne Hinton, Johanna Nichols, and John J. Ohala, eds. Cambridge, UK: Cambridge University Press.
- Klink, Richard R. (2000), "Creating Brand Names with Meaning: The Use of Sound Symbolism," *Marketing Letters*, 11 (1), 5–20.
- Köhler, Wolfgang (1947), *Gestalt Psychology*, 2nd ed., New York: Liveright Publishing.
- Koriat Asher, and Ilia Levy (1977), "The Symbolic Implications of Vowels and of Their Orthographic Representation in Two Natural Languages," *Journal of Psycholinguist Research*, 6 (2), 93–103.
- Lowrey, Tina M., and Larry M. Shrum (2007), "Phonetic Symbolism and Brand Name Preference," *Journal of Consumer Research*, 34 (3), 406–14.
- Newman, Stanley S. (1933), "Further Experiments in Phonetic Symbolism," *The American Journal of Psychology*, 45 (1), 53–75.
- Sapir, Edward (1929), "A Study in Phonetic Symbolism," *Journal of Experimental Psychology* 12 (3), 225–39.
- Sloman, Steven A (1996), "The Empirical Case for Two Systems of Reasoning," *Psychological Bulletin*, 119 (1), 3–22.
- Smith, Grant W. (1998), "The Political Impact of Name Sounds," *Communications Monographs*, 65 (2), 154–72.
- Tversky, Amos, and Daniel Kahneman (1974), "Judgment under Uncertainty: Heuristics and Biases," *Science*, 185 (4157), 1124–31.

Impacts of Language on Consumer Behavior

Chairs: Ernest Baskin, Saint Joseph's University, USA

Peggy Liu, University of Pittsburgh, USA

Paper #1: The Unexpected Implications of Product Descriptors on Product Perceptions

Ernest Baskin, St. Joseph's University, USA

Peggy Liu, University of Pittsburgh, USA

Paper #2: Make Your Tweety Bird Tweet: Use of Textual Paralanguage in Brand and Spokescharacter Online Communications

Andrea Webb Luangrath, University of Iowa, USA

Joann Peck, University of Wisconsin – Madison, USA

Victor A. Barger, University of Wisconsin – Whitewater, USA

Paper #3: Do you e-care? Analyzing the Impact of Dialogue Dynamics in Online Service Resolutions

Francisco Villarroel Ordenes, University of Massachusetts-Amherst, USA

Dhruv Grewal, Babson, USA

Paper #4: Asymmetry in Emotion Language Is Consequential For Evaluative Judgments

Chiara Longoni, Boston University, USA

Geeta Menon, New York University, USA

SESSION OVERVIEW

Since the days of the Whorfian hypothesis (Whorf 1956), much research has been done on how language shapes both cognition and emotion. The role of language in affecting consumer behavior is less well-understood, however. Yet language is highly important in consumers' lives, whether in the form of descriptors on product packages or even in terms of consumers' own linguistic engagement with brands. In this session, we have assembled four papers that collectively examine how different facets of language shape consumer behavior. As a group, these papers raise two main questions: how can language be used to influence consumer cognitions and emotions, and how can marketers take advantage of these influences and structure the language content of their promotions to take advantage of consumer biases.

First, Baskin and Liu examine the effects of unknown language descriptors on product perceptions, finding that consumers make inferences about products, both in terms of price and taste, despite not understanding the descriptor's meaning and having no a priori associations with the descriptor. They present nine studies showing how price perceptions are increased while taste perceptions are decreased when consumers are uncertain about the meanings of product descriptors.

Second, Luangrath, Peck, and Barger examine language use on Twitter, in particular, textual paralanguage and explore how its usage affects perceptions of brand competence and warmth. They present four studies showing that introducing non-word items into a brand's messaging can decrease competence perceptions of the brand.

Third, Ordenes and Grewal examine language through automated text mining on a sample of online dialogues (N=2,084) between customers and employees of various companies including Amazon and Tesco as a way of understanding the impact of interactional control on the service resolution. They use this data to show that, beyond sentiment, interactional control within a dialogue has a non-linear effect (diminishing returns) on the service resolution. In addition, they show that the nonlinear effect of interactional control is stronger for

dialogues in which the trend of employee positivity across messages is increasing.

Finally, Longoni and Menon examine emotional language and its effects on evaluative judgments. Across six studies, they show that the use of positive emotion words lowers emotion intensity and product evaluation.

Overall, all of these papers are at advanced stages, and a range of methods—from lab experiments to text mining—are employed. By examining the multi-faceted impact of aspects of language on consumer perceptions, we hope that this session helps to spur on a new wave of research that delves deeper into aspects of language and how they affect consumer behavior. We expect this session to appeal to researchers interested in the topics of language, word-of-mouth, and online marketing.

The Unexpected Implications of Product Descriptors on Product Perceptions

EXTENDED ABSTRACT

Imagine going to a restaurant and seeing meaningless descriptors on the menu to describe the food items. For example, envision the items, “fiducated cornbread” or “faldered hamburger steak” as you peruse the menu. Even though you are unaware of the meaning of “fiducated” or “faldered” (in fact, they have no meaning), how might they change your perception of the item they are associated with? In particular, would the descriptors affect your price or taste perception of the menu items?

In this research, we examine the effects of meaningless descriptors on perceptions of products, both in a restaurant menu context, as well as more broadly. In particular, we examine how adding descriptors, even meaningless ones with no inherent meaning, affect product price perceptions and in the case of food, taste perceptions. We show that meaningless descriptors increase price perceptions through increasing consumer uncertainty about the product. Thus, consumers may assume the product is more exceptional. Regarding taste, we draw from the notion that consumers are risk averse both generally and especially in the food domain to predict that the uncertainty about product characteristics may lead to increased risk perceptions and thus a decrease in predicted taste.

We present a series of nine studies to test these hypotheses. First, we pretest meaningless descriptors in order to ensure that they are, in fact, unknown to the majority of our participants. In study 1, we establish our main price effect in the food domain. In addition, we show that meaningless descriptors actually hurt predicted taste and enjoyment and have negative downstream consequences for food purchase intentions. Next, in studies 2a and 2b, we replicate our main price effect and show that it holds both inside and outside the food domain. We also find evidence against processing fluency as an alternative explanation by showing that descriptor complexity, one measure of fluency, does not affect price perceptions in 2a. Study 2b further rules out fluency by using a different manipulation of fluency, hard-to-read font, and showing that meaningless descriptors affect price and taste perceptions over and above the effect of fluency. Next, study 3a, shows our serial mediation mechanism for price perceptions in that meaningless descriptors create uncertainty about the general characteristics of a product which then leads people to predict that the product will be more exceptional thus leading to

increased price perceptions. Study 3b shows our serial mediation mechanism for taste perceptions in that meaningless descriptors decrease taste perceptions by increasing uncertainty and increasing potential product risk therefore leading to decreased taste perceptions. Additionally, we look at two potential boundary conditions for the price effect. Study 4a provides additional support for the role of uncertainty by showing that, when product uncertainty is decreased by showing participants a photograph of the product in question, the effect is attenuated. Study 4b then provides additional support for the role of product exceptionality by showing that special occasion products, which are already exceptional, also act as a moderator for our effect. Finally, study 5 shows that the price effect obtains even when price is given to the consumer.

In summary, this research contributes to a number of literatures. First, it contributes to the area of linguistic psychology and the price perception literature writ large. The literature in this area has not been able to disentangle the effects of descriptors as all studies that we are aware of confound the existence of descriptors with the meaning that they give to the products that they describe. While we do not believe that the meaning gained from descriptors has no effect on perceptions [many studies have shown that it does in areas that we find a negative effect in, such as taste (Wansink, Painter, and Van Ittersum 2001)], we do believe that a large portion of the pricing perceptions effect may arise from the existence of the descriptor rather than anything related to the content of the descriptor itself and its relation to the product being described. In addition, we contribute to the linguistics literature by showing an area where a lack of linguistic meaning is taken by consumers as a cue to a change in their visualization about the product being described. We grant further evidence that language is a factor in forming cognitions and biases in everyday life. Finally, we also contribute to the nascent field of textual paralinguistics by showing a new instantiation of meaning that supplements the literal meaning of the written language inherent in the descriptor.

Make Your Tweety Bird Tweet: Use of Textual Paralinguistics in Brand and Spokescharacter Online Communications

EXTENDED ABSTRACT

For years, Kellogg's has been utilizing textual paralinguistics in its advertising for Frosted Flakes cereal, printing "THEY'RE GR-R-REAT!" next to the image of Tony the Tiger. Through repetition of the letter 'r', Kellogg's communicates that the word "great" is to be spoken in a drawn out, tiger-like growl. Recent research defines textual paralinguistics (TPL) as written manifestations of nonverbal audible, tactile, and visual communication (Luangrath, Peck, and Barger 2017). In this research, we examine the effects of TPL use by brands and brands' spokescharacters on social media.

There is growing interest in online communications and the insights to be gained from text-rich data. Much of the existing work on language in consumer research has focused on word usage, such as explanatory phrases (Moore 2015), assertive advertisements (Zemack-Rugar, Moore, and Fitzsimons, *forthcoming*), refusal words (Patrick and Hagtvedt 2012), vowel sounds (Lowrey and Shrum 2007), figurative language (Kronrod and Danziger 2013), closeness-implying pronouns (Sela, Wheeler, Sarial-Abi 2012), and meaningless words (Liu and Baskin, *working paper*). Recent work has been instrumental in advancing sentiment analysis beyond dichotomous classifications of positive/negative to a more nuanced consideration of sentiment strength, implicit meanings, and patterns of sentiment (Villarroel-Ordenes et al. *forthcoming*).

We approach the study of language from an alternative perspective, shifting focus from the meaning and interpretation of specific words to the ways in which the words are communicated. While word-based language assessment is a critical component of linguistic analysis, we believe that aspects of messages conveying properties of speech and communication context are important as well. TPL in text is analogous to nonverbals in face-to-face communication.

Study 1a examines how prominent U.S. brands use TPL in text-based marketing communications. Two sets of brands were selected for this study: Forbes' list of "The World's Most Valuable Brands" (Badenhausen 2013), including brands such as Nike, Google, and Disney, and Time's list of "The 13 Saggiest Brands on Twitter" (Grossman 2014), including brands such as Hamburger Helper, Orbitz, and Old Spice. A Python program was written to collect brand tweets and TAMS Analyzer was used to code the tweets for TPL. Of 5,214 brand tweets, 1,011 (19.4%) contained TPL. Use of TPL was markedly higher by the sassy brands (32.1%) than the Forbes' brands (12.7%). Using these lists as proxies for brand warmth and competence, we hypothesize that sassy brands are likely to be perceived as warmer while Forbes brands, which are more traditional and conservative, are likely to be considered more competent.

Study 1b explores the relationship between TPL and consumer perceptions of warmth and competence. Participants on Amazon's MTurk (N=1,847) were randomly presented with one brand name from the list of Forbes' and Time's brands (study 1a) and asked for their perception of the brand's warmth (Aaker et al. 2010) and competence (Aaker 1997). Results indicate that the Forbes' brands are perceived to be more competent ($M_{\text{ForbesComp}} = 3.78$, $M_{\text{TimesComp}} = 3.29$, $F(1,1846) = 165.28$, $p < .001$), but less warm than Time's sassy brands ($M_{\text{ForbesWarm}} = 3.02$, $M_{\text{TimesWarm}} = 3.27$, $F(1,1846) = 25.70$, $p < .001$). Pearson correlation coefficients reveal that TPL use correlates positively with perceptions of brand warmth ($.16$, $p < .01$) and negatively with perceptions of brand competence ($-.05$, $p < .05$).

To test this relationship, Study 2 investigates whether TPL affects perceptions of brand warmth and competence. Ninety-eight undergraduate students participated in an online study and were asked to imagine that a brand tweets the following: "Big things come in small packages [BIG, Awww, ☺]." Tweets either contained TPL or did not. Results reveal that a tweet containing TPL as compared to a tweet without TPL does not significantly affect perceptions of brand warmth ($M_{\text{NoTPL}} = 3.52$; $M_{\text{TPL}} = 4.06$; $F(1, 97) = 2.89$; $p = .09$) but negatively affects perceptions of brand competence ($M_{\text{NoTPL}} = 4.73$; $M_{\text{TPL}} = 4.09$; $F(1, 97) = 4.58$; $p = .04$).

In Study 3, we investigate whether a brand's spokescharacter can mitigate the negative effects of TPL on perceptions of brand competence. Spokescharacters are often created to imbue brands with personality (Fournier 1998), which may give them leeway to be more informal, humorous, and relatable. A 2 (TPL/no TPL) x 2 (brand/brand mascot) study was conducted with 476 participants on Amazon's MTurk. Participants were asked to imagine that a [brand/brand's mascot] tweets the following: "A penny saved is a penny earned [!!!!, Yippee!, *thumbs up*]." The avatar displayed next to the tweet was either an image of a brand mascot (i.e., a frog) or a neutral brand image (i.e., a green circle). Results indicate that perceptions of brand warmth are not significantly affected by TPL ($M_{\text{NoTPL}} = 4.89$, $M_{\text{TPL}} = 4.69$, $F(1,475) = 2.48$, $p > .10$). Similar to study 2, we find that TPL negatively affects brand competence ($M_{\text{NoTPL}} = 4.96$; $M_{\text{TPL}} = 4.62$; $F(1, 475) = 6.61$; $p = .01$). A significant interaction between the spokescharacter and the TPL condition ($F(1, 475) = 3.79$; $p = .05$) suggests that when a brand tweets using TPL, perceptions of brand competence decrease significantly ($M_{\text{Brand/NoTPL}} = 5.13$; $M_{\text{Brand/TPL}} = 4.52$; $F(1, 472) = 9.72$; $p = .002$). However, when

a spokescharacter tweets using TPL, there is no significant positive or negative effect on perceptions of brand competence ($M_{\text{Frog/NoTPL}} = 4.80$; $M_{\text{Frog/TPL}} = 4.71$; $F(1, 472) = .21$; $p = .65$). In addition, we rule out the possibility that the presence of a smiling frog led to greater positive affect ($M_{\text{Frog}} = 5.54$, $M_{\text{Brand}} = 5.67$, $F(1, 475) = 1.49$, $p > .10$).

This research suggests that, when using TPL in online communications, a brand can avoid negative effects on brand competence by tweeting from a spokescharacter account rather than the brand's main Twitter account. We reason that consumers expect an informal character to use more informal language, but when a brand, a more formal source, uses informal language, it makes the brand seem less formal and thus less competent. As social media platforms continue to add to the range of available text-based symbols, images, and stickers, Frosted Flakes should leave the growling to Tony.

Do you e-care? Analyzing the Impact of Dialogue Dynamics in Online Service Resolution

EXTENDED ABSTRACT

Consumers are increasingly providing feedback and interacting with brands in digital communicational channels. This has given rise to the growing concept e-care, that is, customer service through social online channels such as Twitter and Facebook. For example, the volume of tweets targeted to brands has doubled, and the percentage of users visiting Twitter for customer services increased by 70% during 2013–2014 (McKinsey 2015). Many companies use sentiment analysis—an automated process for deciphering the sentiment contained in text—to assess the sentiment of these conversations, yet this method is limited by its inability to capture dialogue dynamics resulting from consumer-employee interactions. Limited consumer research explicates how language patterns at a dialogue level, can inform the use of sentiment analysis for consumer research (Ordenes et al. 2017).

Relational Communication Theory (Soldow and Thomas 1984) posits that every message comprises content (i.e. substance of a message) and form (i.e. structure of the content). Whereas content relates to the informational aspect, form serves the interpretation of the message in terms the interactional control within a dialogue. Through the form of the message, an interactor positions him- or herself toward dominance, deference, or equality. The interactors' reciprocal propositions entail various combinations of control positions which have an influence on the effectiveness of the interaction.

By theorizing on relational communication (Soldow and Thomas 1984) we posit that the interactional control has non-linear effect (diminishing returns) on the service resolution (hypothesis 1). Then, in line with research on affective meaning (Warriner and Kuperman 2014), we suggest that an increasing trend in positivity across employee messages, has a positive effect on the service resolution (hypotheses 2). Finally, in line with research on the interplay between content and style (Ludwig et al. 2013) we posit that the positive effect of interactional control is stronger when positivity across employee messages increases (hypothesis 3).

A dataset of Twitter and Facebook, consumer initiated dialogues with an employee (all complains), between November 2014 and May 2015, was scraped and pre-processed (e.g. duplicates deleted and data was structured at a dialogue level) by using Knime Analytics 3.2. We identified 2084 dialogues of the retail firms Amazon, Tesco, and Walmart, as well as the car manufacturer Ford.

The dependent variable, service resolution, was coded manually for each dialogue. Two coders coded the service resolution in terms of whether the customer ended up the dialogue satisfied (1) or

dissatisfied (0). Coder inter-reliability was assessed using Krippendorff's alpha, resulting in a value of 0.82.

Interactional control was operationalized using the Relational Communication Framework (Soldow and Thomas 1984). Two coders manually coded each sentence for every message of a dialogue. Each sentence was assigned to a Digit 1 (message author), Digit 2 (grammatical form), Digit 3 (response mode). Then a control position relative to the previous sentence from the customer and the employee was determined (i.e. 1 = deference, 2 = equality, 3 = dominance). Finally, to determine the overall interactional control, an average was calculated from the sentence control positions (SCRL) across the dialogue (1 being the lesser control and 3 being the greater control). Coder inter-reliability was examined by using the Krippendorff's alpha resulting in .99, .89 and .84 for digits "1" "2" and "3" respectively.

To assess the trend of employee positivity across dialogue messages, LIWC (Linguistic Inquiry and Word Count) text analysis software was used (Tausczik and Pennebaker 2010). In line with Ordenes et al (2017), a single positivity trend per dialogue was obtained by computing the slope of positivity across the employee messages within a dialogue. Several control variables such as the number of messages exchanged, picture presence, average employee response time (minutes), social media type, industry type, third participant, and message arousal (Ordenes et al. 2017; Schweidel and Moe 2014; de Vries, Gensler and Leeftang 2012) were included.

In line with our hypotheses, we specified a hierarchical logistic regression approach to estimate 1) the non-linear effect interactional control, 2) employee positivity trend, and 3) their interaction effect. Model 1 represents the baseline of the hierarchical regressions in which we only evaluated the effect of basic sentiment analysis on the service resolution. Model 2 included the nonlinear effect of the interactional control on the service resolution. Our findings supported H_1 by finding a diminishing returns relationship of interactional control. The results of Model 3 supported the proposition of H_2 . A higher level of employee positivity across sentences increases the likelihood of a satisfactory service resolution. Finally, Model 4 incorporated the interaction effect between dialogue interactional control and employee positivity trend. Our results partially supported H_3 , by confirming that dialogues in which employees increase their positivity across sentences, strengthen the relationship between interactional control and the service resolution.

By using the lenses of relational communication theory, the present study informs research on online consumer-employee dialogues. Theoretical contributions in the area of consumer language and managerial implications concerning the development of conversational analytics' methods are offered.

Asymmetry in Emotion Language Is Consequential For Evaluative Judgments

EXTENDED ABSTRACT

Imagine two football fans Tweeting about their team winning the Super Bowl; one fan uses 2 positive emotion words whereas the other fan uses 6 positive emotion words. Which fan will rate the victory as more emotionally intense? Which fan will enjoy the victory more? Content-focused models of judgments (Higgins, 1996) predict that the fan who used 6 positive emotion words experiences the victory more intensely, and therefore enjoys the win more. Contrary to this prediction, we show that for positive (but not for negative) emotion words, the effect is reversed: the greater the number of positive emotion words a person associates with an event, the lower the emotion intensity and evaluation of an event.

We ground our predictions in diverse literatures spanning emotions and how emotions are conceptualized (Barrett, 2007; Lindquist et al., 2006). We also rely on several lines of research that have examined production and development of emotion language (i.e., the vocabulary we use to refer to emotions) in both children and adults. These lines of research are suggestive — although not testing directly—that positive emotion words are less readily available than negative emotion words. For example, in 4-month olds, negative emotions such as anger and fear grab attention more than positive emotions such as happiness, as measured via gaze orientation, recall, and recognition (Montague and Walker-Andrews, 2001). Young children spontaneously and more frequently talk with their parents about the causes of unpleasant emotions than the sources of positive feelings (Dunn et al., 1987; Dunn et al., 1991), and are more prone to reminisce about negative past events than positive ones (Miller and Sperry, 1988). The qualities of parent-child narrative discourse and interactions also suggest that positive emotions are less salient than negative ones. For example, parental questioning, the act of parents enquiring, “what is the matter?”, “what is bothering you?”, is more likely to prompt children to elaborate and think about negative than positive emotions (Lagattuta and Wellman 2001).

Together, these lines of enquiry indirectly suggest that negative emotions are more salient than positive emotions. We test this hypothesis directly and examine its implications for evaluative judgments in a variety of domains. Specifically and across 6 studies, (a) we show that emotion language affects evaluative judgments, (b) we document an asymmetry in positive (vs. negative) active emotion vocabulary, (c) we show that this asymmetry has hedonic consequences across various contexts, and (d) we show that the effect of emotion language on judgments is mediated by the subjective experience of effort associated with emotion generation.

First, we directly test the hypothesis that there is lower chronic accessibility of positive (vs. negative) emotions words. In study 1, we asked participants to generate as many positive or negative emotion words as they could in a set time frame. Participants were able to generate fewer positive emotions than negative emotions, suggesting that negative emotion words dominate the working emotion vocabulary of the average individual ($p < .001$). This difference reflects the English vocabulary (406 positive emotions vs. 499 negative emotions).

Second, we show that this differential accessibility of positive (vs. negative) emotion words is consequential for evaluative judgments in various domains, including recalls of personal experiences, evaluation of photos and blog posts, and product reviews. In studies 2 and 3 we measured the relationship between the number of positive (negative) emotion words used when recalling a personal event, and how intensely positively (negatively) one felt about that personal event. In study 2, participants wrote a post about a personal event that was meaningful to them, had taken place in the recent past, and in which they were happy or unhappy (order counterbalanced). In study 3, participants wrote about current positive and pleasant (or negative and unpleasant) events. In both studies, participants who reminisced about happy past life experiences or recalled pleasant current events subsequently felt less happy the greater the number of positive words they had included in the recall (for past events, $p = .02$; for current events, $p = .01$), whereas the number of negative emotion words they used did not affect mood ratings.

The same effect emerged for evaluation of photos and blog posts in studies 4 and 5. Participants who described positive stimuli (a photo of a smiling child, a photo of the zoo) using 6 positive emotion words rated these stimuli less favorably compared to participants who used 2 positive emotion words ($p = .001$ and $p < .001$ res-

spectively), with the difference in evaluations fully mediated by the effort associated with emotion generation (indirect effect bootLLCI: 0.044 bootULCI: 0.745; bootLLCI: 0.012 bootULCI: 0.518 respectively). However, the number of negative emotion words used to describe negative stimuli did not predict evaluation, nor did effort in emotion generation mediate evaluation.

Finally, in study 6 we tested the proposed phenomenon in the context of product reviews. Participants who used 8 positive emotion words as hashtags after reviewing a cafe subsequently gave the establishment lower star ratings compared to participants who used 3 positive emotion words as hashtags ($p = .001$), unless participants assigned the star rating before reviewing the cafe.

Overall, across several studies, measurements, and contexts, we present a novel framework that advances our understanding of emotions and emotion language, and furthers our knowledge of the consequences of emotions on judgments. Importantly and from a practical standpoint, this research shows how encouraging consumers to express positive affective states, like it is often customary online by use of hashtags, tweets, and short posts, may have aversive consequences on evaluations.

REFERENCES

Paper #1

- Becker, Gay (1998), *Disrupted lives: How people create meaning in a chaotic world*: Univ of California Press.
- Chahuneau, Victor, Kevin Gimpel, Bryan R Routledge, Lily Scherlis, and Noah A Smith (2012), “Word salad: Relating food prices and descriptions,” in *Proceedings of the 2012 Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning*: Association for Computational Linguistics.
- Lee, Leonard, Shane Frederick, and Dan Ariely (2006), “Try it, you’ll like it the influence of expectation, consumption, and revelation on preferences for beer,” *Psychological Science*, 17 (12), 1054-58.
- Lockyer, Tim (2006), “Would a restaurant menu item by any other name taste as sweet?,” *Hospitality Review*, 24 (1), 21-31.
- McCall, Michael and Ann Lynn (2008), “The effects of restaurant menu item descriptions on perceptions of quality, price, and purchase intention,” *Journal of Foodservice Business Research*, 11 (4), 439-45.
- Wansink, Brian, James E Painter, and Koert Van Ittersum (2001), “Do Descriptive Menu Labels Bias a Person’s Taste?,” *Cornell Hotel and Restaurant Administrative Quarterly*, 42 (6), 68-72.

Paper #2

- Aaker, Jennifer L (1997), “Dimensions of Brand Personality,” *Journal of Marketing Research*, 34 (3), 347-56.
- Aaker, Jennifer L., Emily N. Garbinsky, and Kathleen D. Vohs (2012), “Cultivating Admiration in Brands: Warmth, Competence, and Landing in the “Golden Quadrant”,” *Journal of Consumer Psychology*, 22 (2), 191-94.
- Badenhausen, Kury (2013), “World’s Most Valuable Brands: Behind the Numbers,” *Forbes*. < <http://www.forbes.com/sites/kurtbadenhausen/2013/11/06/worlds-most-valuable-brands-behind-the-numbers/>>
- Baskin, Ernest and Peggy Liu (*working paper*), “The Unexpected Implications of Product Descriptors on Product Perceptions.”
- Fournier, Susan (1998), “Consumers and Their Brands: Developing Relationship Theory in Consumer Research,” *Journal of Consumer Research*, 24 (4), 343-53.

- Grossman, Samantha (2014), "The 13 Sassiest Brands on Twitter," Time. <<http://time.com/5151/sassiest-brands-on-Twitter-ranked/>>
- Kronrod, Ann and Shai Danziger (2013), "'Wii Will Rock You!' The Use and Effect of Figurative Language in Consumer Reviews of Hedonic and Utilitarian Consumption," *Journal of Consumer Research*, 40 (4), 726-39.
- Lowrey, Tina M. and Larry J. Shrum (2007), "Phonetic Symbolism and Brand Name Preference," *Journal of Consumer Research*, 34 (3), 406-14.
- Luangrath, Andrea Webb, Joann Peck, and Victor A. Barger (2017), "Textual Paralanguage and its Implications for Marketing Communications," *Journal of Consumer Psychology*, 27 (1), 98-107.
- Moore, Sarah G. (2015), "Attitude Predictability and Helpfulness in Online Reviews: The Role of Explained Actions and Reactions," *Journal of Consumer Research*, 42 (1), 30-44.
- Patrick, Vanessa M. and Henrik Hagtvædt (2012), "'I Don't' versus 'I Can't': When Empowered Refusal Motivates Goal-Directed Behavior," *Journal of Consumer Research*, 39 (2), 371-81.
- Sela, Aner, Christian Wheeler, and Gülen Sarial-Abi (2012), "We Are Not the Same as You and I: Causal Effects of Minor Language Variations on Consumers' Attitudes toward Brands." *Journal of Consumer Research*, 39 (3), 644-61.
- Villarroel-Ordenes, Francisco, Stephan Ludwig, Dhruv Grewal, Ko De Ruyter, Martin Wetzels (forthcoming), "Unveiling What is Written in The Stars: Analyzing Explicit, Implicit, and Discourse Patterns of Sentiment in Social Media," *Journal of Consumer Research*.
- Zemack-Rugar, Yael, Sarah G. Moore, and Gavan J. Fitzsimons (forthcoming), "Just Do It! Why Committed Consumers React Negatively to Assertive Ads," *Journal of Consumer Psychology*.
- Paper #3**
- Berger, J., and Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192-205.
- Bianchi, R., Gacsal, G. and Svoboda, D., (August 2015) "Overcoming obstacles to digital customer care", Retrieved from: <http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/overcoming-obstacles-to-digital-customer-care>. (Last accessed: August 14, 2015).
- De Vries, L., Gensler, S., and Leeflang, P. S. (2012), "Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing", *Journal of Interactive Marketing*, 26(2), 83-91.
- Fehr, R., and Gelfand, M. (2010), "When apologies work: How matching apology components to victims' self-construal facilitates forgiveness," *Organizational Behavior and Human Decision Processes*, 113 (1), 37-50.
- Ludwig, S., De Ruyter, K., Friedman, M., Brüggem, E. C., Wetzels, M., and Pfann, G, (2013), "More than words: The influence of affective content and linguistic style matches in online reviews on conversion rates," *Journal of Marketing*, 77(1), 87-103.
- Schweidel, D. A., and Moe, W. W. (2014), "Listening in on social media: a joint model of sentiment and venue format choice," *Journal of Marketing Research*, 51(4), 387-402.
- Soldow, G. F. and Thomas, G. P. (1984), "Relational Communication: Form Versus Content in the Sales Interaction," *Journal of Marketing*, 48(1), 84-93.
- Tausczik, Y. R. and Pennebaker, J. W. (2010), "The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods," *Journal of Language and Social Psychology*, 29(1), 24-54.
- Thelwall, M., Buckley, K., Paltoglou, G., Cai, D., and Kappas, A. (2010), "Sentiment Strength Detection in Short Informal Text," *Journal of the American Society for Information Science and Technology*, 61(12), 2544-2558.
- Villarroel Ordenes, F., Ludwig, S., De Ruyter, K., Grewal, D., and Wetzels, M, (2017), "Unveiling What is Written in The Stars: Analyzing Explicit, Implicit and Discourse Patterns of Sentiment in Social Media," *Journal of Consumer Research*, Forthcoming.
- Warriner, A., Kuperman, V., and Brysbaert, M. (2013), "Norms of valence, arousal, and dominance for 13,915 English lemmas," *Behavior Research Methods*, 45(4), 1191-1207.
- Paper #4**
- Barret, Mesquita, Ochsner, and Gross (2007), The experience of emotion, *Annual Review of Psychology*, 58, 7.1-7.31.
- Dunn, Bretherton, and Munn (1987). Conversations about feeling states between mothers and their young children, *Developmental Psychology*, 23, 132-139.
- Dunn, Brown, and Beardsall (1991). Family talk about feeling states and children's later understanding of others' emotions *Developmental Psychology*, 27, 448-455.
- Higgins (1996). Knowledge activation: Accessibility, applicability, and salience. In: Higgins ET, Kruglanski AW, editors. *Social Psychology: Handbook of Basic Principles*. New York: Guilford, 133-168.
- Lagattuta and Wellman (2001). Thinking about the past: Early knowledge about links between prior experience, thinking, and emotions. *Child Development*, 72, 82-102.
- Lindquist, Barrett, Bliss-Moreau, and Russell (2006), Language and the perception of emotion, *Emotion*, 6, 125-138.
- Miller and Sperry (1988), The socialization of anger and aggression, *Merrill-Palmer Quarterly*, 33, 1-31
- Montague and Walker-Andrews (2001), Peekaboo: A new look at infants' perception of emotion expressions, *Child Development*, 73, 1339-132.
- Wansink, Brian, James E Painter, and Koert Van Ittersum (2001), "Do Descriptive Menu Labels Bias a Person's Taste?," *Cornell Hotel and Restaurant Administrative Quarterly*, 42 (6), 68-72.

Wisdom from Words

Chairs: Jonah Berger, University of Pennsylvania, USA
Grant Packard, Wilfrid Laurier University, Canada

Paper #1: Differentiation and Cultural Success

Jonah Berger, University of Pennsylvania, USA
Grant Packard, Wilfrid Laurier University, Canada

Paper #2: How do Authenticity Meanings Evolve? A Longitudinal Analysis of Music Album Reviews

Matteo Corciolani, University of Pisa, Italy
Kent Grayson, Northwestern University, USA
Ashlee Humphreys, Northwestern University, USA

Paper #3: When Words Sweat: Identifying Signals for Loan Default in the Text of Loan Applications

Oded Netzer, Columbia University, USA
Alain Lemaire, Columbia University, USA
Michal Herzenstein, University of Delaware, USA

Paper #4: Make America Tweet Again: A Dynamic Analysis of Micro-blogging During the 2016 U.S. Republican Primary Debates

Ron Berman, University of Pennsylvania, USA
Colman Humphrey, University of Pennsylvania, USA
Shiri Melumad, Columbia University, USA
Robert Meyer, University of Pennsylvania, USA

SESSION OVERVIEW

From posting online to texting with friends, more and more of our lives now leave digital traces. Further, the burgeoning digitization of cultural items (e.g., song lyrics) provides an additional wealth of information. How can researchers use all this textual content to study consumer behavior? And what does the language we use reveal about our motivations, relationships, and likely future actions?

This session integrates a variety of perspectives to showcase how textual analysis can provide behavioral insight. Can language shape what becomes popular? Indicate whether someone will default on a loan? How does the meaning of authenticity change over time? Which narratives diffuse through culture and why? Using a diverse set of methods and data sources, this session sheds light on these and other questions as it demonstrates insights from language.

First, **Packard and Berger** examine why things catch on, investigating how differentiation shapes cultural success in popular music. Textual analysis and chart performance of thousands of songs reveals that the more different a song's lyrics are from its genre, the more successful it is. Further analysis reveals that the effect of lyrical differentiation varies across genres (e.g., less important in Dance music, more important in Rap), consistent with their conceptual account.

Second, **Corciolani, Grayson and Humphreys** examine how the meaning of authenticity evolves over time. Looking at nearly five decades of music critic reviews from *Rolling Stone* magazine, they find that a music genre's authenticity evolves from language about product quality (in early phases), to cultural or artistic sincerity (in mature genres), supporting the authors' contentions regarding field-dependency in cultural evolution.

Third, **Netzer, Lemaire and Herzenstein** demonstrate how the language consumers use when requesting loans indicate their future behavior and likelihood of default. Analyzing over 18,000 loan requests from an online crowdfunding platform, and using text-mining and machine-learning tools, they find that references to the future, family, and God are among several language-based factors that improve the ability to differentiate good from bad consumer debtors.

Finally, **Berman, Humphrey, Melumad, and Meyer** analyze over 3 million tweets from before, during and after the 2016 U.S. presidential debates to examine how the Twittersphere influences the diffusion of political information. While one might hope that this new channel of communication has helped better inform the electorate, they find that topics shift from the substantive to the sensational as time passes around each debate, shifting the medium's quality from relatively journalistic to more tabloid in value.

Taken together, these papers highlight how words shed light on important behavioral and cultural phenomena. Notably, each offers an example of how psychological insights can be pursued outside the laboratory. They also illustrate how a variety of researchers can use unstructured data sets (i.e., "big data") and textual analysis to answer relevant consumer behavior questions. The session should be of interest to anyone who studies social influence, word of mouth, financial decision making, and authenticity, as well as those who are interested in this toolkit more generally.

Differentiation and Cultural Success

EXTENDED ABSTRACT

Why do some cultural items succeed while others fail? Academics and practitioners have long been interested in why music, ideas, and other tastes become popular while others languish (Gladwell 2006; Simonton 1980; Lieberman 2000). Some movies, for example, become blockbusters and some songs reach the top of the charts. Even domain experts have difficulty predicting hits (Bielby and Bielby 1994; Hirsch 1972), however, leading some to argue that success is random (Hahn and Bentley 2003; Salganik, Dodds and Watts 2006), driven more by social dynamics than anything specific to the cultural items themselves.

In contrast, we suggest that inter-item similarity, or how similar something is to related cultural items, plays an important role in success. In the context of music, for example, some Country songs have lyrics that are quite similar to other Country songs, while others have lyrics that are quite different. How might similarity or differentiation shape whether something becomes a hit?

We suggest that things that are more differentiated from others will be more popular. People have a drive for stimulation (Zuckerman 1979), and from an early age, children are attracted to novel stimuli, or those that are different from what they have seen before (Flavell, Miller, and Miller 2001). Taken to a collective level, cultural items that are more different from their peers may be liked more, and, as a result, become more popular.

Importantly, the differentiation we suggest is not infinite, but bounded. A song whose lyrics sound like death metal would be extremely different from most country songs, but would also be unlikely to be classified as a country song in the first place. Thus, we examine whether *among* songs classified as belonging to a given genre, those whose lyrics are more atypical, or differentiated from other genre members, are more successful. By adhering enough to genre conventions to be classified as such, these songs may succeed by blending similarity and distinction (Berger, Bradlow, Braunstein, and Zhang 2012). Similar enough to the genre to evoke the warm glow of familiarity (Monahan, Murphy, & Zajonc, 2000), but different enough to be novel and liked more (i.e., two stage valuation; Zuckerman 2016).

Method

We analyze thousands of songs, testing how lyrical differentiation (i.e., how different a song's lyrics are from others within its genre) shapes popularity.

First, we collected song data. We captured consumer demand using Billboard's digital download rankings. This measures sales data from major paid song services (e.g., Apple iTunes). We obtained all songs ranked each quarter for three years (2014-16) for each of seven major genres (e.g., Pop, Rap, Rock). This resulted in a dataset of 4,200 song rankings and 1,879 unique songs.

Next, we used latent Dirichlet allocation (LDA, Blei 2012) to determine key lyrical features. LDA takes a number of texts (songs in our case), and by measuring word co-occurrence, determines the key latent topics or themes that make up those texts, and the words that make up each topic. In this case, some of the themes identified were "car cruising" (e.g., words like "road," "ride," and "drive"), "uncertain love" (e.g., "heart," "need," "love"), and "body movement" (e.g., "shake," "bounce," "clap").

Then, we used these latent topics to calculate how different each song is from songs in its genre. The LDA model outputs the proportion of each song that belongs to each latent topic. One song, for example might be 25% "car cruising," 45% "uncertain love," 10% "body movement," and so on. Averaging across all songs in a genre provides the genre's mean use of language. Country songs, for example, talk a lot about "girls and cars" (39%) and "uncertain love" (36%) and less about "body movement" (2%). We calculate the differentiation of each song by taking the difference between its score and the genre mean for a given topic, aggregating across topics.

Finally, we use an OLS regression to examine the relationship between lyrical differentiation and song performance.

Results

Results demonstrate a significant relationship between lyrical differentiation and popularity. The more different a song's lyrics are from its genre, the more successful it is. 16% lyrical differentiation from the genre mean corresponds to a one position improvement in chart ranking. These results hold controlling for numerous covariates (e.g., artist, radio airplay, prior chart appearance, genre, and presence in multiple genres) and alternative specifications, including those accounting for non-linearity or selection. The results are also robust to whether we compute topics across or within genres. Across all specifications, differentiation was linked to success.

More or Less Typical?

Differentiation could occur in one of two ways. While Rap songs with more differentiated lyrical topics are more successful, for example, this could be because they include even *more* rap-associated content than other Rap songs or because they include *less* Rap-associated content and more content associated with other genres.

Results suggest the latter. Successful songs tend to use less of their genre's own typical topics (e.g., "bad man" in Rap) and more of topics associated with other genres (e.g., country's "uncertain love" in Rap).

Moderation by Genre

Finally, we examined whether the relationship between lyrical differentiation and success varied by genre. Differentiation was good overall, but lyrics may matter less in Dance music, for instance, where attributes that drive movement (e.g., the beat) may be more important than lyrics (Fabbri 1981). Results are consistent with this prediction. Lyrical differentiation matters less in Dance, as well as Pop music, which, almost by definition, is more about mainstreaming than differentiation (Frith 1986).

Conclusion

In conclusion, analysis of thousands of song suggests that differentiation plays an important role in cultural success. More generally, this work demonstrates how natural language processing can be used to study cultural dynamics, and sheds light on psychological drivers of why things catch on.

How do Authenticity Meanings Evolve? A Longitudinal Analysis of Music Album Reviews

EXTENDED ABSTRACT

Research has shown that consumers value authenticity (Grayson and Martinec 2004; Rose and Wood 2005; Valsesia et al 2015). As past research has emphasized, authenticity can be generally defined in one of two ways: (a) being true to one's self, which we call sincerity, but has also been known as expressive authenticity or creative authenticity (Dutton 2004; Ilicic and Webster 2014; Valsesia et al 2015) or (b) being true to some established type or genre, which we call heritage, but is also known as iconic authenticity (Grayson and Martinec 2004) or type authenticity (Davies 2001). In this research, we explore how changing field-level factors can influence the definition of authenticity preferred by music critics. By examining the context of music album reviews, we longitudinally analyze how authenticity meanings evolve over the development of a music genre. The music industry is one domain in which authenticity has particular value to consumers (e.g., Grazian 2003; Peterson 1997). Because audiences value authenticity in music, artists often seek to create authentic music and to perform it authentically, and critics often comment on the authenticity of a musician and his or her music (Peterson 1997; Valsesia et al 2015).

Although previous research has examined the individual and small-group effects involved with evaluating authenticity (Grayson and Martinec 2004; Grayson and Shulman 2000; Valsesia et al 2015) and coping with its paradoxes (Rose and Wood 2005), it has not accounted for field-level dynamics—changes in the age, number, and variety of alternatives—on criteria for evaluating authenticity. Using theoretical tools from cultural sociology and institutional theory, we examine the change of criteria for judging authenticity over time and in conjunction with changes in field age and size.

In our work, we empirically study the evolution of authenticity meanings over time by focusing on the music albums reviewed by the magazine *Rolling Stone* from 1967 to 2014. Our sample consists of 4,924 reviews, which were downloaded from the official website of the magazine. We first conducted a qualitative analysis to identify the most common ways in which the concept of authenticity was discussed. This first analysis enabled us to identify three different types of authenticity most common in our dataset, and which are similar to those identified by Napoli et al. (2014): quality commitment, sincerity, and heritage. Then, we conducted a quantitative, automated text analysis of *Rolling Stone*'s music album reviews (Humphreys 2014) to measure the change in these types of authenticity over time.

We find that, when a genre is new, music reviews tend to mention authenticity in association with quality commitment. As the genre matures, reviewers focus more on authenticity as sincerity, evaluating the motives of the artist. Then, as a genre matures further and faces competition from sub-genres and other genres, reviewers focus more on authenticity as heritage, evaluating it in relation to an ideal type for that genre. We argue that this progression is common across most genres because, over time, the resources available to critics change (as well as the resources available to artists and audiences). By "resources," we mean common understandings among stakeholders about the genre.

Criteria for evaluating authenticity in our dataset therefore has three distinct periods. Specifically, in Phase I (1960s-1970s), quality commitment resulted to be the dominant dimension. During Phase II (1980s-1990s), sincerity was the main dimension. In Phase III (2000s-2010s), heritage was the salient dimension. By drawing both historical and cross-sectional comparisons, we can assess differences according to field-level dynamics of both size and age of the genre. For example, *avant-garde*, which has remained a small genre, went through quality commitment and sincerity stages, but has not yet shifted to evaluation of authenticity according to heritage or type.

Earlier in the development of a music genre, critics, artists, and audiences do not have the resources to judge authenticity according to type. Instead, they rely on a definition of authenticity that does not require field-specific knowledge that people have developed across domains—namely, the common understandings they have regarding how to judge whether someone is being true to self or quality according to some abstract standard.

Using work from cultural sociology, we argue that cultural resources are needed to develop criteria for judging authenticity based on type. As Peterson (1997) points out, an artist cannot be true to an established model until a model has been established. For critics to feel comfortable referring to a musician's adherence to the standards of a genre, industry stakeholders (including both critics and audiences) must have a sufficient level of field-specific knowledge regarding a genre's history and tropes. Commenting about the difference between country music in the 1990s versus the 1920s (when the genre was in its infancy), Peterson argues that: "the most obvious change ... is that there was then no clear tradition of country music with its own past, its own iconic progenitors, its own institutional delivery system, and its own self-conscious fan community" (Peterson 1997, p. 223).

This research makes several contributions to our understanding of authenticity. First, we identify the differential role of field-dependent and field-independent knowledge in criteria for assessing authenticity. That is, field-dependent knowledge leads to assessments of quality commitment and sincerity, but assessments of heritage require more sophisticated knowledge of fields and attributes. Second, the findings explore a kind of cultural capital that is different from that examined previously. Bourdieu defines cultural capital as a resource that an individual person builds up in order to gain advantage in a field. The cultural capital needed to define and promote heritage-based authenticity is not really "owned" by a particular person (although some can be more/less knowledgeable about it) but is instead a resource that everyone in the field can access and refer to when making aesthetic judgments. Although previous research has enumerated different types of authenticity, it has not specified how these are related or may shift in relation to institutional, field-level dynamics.

When Words Sweat: Identifying Signals for Loan Default in the Text of Loan Applications

EXTENDED ABSTRACT

Unprecedented loan default levels were at the heart of the financial crisis of 2008-9 (Lewis 2015). While the majority of these loans were mortgages, a significant amount was in consumer loans. As a result, it became difficult for consumers to secure a bank loan—as much as 30% of the people who wished to get a loan were not able to obtain one through conventional channels (Dogra and Gorbachev 2016). Consequently, Americans turned to other sources. In 2011, 14% of American households (over 16 million households) reported using "non-bank credit," which includes payday loans and pawn shops (Mills and Monson 2013). Arguably, a better alternative

to these "shark" loans emerged in the form of online crowdfunding platforms, which serve as a marketplace for lenders and borrowers. These platforms have become a substantial financial market, with over 1,250 sites and \$34.4 billion in raised funds in 2015 (Crowdfunding industry report, Massolution 2015).

While the idea of crowdfunding may be appealing to both borrowers, who may not be able to get a loan elsewhere, and lenders, who may be able to get better returns on their investments, default rates in crowdfunding sites are high, which puts the entire concept at risk. In comparison to more secured channels such as bank loans, default rates are especially important in crowdfunded loans because the crowdfunding process is riskier and more uncertain—lending money to strangers without any collateral. Furthermore, the online nature of crowdfunding platforms eliminates the human interactions around the financial transaction of granting a loan, which has been shown to reduce default rates. Indeed, Agarwal and Hauswald (2010) found that supplementing the loan application process with the human touch of loan officers decreases default rates significantly due to better screening on the bank's part and higher interpersonal commitment on the consumer's part.

We propose that in a similar vein to loan officers, who are able to assess default likelihood in the offline banking environment, the text that borrowers write when requesting an online crowdfunded loan may leave some traces—similar to body language detected by loan officers—that can improve predictions of future repayment behavior. Specifically, we investigate whether borrowers leave traces of their intentions, circumstances, emotional states, and personality traits in the text they write that are predictive of whether they will default on their loan up to three years after the text was written. To answer these questions we apply text-mining and machine-learning tools to a large dataset of loans from the crowdfunding platform Prosper.

We began by creating an ensemble of predictive models consisting of decision trees and regularized logit models. We find that the predictive ability of the textual information alone is of similar magnitude to that of the financial and demographic information. Moreover, supplementing the financial and demographic information with the textual information improves predictions of default by as much as 4.03%.

Next we used a multi-method approach to uncover the words and writing styles that are most predictive of default. Using a naive Bayes and an L1 regularization binary logistic model we find that loan requests written by defaulting borrowers are more likely to include words related to the borrower's family, financial and general hardship, mentions of God and the near future, as well as pleading lenders for help. We use a latent Dirichlet analysis (LDA) to identify the loan purpose, life circumstances, and writing styles that are most associated with loan default. We find that loans whose purpose is to help with a business or medical circumstances are riskier than other loan types in terms of their default likelihood. Consistent with the naive Bayes results, we find that lenders pleading for help and providing explanations are also associated with higher risk of default.

We further explore the writing styles and personality traces embedded in the loan request text using the Linguistic Inquiry and Word Count dictionary (LIWC; Tausczik and Pennebaker 2010). We find that defaulting loan requests are written in a manner consistent with the writing style of extroverts. This is not surprising as extroverts aspire to have exciting lives, more so than others, and hence spend their money on experiences and worry less about the financial consequences (Brown and Taylor 2014). We further find that defaulting loan requests are written in a manner consistent with the writing style of liars. While we are unable to claim that defaulting borrowers were intentionally deceptive when they wrote the loan request, we believe

their writing style may have reflected their doubts in their ability to repay the loan.

Our research shows that in an environment characterized by high uncertainty, verifiable and unverifiable data have similar predictive ability. While borrowers can truly write whatever they wish in the textbox of the loan application—supposedly “cheap talk” (Farrell and Rabin 1996)—their word usage reveals something about them that we could not have inferred from their financial dossier alone, namely their personality and intentions.

**Make America Tweet Again:
A Dynamic Analysis of Micro-blogging
During the 2016 U.S. Republican Primary Debates**

EXTENDED ABSTRACT

The 2016 presidential election illustrated the growing role that micro-blogging sites such as Twitter play in electoral politics. Whereas politicians once relied on stump speeches to reach potential voters, candidates can now directly speak to their audiences in real time from the convenience of their devices, whether it be to react to a comment made by another, or express a view about an emerging news event. Indeed, the pervasive influence of micro-blogging has been such that *New Yorker* writer Nathan Heller (2016) called the 2016 U.S. presidential campaign the country’s first “Twitter Election”—one where the battle for the “Twittersphere” loomed almost as large as the election itself.

Whether this new channel of communication has helped better inform the electorate in elections, however, is unclear. On one hand, the increased volume of messages from candidates allows them to reach a broader cross-section of potential voters, something that could enhance knowledge about their positions on key issues. On the other hand, the fact that these messages come in the form of 140-character sound bites implies that this broader reach could come with a loss of depth.

In this paper we attempt to explore this issue by reporting an analysis of a unique dataset that characterizes how the substantive and affective content of Tweets evolved before, during, and after the course of three critical Republican Primary debates leading to the presidential election. We focus on the primary debates because past work has shown that they have the largest influence in shaping voter opinion about the candidates—more so than the final presidential debates, when voter opinions are typically solidified (McInney and Warner 2013). We examine how Tweeting behavior—who is Tweeting, what is being Tweeted, and the sentiment that is expressed in the Tweets—changed as the debates evolved over time.

We emerge with three major sets of findings that collectively offer a disquieting view of the ability of the “Twittersphere” to serve as a substantive source of information about the debates. First, we found that as the debates proceeded the Twittersphere provided an increasingly backward-looking account of the debates, as original content describing the event were increasingly dominated in number by re-Tweets of the more popular Tweets posted earlier. In other words, as time progressed the Twittersphere increasingly resembled a replaying of the “greatest hits” from earlier in the debate.

More critically, we found that that this shift to retweeting was also accompanied by a change in the tone and content of what was being posted. While Tweets posted during the debates often mentioned substantive policy issues, after the debate Twitter looked more like a news tabloid, dominated by re-Tweets of content focusing on the more sensationalistic events that occurred during the debates. For example, early in the August 2015 debate there was an initial flurry of Tweeting about the acidic exchange between Donald Trump

and Megyn Kelly about his views toward women. This quickly died out, however, as Tweets shifted their attention to the more substantive policy topics being discussed by the candidates. But by the end of the debates there was a sudden resurgence of interest in the Trump-Kelly exchange, such that one hour after the debates that single topic dominated the Twittersphere.

The third major finding was more theoretical in nature: statistical analyses of the drivers of re-Tweeting rates suggested that the mechanism that drove the popularity of a given Tweet was more complex than that reported in prior research on the drivers of content sharing (e.g., Berger and Milkman 2012). Surprisingly, simple negative and positive emotion tended to be *negatively* associated with re-Tweeting counts. In our case Tweet popularity was positively associated with more nuanced factors such as visual appeal, criticisms expressed through humor, and words related to reward and achievement (e.g., “won,” “lost”).

We suggest that this finding may be explained by the unique motivations for sharing content during live broadcast events on Twitter relative to other media. Unlike message sharing on more restricted networks (e.g., texting, email, or even Facebook), Tweets have the potential to reach particularly broad audiences, such that Tweeters may be motivated to create and/or share posts that allow them to gain as large a share of the Twittersphere as possible during the short span of the events (e.g., Barasch and Berger 2014). If Tweeters believed that the most popular content would be that eschewing substance and embracing sensationalism, as time progressed Tweets containing the latter should come to dominate. In essence, what emerges might be a norm of sensationalism (Heath 1996), where the Twittersphere is dominated by the most extreme instances of this norm; the funniest videos, the most sensationalist moments from the debates.

While our analyses here focused on the dynamics of Tweeting during political debates, we suggest that the findings may generalize to other televised live events such as sporting matches, election coverage, and awards shows — events where there is typically a high flurry of Tweeting activity during a relatively short period of time. There, like here, we might expect to see re-Tweeting come to dominate the generation of original content as events wear on, with the most sensationalist content having the longest staying power. We conclude the paper with a discussion of both the theoretical implications of the work for research on message sharing as well as substantive implications of the findings for political processes.

REFERENCES

Paper #1

- Berger, Jonah, Eric T. Bradlow, Alex Braunstein, and Yao Zhang (2012), “From Karen to Katie: Using Baby Names to Understand Cultural Evolution,” *Psychological Science*, 23(10), 1067-1073.
- Bielby, William T. and Denise D. Bielby (1994), “All hits are flukes: Institutionalized decision making and the rhetoric of network prime-time program development,” *American Journal of Sociology*, 99, 1287–1313.
- Blei, David M. (2012), “Probabilistic Topic Models,” *Communications of the ACM*, 55 (4), 77-84.
- Fabbri, Franco (1981), “Musical Genres,” in *Popular Music Perspectives*, ed. D. Horn and P. Tagg; Göteborg and Exeter: International Association for the Study of Popular Music, p. 52-81.
- Flavell, John H., Patricia H. Miller, and Scott A. Miller (2001). *Cognitive development*. Upper Saddle River, NJ: Prentice Hall.

- Frith, Simon (1986), "Why do songs have words?," *The Sociological Review*, 34(1), 77-106.
- Gladwell, Malcolm (2006), "The formula," *The New Yorker*, Retrieved from http://www.newyorker.com/archive/2006/10/16/061016fa_fact6.
- Hahn, Matthew W., and R. Alexander Bentley (2003), "Drift as a mechanism for cultural change: An example from baby names," *Proceedings of the Royal Society B: Biological Sciences*, 270, S120-S123.
- Heath, Chip, Chris Bell and Emily Sternberg (2001), "Emotional selection in memes: The case of urban legends," *Journal of Personality and Social Psychology*, 81, 1028-1041.
- Hirsch, Paul M. (1972), "Processing fads and fashions: An organization set analysis of cultural industry systems," *American Journal of Sociology*, 77, 639-659.
- Liebertson, Stanley (2000). *A matter of taste: How names, fashions, and culture change*. New Haven, CT: Yale University Press.
- Monahan, Jennifer L., Shiela T. Murphy and Robert B. Zajonc (2000), "Subliminal mere exposure: Specific, general, and diffuse effects," *Psychological Science*, 11, 462-466.
- Salganik, Matthew J., Peter S. Dodds and Duncan J. Watts (2006), "Experimental study of inequality and unpredictability in an artificial cultural market," *Science*, 311, 854-856.
- Simonton, Dean K. (1980), "Thematic Fame, Melodic Originality, and Musical Zeitgeist: A Biographical and Transhistorical Content Analysis," *Journal of Personality and Social Psychology*, 38 (6), 972-983.
- Tausczik, Yla R., and James W. Pennebaker (2010), "The psychological meaning of words: LIWC and computerized text analysis methods," *Journal of Language and Social Psychology*, 29(1), 24-54.
- Zuckerman, Ezra (2016), "Optimal distinctiveness revisited," in *Oxford Handbook of Organizational Identity*, ed. M. G. Pratt, M. Schultz, B. E. Ashforth, D. Ravasi, (Oxford: Oxford University Press), 183-199.
- Zuckerman, Marvin (1979), *Sensation seeking: Beyond the optimum level of arousal*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Paper #2

- Davies, S. (2001). *Musical Works and Performances: A Philosophical Exploration*, Oxford, UK: Clarendon Press.
- Dutton, Denis (2004), "Authenticity in Art," in *The Oxford Handbook of Aesthetics*, ed. Jerrold Levinson, Oxford, UK: Oxford University Press, 258-74.
- Grayson Kent and Radan Martinec (2004), "Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings," *Journal of Consumer Research*, 31 (2), 296-312.
- Grayson, Kent and David Shulman (2000), "Indexicality and the Verification Function of Irreplaceable Possessions: A Semiotic Analysis," *Journal of Consumer Research*, 27 (June), 17-30.
- Grazian, D. (2003) *Blue Chicago: The Search for Authenticity in Urban Blues Clubs*, Chicago, IL: University of Chicago Press.
- Humphreys, Ashlee, (2014) "The Use of Text-Analysis in Consumer Research," *Working Paper*.

- Ilicic, Jasmina and Cynthia M. Webster (2014), "Investigating Consumer-Brand Relational Authenticity," *Journal of Brand Management*, 21 (4), 342-63.
- Napoli, Julie, Sonia J. Dickinson, Micheal B. Beverland, and Francis Farrelly (2014), "Measuring Consumer-Based Brand Authenticity," *Journal of Business Research*, 67 (6), 1090-8.
- Peterson, R.A. (1997) *Creating Country Music: Fabricating Authenticity*, Chicago, IL: University of Chicago Press.
- Rose, Randall L. and Stacy L. Wood (2005), "Paradox and the Consumption of Authenticity Through Reality Television," *Journal of Consumer Research*, 32 (1), 284-96.
- Valesia Francesca, Joseph C. Nunes and Andrea Ordanini (2016), "What Wins Awards Is Not Always What I Buy: How Creative Control Affects Authenticity and Thus Recognition (But Not Liking)," *Journal of Consumer Research*, 42 (6), 897-914.

Paper #3

- Agarwal, Sumit, and Robert Hauswald (2010), "Distance and Private Information in Lending," *Review of Financial Studies*, 23 (7), 2757-2788.
- Brown, Sarah, and Karl Taylor (2014), "Household Finances and the 'Big Five' Personality Traits," *Journal of Economic Psychology*, 45, 197-212.
- Dogra, Keshav and Olga Gorbachev (2016), "Consumption Volatility, Liquidity Constraints and Household Welfare," *The Economic Journal*, forthcoming.
- Farrell, Joseph, and Matthew Rabin (1996), "Cheap Talk," *The Journal of Economic Perspectives*, 10 (3), 103-118.
- Lewis, Michael (2015), *The Big Short: Inside the Doomsday Machine*. WW Norton & Company.
- Mills, Gregory B. and William Monson (2013), "The Rising Use of Nonbank Credit among U.S. Households: 2009-2011," *Urban Institute*.
- Tausczik, Yla R., and James W. Pennebaker (2010), "The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods," *Journal of Language and Social Psychology*, 29 (1), 24-54.

Paper #4

- Barasch, Alix, and Jonah Berger (2014), "Broadcasting and Narrowcasting: How Audience Size Affects what People Share," *Journal of Marketing Research*, 51(3), 286-299.
- Berger, Jonah, and Katherine Milkman (2012), "What Makes Online Content go Viral," *Journal of Marketing Research*, 49 (2), 192-205.
- Heath, Chip (1996), "Do People Prefer to Pass Along Good or Bad News? Valence and Relevance of News as Predictors of Transmission Propensity," *Organizational Behavior and Human Decision Processes*, 68(2), 79-94.
- Heller, Nathan (2016), "The First Debate of the Twitter Election," *New Yorker*, September 27.
- McInney, M. S., and Benjamin R. Warner (2013), "Do Presidential Debates Matter? Examining a Decade of Campaign Debate Effect," *Argumentation and Advocacy*, 49(Spring), 238-58.

Brand Journeys: Exploring the Boundaries of Consumer-Brand Relationships

Chair: Ignacio Luri, University of Arizona, USA

Paper #1: The Game Day Experience: Consumers, Brands and Brand Celebrations

Tonya Williams Bradford, University of California, Irvine, USA
John F. Sherry, Jr., University of Notre Dame, USA

Paper #2: Follow the Code: The Impact of Linguistic Brand Codes on Brand Journeys

Ignacio Luri, University of Arizona, USA
Hope J. Schau, University of Arizona, USA

Paper #3: Disruptive Self-Brand Play: The Izikhothane Journey

Liezl-Marié Kruger, University of Pretoria, South Africa
Robing A. Coulter, University of Connecticut, USA
Kelly D. Martin, Colorado State University, USA

Paper #4: Where Do We Go From Here? Consumer-Brand Relationships After Brands do Bad

Luciana Velloso, York University, Canada
Eileen Fisher, York University, Canada

SESSION OVERVIEW

The importance of relationships between consumers and brands is made manifest by the amount of attention that the topic has received from researchers and practitioners alike (Fournier 1998). We propose a session exploring dynamic consumer-brand relationships. These consumer brand journeys start with firms' strategic efforts to strengthen ties with consumers, and consumers' agency defining brand relationships in their own terms. Consumer-brand intimacy creates a sense of inclusion (we-ness) that enhances brand loyalty and brand equity. Inevitably, inclusion necessitates exclusion (otherness) that sparks controversy and consumer resistance. As consumer-brand relationships escalate, dialectical wars and oppositional discourses generate within consumers and between consumers and their brands. At the extreme, relationships become dysfunctional when consumers engage with brands in disruptive ways, or when firms abuse the trust of consumers. The studies in this session unpack the tensions between brand acculturating forces and consumer agency that may result in brand loyalty, opposition, or brand abandonment.

In the first paper, the authors propose a model to explain firms' roles in initiating and supporting consumer-brand relationships. In the second paper, researchers explore consumer's agency interpreting brand cultural objects (Schroeder 2009) and show how the strengthening of consumer-brand ties inevitably results in ingroup-outgroup dynamics and exclusion. A third paper explores disruptive consumer-brand relationships illustrating the manner in which consumers normatively excluded from high-end brands still use those brands in anti-normative ways in order to express aspirational pseudo-identities. In a fourth study, the authors investigate what happens when valued brands do bad, and consumers engage in repair processes to continue the relationship to avoid the potential loss of identity related with a breakup.

The presenters take a variety of interpretive approaches and methodologies to analyze data from four very different contexts (tailgating, Starbucks, a South African subculture, and Volkswagen community). Together, the studies shape a lively conversation on consumer-brand relationships in the form of a "brand journey" from the initial steps towards building intimacy to the dissolution of ties. These papers further our understanding on consumer-brand relationships, exploring a purposely broad the spectrum of relationships to illustrate what happens at and beyond the boundaries of

consumer-brand ties. Brand journeys have significant managerial and theoretical implications, and our session aims to generate discussion and raise questions, such as: How are brand communities and brand-engaged subcultures created and maintained, leveraging brand cultural objects and consumers' active negotiation of meaning? How do the respective roles of firms and consumers impact the nature and strength of consumer-brand relationships; what is the interplay between these relationship partners and the consequences of their interplay? How does "good" and "bad" consumer and firm behavior impact consumer-brand relationships and their boundaries?

The Game Day Experience: Consumers, Brands and Brand Celebrations

EXTENDED ABSTRACT

Brand communities are embraced by marketers and consumers alike for the keen ability of those communities to enliven the brand and keep it connected with its users. Beyond the experience of community, the present research seeks to explain how events engage communities in support of the brand. Prior studies of Trekkies and their conventions (Kozinets 2001), Harley Owner Group (HOG) members and their rallies (McAlexander et al. 2002), or distance runners (Thomas et al. 2013) theorize the import of community member interactions. In particular, those studies find roles for shared rituals and norms to sustain community engagement and interaction of members over time through various mechanisms. While much is understood about how relationships between consumers and brand contribute to brand loyalty, there is an opportunity to explore roles for the firm in contributing to and sustaining consumer-brand relations beyond brand actions themselves. One mechanism that seems to be impactful in the development and continuity of community for some brands is the orchestrated gathering of community members to celebrate the brand.

Through an ethnography of collegiate tailgating, we explore roles for firms in supporting consumer-brand relationships. More specifically, we seek to explain roles for firms in constructing and executing events for brand communities in service to developing relationships to the brand through events orchestrated on behalf of the community, and to foster relationships with other fans. Collegiate tailgating is often a university orchestrated event where the university invites alumni, donors, and fans to celebrate the brand around a football contest. While colleges are a unique form of brand, many firms aspire to create loyalty similar to that fans have for their favorite athletic teams. The zeal of fans for athletics is not lost on university officials who recognize home football games as opportunities to engage with various stakeholders in support of broader university goals and objectives. And, many universities have developed formal organizations to orchestrate such events. Consider this account:

We have an Office of Special Events and Protocol... [w]e formed an Ad Hoc committee...It was probably a 15 or 17 person committee. It had alumni on it... [University] trustees...security personnel from the NFL...It was a very diverse group, and they studied the whole game day experience at Blackthorn because, intuitively, we felt that it could be better. We were getting a lot of feedback around the tailgating and the pregame activities that wasn't really positive...This group did their work and they broke it down into three buckets – safety and security is number one; hospitality is number two; and communication is number three...[The] report had about

22 major global recommendations.... [Game Day] has become, in a short period of time I'm proud to say, an industry best practice within college [football], because we've taken a lot of elements of the pros and adapted [it] to what is Blackthorn. So we've cherry-picked the best ideas from different folks, selected the ones that made sense here, and applied it to Blackthorn, so it's a uniquely, genuine Blackthorn experience. ~ Game Day Executive

Blackthorn recognizes their varied constituents (e.g., home, visiting, and competitor fans; neighbors; Athletics; Academic departments; Development) and seeks to address the diverse needs represented among them through an orchestrated Game Day experience. Within this highly orchestrated event, participants are provided opportunities to engage with formal and informal activities which serve to enhance brand engagement.

We have identified four themes that reflect the experience of Game Day as an orchestrated brand event for communities: connectivity, ceremony, congregation, and contiguity. Connectivity reflects the consumer-consumer and consumer-brand bonds generated and sustained through the Game Day experience and manifesting most prominently through 'neighborhoods' of tailgaters. The connections participants foster through joint activities and allegiance encourages further engagement with the brand. Ceremony encompasses the shared rituals and traditions within the community that are enacted across the event. The ritual of tailgating, from the journey and preparation to the traditions carried out in the parking lot, provides opportunities to engage collectively in developing brand meaning and symbolism more so than the physical acts performed. Congregation consists of the gathering of tailgaters around a central concept or ideal. Each congregation strives to reach a common goal: to live in the unifying spirit of brand which is football. This sense of belonging and community propagates beyond neighboring tailgates and can impact the larger tailgating community. Contiguity refers to the expansion of one community to others thus forming a continuous entity. We find that as an orchestrated brand community event, Game Day is how participants invigorate membership in the brand community, and infuse meaning into the brand.

Firms aspire to attain the level of engagement and satisfaction fans have with athletic teams. Blackthorn found a means to leverage athletic contests as they engage their varied constituents in manners that increase satisfaction and ultimately contribute to brand loyalty. In particular, from the themes generated in this study of collegiate tailgating and the orchestration of the football game day experience, we develop recommendations for firms seeking to extrapolate these findings into a hosted brand community event to support the brand, community members, and brand-consumer relations all with the intent of enhancing brand loyalty, and ultimately brand equity.

Follow the Code: The Impact of Linguistic Brand Codes on Brand Journeys

EXTENDED ABSTRACT

Successful brands are active producers of cultural objects, rather than mere parasites that appropriate popular culture. Indeed, brands create symbols, myths, and even prescriptive models for the way consumers think and behave – their goals, ideals, and values. Eavesdropping on someone ordering a drink at Starbucks or talking about Star Trek will make obvious that brands also change the way consumers talk. Despite the widely-accepted centrality of language to culture (Crawford & Valsiner 1999), brand-specific linguistic codes have been largely overlooked in cultural approaches to consumer research.

Despite the lack of deliberate examination, the existence of linguistic codes shared and used within consumption communities and brand communities is widely recognized. Thomsen, Straubhaar and Bolyard (1998) use the words "jargon or group speak" to describe the insider code used within cyber-communities. Schau and Muñiz (2002) find a "community jargon" shared in brand-related personal websites. Langerak et al. (2003) use the term "specialized language" for the jargon spoken within an e-brand's virtual community. In their ethnography of the new bikers, Schouten and McAlexander (1995) define subcultures of consumption as having unique jargons, and their data illustrates several examples of "biker vernacular." One of the Trekker sub-communities described by Kozinets (2001) revolves around the constructed language Klingon. Muñiz and Schau (2005) describe a characteristic "formulaic language" within users of the discontinued Apple Newton. Whereas the presence of brand codes has been repeatedly acknowledged, their relevance to consumer researcher theory and marketing implications have yet to be explored. This study aims to fill this gap in the literature by putting the spotlight on this particular brand cultural object.

We bring together Bourdieu's cultural capital theories (e.g. Bourdieu 1986, Bourdieu & Passeron 1990), a brand culture approach (Schroeder 2009), and a consumer research reading of sociolinguistics to study the practices and discourses created by branded jargon and dialects. Starbucks is our context for studying brand codes. Brand-specific linguistic codes were studied using an netnographic (Kozinets 2002) approach complemented with in-store observation. Brand related conversations were extracted from official and fan-created websites, Twitter messages and YouTube videos. Findings were further informed by naturalistic observation in Starbucks coffeehouses.

Findings confirm the appropriateness of the "brand language" metaphor, revealing the ubiquity of its use among consumers and illustrating the many ways in which linguistic brand codes mirror natural languages. Specifically, this study sheds light on the largely unexplored topic of how "brand literacy" (Bengtsson & Firat 2006) is acquired. Careful examination of Starbucks' linguistic brand code reveals "jargon" to be an insufficient term to refer to a code with grammar-like properties in which issues of syntax (e.g. word order), pragmatics (e.g. tacitness and sub-textuality), and style (e.g. redundancy) matter. Linguistic competence in "Starbuckese" is revealed as a continuum ranging from complete lack of fluency to "native-like" competence. Two main opposing discourses co-exist around Starbucks' ordering script. A wide range of oppositional and skeptical consumers see the brand code as unnecessarily cryptic, putatively designed to pretentiously sound "vaguely European" or simply exert Starbucks cultural hegemony. A second discourse (as voiced by baristas, and endorsed by most fans) is to discount the need for the code and the barriers to learning it without denying its complexity.

Among the most brand loyal customers endorsing the latter discourse, competence in Starbucks linguistic code signals commitment to the brand (and hence, status within the fan community). These fans often police the brand discourse and community in such a way that lack of fluency is tolerated, if looked down upon, but oppositional discourse is attacked and silenced.

On the other ideological end, oppositional customers, in their own words, "make a point" of not learning or using the linguistic brand code while ridiculing those who do and sharing with like-minded users their successes in defying Starbucks cultural dominance. Interestingly, they do so while still being Starbucks customers (many of them declared frequent customers).

Amid this dialectical war, occasional and unaligned Starbucks customers must still manage to navigate the brand code. Lacking

fluency, they do so using a variety of compensatory strategies that typically result in negative feelings or suboptimal outcomes.

Fans use brand codes as a field-specific cultural capital and a source of identity, belonging, and group status. In the case of a highly accessible brand like Starbucks, cultural capital is more tied to how to consume and less to what is consumed (Holt 1998). Whereas less-than-expert customers are needed if code competence is to be a signal of high status, deniers of the value of “speaking the brand” are a menace to status-seeking fans who have learned the code. Lack of fluency is described by consumers as a source of rejection and anxiety. Consistent with previous theory (Bourdieu and Passeron 1990, Lamont and Lareau’s 1988), cultural and social exclusion prove to be a central component of the status game. On the other hand, and deviating from previous literature on consumer resistance, we find oppositional consumers who are “anti-Starbuckese” rather than anti-Starbucks. Consumers can be polarized not only for and against a brand (as in Thompson & Arsel 2004, Kozinets & Handelman 2004) but for and against a brand’s cultural objects while still consuming the brand. Etic interpretation of this form of consumer cultural resistance is that consumers are inverting the sign of marketer-imposed codes (Ozanne & Murray 1995) while still using them for status-seeking purposes. As Holt (2002) points out, opposition does not liberate from the market, but instead drives consumers to build their resistance identity through the market. We extend Holt’s findings by adding that even opposition to a brand’s cultural objects does not emancipate from the brand: knowing and denying brand cultural objects can be two fields within the same context; two strategies in the same status-seeking game of cultural capital.

Disruptive Self-Brand Play: The Izikhothane Journey

EXTENDED ABSTRACT

Consumer-brand relationships take on myriad forms. A preponderance of this research has focused on the more positive associations between consumers and their brands as relationship partners (Fournier 1998), as extensions of self (Escalas and Bettman 2003), and as identity signals (Levy 1959; Schau and Gilly 2003), yet others have pointed to more adverse aspirational, materialistic, and compulsive consumption practices (Belk 1988; Rindfleisch, Burroughs, and Denton 1997). In this research, we introduce *self-brand play*, defined as incorporating brands into the self to create an alternative play reality, with no rules or responsibilities. The self is tied to the brand, and the brand determines the value of the self. Self-brand play is viewed as an escape with purpose of enhancing the self. When one plays, the rules and norms of society do not apply, actively allowing for play accompanied by moral disengagement. Bandura (1999) propounds that different types of moral disengagement strategies are employed to make detrimental conduct acceptable through self-regulatory systems. Indeed, moral disengagement has previously been used to explain the perpetration of inhumanities, both actual (Leidner, Castano, Zaiser and Giner-Sorolla 2010; Osofsky, Bandura and Zimbardo 2005) and in virtual video games (Hartmann and Vorderer 2009).

Disruptive self-brand play operates at the intersection of brand signaling, aspirational consumption, and moral disengagement. We argue that when moral disengagement ensues, consumer-brand relationships can escalate beyond what is deemed appropriate and acceptable by standard social norms, and result in detrimental consequences to the brand, oneself, and others. The context for our research is the Izikhothane subculture within South African townships. Izikhothane is the term coined for the behavior of poor South African township males who as collectives (or “crews”) engage in aspiration-

al consumption of high-end brands and participate in dissing practices (or “battles”) to destroy these expensive brands, as evidence of their ability to afford them (Howell and Vincent 2014; Mnisi 2015; Nkosi 2011).

We explore *disruptive self-brand play* as part of Izikhothane subculture practices using an interpretive approach. We first conducted a focus group with five Izikhothane members to obtain a general understanding of the subculture, individual roles within the crew, rituals and practices with regard to expensive brand consumption, shared norms (e.g., having gold plated teeth sharing shape symbols), and the preparations and practices related to battles. These discussions provided the groundwork for the depth interview protocol in which we examine the journey of members of the Izikhothane subculture, specifically the enticement and motivations for self-brand play, moral disengagement for aspirational consumption and experiences in disruptive self-brand play, as well as moral reengagement as part of the Izikhothane journey. We purposively sampled from four Izikhothane crews, recruiting 29 members. All informants were at least 18 years of age when interviewed, having participated in the Izikhothane subculture for two to ten years. Four interviewers from a South African research firm conducted the interviews in Soweto, South Africa at specific locations identified by participants. The interviews were recorded and transcribed for analysis.

Our findings document that the Izikhothane subculture is grounded in the informants’ life circumstances, marked by broken middle class homes in South African townships, where these young men are looking for ways to express their identity, and vie for fame and attention. They are attracted to this subculture because of their love of brands, high fashion associations, dancing, and observed “famous” lifestyle. Expensive brands, cash, taxis, and music are the key props for the battles between the crews. The subculture is bound by, “Live life as if you have money, even though you don’t,” with the intent of creating a pseudo-identity.

As informants report becoming more committed to the Izikhothane subculture, we observe moral disengagement. The township youth, with few financial resources of their own, lie to get cash from their family members, save their lunch money, hustle jobs, and sometimes sell drugs or stolen cell phones to buy these expensive shoes, clothes and food products needed for the battles. Crews organize the battles, which are typically one-on-one “competitions” in which food and alcohol are thrown at one another with the express intent to destroy the expensive brands; sometimes there is tearing of expensive clothes and burning of cash. Informants, across all crews, reframe their conduct to downplay the consequences from the behavior, and devalue or dehumanize victims of harm. Moral disengagement occurs throughout and is not only related to high-end brands, but also with regard to girls who serve as groupies and “snacks.”

As informants reflect on their Izikhothane membership over the years, many acknowledge their moral disengagement as having significant collateral damage, and report that they are in the process of leaving the Izikhothane. They link the disruptive self-brand play to distraction from schooling and the need to repeat grades or even drop out, with disrespect of parents and teachers, and with the denigration of others which often leads to jealousy. Some suggest their Izikhothane “successes” and “fame” make them safer, whereas others have concern for their own safety, perceiving their visible display of high-end brands makes them targets of crime and violence. As informants contemplate their futures, they recognize their failures (not going to school or working to their potential) and their wastefulness of money (that could be used for my family or others who have financial needs), as well as the bad influence they have on their siblings and young township children. Their reflections acknowledge

a moral reengagement, and a call to question the value of this disruptive self-brand play. As they morally reengage, this play stops. Many report transitioning from the Izikhothane lifestyle by rather focusing on the practicality of life with attention to life goals of completing their education and finding jobs.

Our research contributes to the work on consumer-brand relationships and consumer journeys, providing unique insights into how disruptive self-brand play is at the center of creating an aspirational pseudo-identity. Moral disengagement serves the Izikhothane well through their self-concept enhancement in a resource-constrained environment, yet acknowledgement that this pseudo-identity has deleterious effects over time reengages a moral compass to pursue a new life-path and identity.

Where Do We Go From Here? Consumer-Brand Relationships After Brands do Bad

EXTENDED ABSTRACT

“On September 3, 2015, Volkswagen AG disclosed at a meeting with the California Air Resources Board and the U.S. Environmental Protection Agency that emissions software in four-cylinder diesel vehicles from model years 2009 until 2015 contained a ‘defeat device’ in the form of hidden software that could recognize whether a vehicle was being operated in a test laboratory or on the road. The software made those vehicles emit higher levels of nitrogen oxides when the vehicles were driven in actual road use rather than laboratory testing.” (Michael Horn’s testimony, as President and CEO of Volkswagen Group of America, before the U.S. House Energy and Commerce Committee, 10/08/15)

Brands do bad. Volkswagen’s “Dieselgate” scandal is but one example of the deliberate misdeeds brands sometimes engage in that we might expect to provoke outrage among consumers and culminate in relationship dissolutions (Bechwati and Morrin 2003; Hemetsberger, Kittinger-Rosanelli, and Friedmann 2009). Even heartfelt love may become hate, as devoted consumers feel betrayed and seek revenge through anti-brand activity (Grégoire and Fisher 2008; Grégoire, Tripp, and Legoux 2009; Johnson, Matear, and Thomson 2011).

Although transgressions are often thought to lead to weakening or termination of consumer-brand relationships, previous research has shown that other trajectories are possible, and some consumers do retain relationships after revelations of malfeasance (Aaker, Fournier, and Brasel 2004; Lin and Sung 2014; Sung and Choi 2010). The present paper thus investigates the repair processes consumers undertake to continue in relationships with wrongdoers.

Prior research has focused on factors that motivate consumers to maintain such relationships, while overlooking consumers’ active relationship repair work. For example, Aaker et al. (2004) emphasize how brand personality matters to relationship progress after good brands do bad, finding that violations prompt the reinvigoration of relationships with exciting brands (i.e., those associated with energy and youthfulness) through gains in knowledge about the partner and the relationship (per intimacy and partner quality development), reactivation of self-connections, and intensification of interdependency levels. The consumer-brand relationship literature also posits that there may exist different kinds of relationship dynamics that prevent consumers from turning away from transgressors, including love, mixed-valence (e.g., love-hate engagements), and negative relationship types (e.g., master-slave, dealer-addict, and villain-victim) (Alvarez and Fournier 2016; Batra, Ahuvia, and Bagozzi 2012; Fournier 1998; Fournier and Alvarez 2013). Sung and Choi (2010) reinforce that consumers might not easily discontinue the relationship with

a brand if they perceive they have made a great investment which could not be recovered if the relationship dissolved. Lin and Sung (2014) argue that brand identity fusion (i.e., consumers’ feelings of oneness with a brand) trigger relationship-sustaining behaviors because individuals interpret brand misbehaviors as threats to their identities, increasing their tendencies to engage in biased information processing and motivated reasoning that confirms their positive beliefs about the brand.

Arsel and Stewart’s (2015) research constitutes one notable effort to uncover the coping strategies consumers use to continue relationships in the face of negative information about the brand. They find that consumers may deny brand failures, claim moral superiority as they develop oppositional narratives, and keep product use secret from others. However, the authors investigate consumers’ response to identity-degrading meanings arising from doppelgänger images rather than ethical missteps. These two situations may pose different challenges to consumers.

Our qualitative research has analyzed online consumer posts about “Dieselgate” in the comments sections of major US news outlets, automotive magazines, and blogs. Data collection and analysis started at the outbreak of Volkswagen’s emissions scandal in September of 2015, and continued for the following seventeen months. Results show that consumers engage in three main repair processes to maintain relationships despite awareness of brand misdeeds: contextualizing, recalibrating, and refocusing.

“Contextualizing” refers to mobilizing the institutional context of the automobile industry (and its long history of scandals) to downplay negative interpretations of “Dieselgate” by contrasting Volkswagen’s misdeeds with other automakers’ misbehaviors “just like” or “worse than” theirs. In the process of “recalibrating,” consumers reframe the magnitude of the sins, for example, by positioning the use of defeat devices as acceptable when regulations are considered excessive or unwarranted. They may also weigh Volkswagen’s wrongdoings against unethical behaviors pervasive in everyday life (e.g., gaming school tests), and compare the pollution caused by vehicles with defeat devices to that caused by “legal” technologies (e.g., older car models, factories). Finally, in “refocusing,” consumers minimize the importance of certain product features (e.g., environmental benefits) while playing up other attributes (e.g., economic benefits) as the critical ones for everyday usage. Implications for both the consumer-brand relationship and the branding literatures are discussed.

REFERENCES

- Aaker, Jennifer, Susan Fournier, and S Adam Brasel (2004), “When Good Brands Do Bad,” *Journal of Consumer Research*, 31(1), 1–16.
- Alvarez, Claudio and Susan Fournier (2016), “Consumers’ Relationships with Brands,” *Current Opinion in Psychology*, 10(August), 129–35.
- Arsel, Zeynep and Scott Stewart (2015), “Identity Degrading Brands,” in *Strong Brands Strong Relationships*, ed. Susan Fournier, M. Breazeale, and J. Avery, New York, NY: Routledge, 106–16.
- Bandura, Albert (1999), “Moral Disengagement in the Perpetration of Inhumanities,” *Personality and Social Psychology Review*, 3 (3), 193–209.
- Bandura, Albert, Claudio Barbaranelli, Gian Vittorio Caprara, and Concetta Pastorelli (1996), “Mechanisms of Moral Disengagement in the Exercise of Moral Agency,” *Journal of Personality and Social Psychology*, 71 (2), 364–374.

- Batra, Rajeev, Aaron Ahuvia, and Richard P Bagozzi (2012), "Brand Love," *Journal of Marketing*, 76(2), 1–16.
- Bechwati, Nada Nasr and Maureen Morrin (2003), "Outraged Consumers: Getting Even at the Expense of Getting a Good Deal," *Journal of Consumer Psychology*, 13(4), 440–53.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September), 139-168.
- Bengtsson, A., & Firat, F. (2006). Brand literacy: Consumers' sense-making of brand management. *Advances in Consumer Research* Volume 33, 375-380.
- Bourdieu, P. (1986). The forms of capital. In Richardson, J. G. (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood
- Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society and culture* (Vol. 4). Sage.
- Crawford, V.M., & Valsiner, J. (1999). Varieties of discursive experience in psychology: Culture understood through the language used. *Culture & Psychology*, 5, 259–269.
- Escalas, Jennifer E. and James R. Bettman (2003), "Self-Construction, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32 (3), 378–89.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing a Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343–73.
- Fournier, Susan and Claudio Alvarez (2013), "Relating Badly to Brands," *Journal of Consumer Psychology*, 23(2), 253–64.
- Grégoire, Yany and Robert J Fisher (2008), "Customer Betrayal and Retaliation: When Your Best Customers Become Your Worst Enemies," *Journal of the Academy of Marketing Science*, 36(2), 247–61.
- Grégoire, Yany, Thomas M Tripp, and Renaud Legoux (2009), "When Customer Love Turns into Lasting Hate: The Effects of Relationship Strength and Time on Customer Revenge and Avoidance," *Journal of Marketing*, 73(November), 18–32.
- Hartmann, Tilo and Peter Vorderer (2009), "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games," *Journal of Communication*, 60 (1), 94-119.
- Hemetsberger, Andrea, C. M T Kittinger-Rosanelli, and Sandra Friedmann (2009), "'Bye Bye Love' - Why Devoted Consumers Break up with Their Brands," in *NA - Advances in Consumer Research*, ed. Ann L. McGill and Sharon Shavitt, Duluth, MN: Association for Consumer Research, 430–37.
- Holt, D. B. (1998). Does cultural capital structure American consumption? *Journal of consumer research*, 25(1), 1-25.
- Holt, D. B. (2002). Why do brands cause trouble? A dialectical theory of consumer culture and branding. *Journal of consumer research*, 29(1), 70-90.
- Howell, Simon and Louise Vincent (2014), "'Licking the Snake' – The I'khotane and Contemporary Township Youth Identities in South Africa," *South African Review of Sociology*, 45 (2), 60-77.
- Johnson, Allison R, Maggie Matear, and Matthew Thomson (2011), "A Coal in the Heart: Self-Relevance as a Post-Exit Predictor of Consumer Anti-Brand Actions," *Journal of Consumer Research*, 38(June), 108–25.
- Kozinets, R. V. (2001). Utopian enterprise: Articulating the meanings of Star Trek's culture of consumption. *Journal of consumer research*, 28(1), 67-88.
- Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of marketing research*, 39(1), 61-72.
- Kozinets, R. V., & Handelman, J. M. (2004). Adversaries of consumption: Consumer movements, activism, and ideology. *Journal of consumer research*, 31(3), 691-704.
- Lamont, M., & Lareau, A. (1988). Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological theory*, 153-168.
- Langerak, Fred, Peter C. Verhoef, Peeter W. Verlegh, and Kristine de Valck (2003), "The Effect of Members' Satisfaction with a Virtual Community on Member Participation," *ERIM Report Series Research in Management*, 2003-004-MKT, Erasmus Research Institute of Management, Erasmus University Rotterdam.
- Leidner, Bernhard, Emanuele Castano, Erica Zaiser, and Roger Giner-Sorolla (2010), "Ingroup Glorification, Moral Disengagement, and Justice in the Context of collective Violence," *Personality and Social Psychology Bulletin*, 36 (8), 1115-1129.
- Levy, Sidney (1959), "Symbols for Sale," *Harvard Business Review*, 37 (4), 117-24.
- Lin, Jih-Syuan and Yongjun Sung (2014), "Nothing Can Tear Us Apart: The Effect of Brand Identity Fusion in Consumer–Brand Relationships," *Psychology and Marketing*, 31(1), 54–69.
- McAlexander, James H., John W. Schouten, and Harold F. Koenig (2002), "Building Brand Community," *The Journal of Marketing*, 66 (1), 38-54.
- Mnisi, Jabulani (2015), "Burning to Consume? Izikhothane in Daveyton as Aspirational Consumers," *Communicatio*, 41 (3), 340-353.
- Muñiz, A. M., & Schau, H. J. (2005). Religiosity in the abandoned Apple Newton brand community. *Journal of consumer research*, 31(4), 737-747.
- Nkosi, Lindokuhl (2011), *Burn Swag Burn. Mahala*. Available from: <http://www.mahala.co.za/culture/burn-swag-burn/>, March 7, 2017.
- Osofsky, Michael J., Albert Bandura, and Philip G. Zimbardo (2005), "The Role of Moral Disengagement in the Execution Process," *Law and Human Behavior*, 29 (4), 371-393.
- Ozanne, J. L., & Murray, J. B. (1995). Uniting critical theory and public policy to create the reflexively defiant consumer. *American Behavioral Scientist*, 38(4), 516-525.
- Rindfleisch, Aric, James E Burroughs, and Frank Denton (1997), "Family Structure, Materialism, and Compulsive Consumption," *Journal of Consumer Research*, 23 (4), 312-325.
- Schau, Hope Jensen and Mary C. Gilly (2003), "We are What we Post? Self-Presentation in Personal Web Space," *Journal of Consumer Research*, 30 (3), 385-404.
- Schau, H. J., & Muñiz, A. M. (2002). Brand communities and personal identities: Negotiations in cyberspace. *Advances in consumer research*, 29(1), 344-349.
- Schouten, J. W., & McAlexander, J. H. (1995). Subcultures of consumption: An ethnography of the new bikers. *Journal of consumer research*, 22(1), 43-61.
- Schroeder, J. E. (2009). The cultural codes of branding. *Marketing Theory*, 9(1), 123-126.
- Sung, Yongjun and Sejung Marina Choi (2010), "'I Won't Leave You Although You Disappoint Me': The Interplay between Satisfaction, Investment, and Alternatives in Determining Consumer–Brand Relationship Commitment," *Psychology & Marketing*, 27(11), 1050–74.

62 / Brand Journeys: Exploring the Boundaries of Consumer-Brand Relationships

Thomas, Tandy Chalmers, Linda L. Price, and Hope Jensen Schau (2013), "When Differences Unite: Resource Dependence in Heterogeneous Consumption Communities," *Journal of Consumer Research*, 39 (5), 1010-33.

Thompson, C. J., & Arsel, Z. (2004). The Starbucks brandscape and consumers' (anticorporate) experiences of glocalization. *Journal of Consumer Research*, 31(3), 631-642.

Thomsen, S. R., Straubhaar, J. D., & Bolyard, D. M. (1998). Ethnomethodology and the study of online communities: exploring the cyber streets. *Information research*, 4(1), 4-1.

Improving Consumer Well-Being Through Meaning vs Happiness

Chair: Rhia Catapano, Stanford University, USA

Paper #1: Meaningful Consumption Provides Long Lasting Benefits at a High Cost

Erin Percival Carter, University of Colorado Boulder, USA
Lawrence Williams, University of Colorado Boulder, USA

Paper #2: Buying Time Promotes Happiness

Ashley Whillans, Harvard University, USA
Elizabeth Dunn, University of British Columbia, Canada
Michael Norton, Harvard University, USA

Paper #3: Moments that Last: Meaningfulness Slows Happiness Decay

Rhia Catapano, Stanford University, USA
David Hardisty, University of British Columbia, Canada
Jennifer Aaker, Stanford University, USA

Paper #4: Taking Vacation Increases Meaning at Work

Colin West, UCLA, USA
Cassie Mogilner, UCLA, USA
Sanford DeVoe, UCLA, USA

SESSION OVERVIEW

Much of consumer research assumes that the primary motivator in consumer choice is the pursuit of happiness. Yet, much of the consumer experience does not focus on maximizing for happiness alone. Parents opt to spend their time and money on their children, although child rearing generally decreases happiness (e.g. McGregor and Little, 1998), and individuals consistently try to find ways to improve their self-control despite its negative impacts on their happiness (Baumeister, 2002). Another important driver of choice and decision-making is the pursuit of meaning. Previous research provides insight into what actions and decisions are considered meaningful and how meaning differs from happiness (Baumeister, Vohs, Aaker and Garbinsky, 2013; Choi, Catapano and Choi 2016). However, several important questions have received less attention: How do consumers make trade-offs between pursuing happiness and meaning? How can consumers maximize for happiness and meaning beyond the present moment?

Our session sheds light on these questions. Paper 1 (Carter and Williams) explores how consumers make trade-offs between happiness and meaning. Compared to more pleasure focused consumption, consumers expect the benefits of meaningful consumption to pay off over a longer period of time, require a larger time investment, and require greater knowledge to prove beneficial. These results have important implications for understanding when consumers choose to engage in meaningful versus happy consumption.

The next two papers examine how consumers can maximize their long-term happiness. Paper 2 (Whillans, Dunn, and Norton) demonstrates that individuals who spend money on time-saving services report greater life satisfaction. Providing causal evidence, working adults reported greater happiness after spending money on time-saving purchases as compared to material purchases. Paper 3 (Catapano, Hardisty, and Aaker) explores how meaning can promote long-lasting happiness from experiences. In a series of field and lab studies, more meaningful memories show less happiness decay, therefore making individuals happier for longer. In addition, this prolonging of happiness improves consumer brand attitudes and purchase intentions in response to meaningful advertising.

Finally, Paper 4 (West, Mogilner, and DeVoe) explores how individuals can increase their meaning experienced at work through a

happy experience, taking a vacation. They find that taking vacation has a significant positive effect on meaning at work, which holds controlling for the effect of vacationing on meaning in life overall. This result suggests that sometimes, taking time away from a common activity may actually increase the meaning derived from future engagement with the activity.

Together, the four papers in this session enhance our understanding of how consumers can experience more happiness and meaning, and the downstream consequences of these experiences. They incorporate a variety of perspectives on an area of consumer behavior that has only just begun to be explored. We believe this session will attract a broad audience, and facilitate interesting discussions and collaborations that can generate valuable insights for researchers, marketers, and policy makers who aim to help consumers get off the hedonic treadmill. Ultimately, by considering how choices provide happiness as well as meaning, we may develop a stronger vision of the significance of consumer research.

Meaningful Consumption Provides Long-Lasting Benefits at a High Cost

EXTENDED ABSTRACT

Consumer well-being is of increasing interest to consumer researchers. While the study of consumer well-being largely draws from a hedonic approach to the topic (Kahneman, Diener, and Schwarz 1999), a growing body of evidence finds that meaning is an important and distinct aspect of well-being (Baumeister et al. 2013; Deci and Ryan 2008; Waterman 1993). Following others, we define *meaning-oriented consumption* as consumption motivated by a desire for self-growth, social connectedness, and the pursuit of personal fulfillment in life requiring a more cognitive evaluation (eudaimonia; Baumeister et al. 2013; Deci and Ryan 2008), whereas *pleasure-oriented consumption* is motivated by a desire to maximize positive affect and minimize negative affect requiring more affective evaluations (hedonia; Bentham 1789/1948, Kahneman 2000).

We propose and demonstrate that consumers expect (1) the benefits of meaningful consumption to persist after the experience has ended, (2) the minimum time investment (MTI) necessary to benefit from a consumption experience is greater for meaningful consumption compared to pleasure-focused consumption, and (3) knowledge to benefit meaningful but not necessarily pleasurable consumption.

Lasting Benefits

In studies 1A and 1B, we ask participants to reflect on books, movies, or trips that they have not consumed but would like to and that they expect to be either particularly meaningful or particularly pleasurable. We then measure the extent to which participants believe consuming the product will be beneficial at four time points. We expect the benefits of meaningful consumption to persist to a greater degree at later time points.

Two studies confirmed our hypothesis. In study 1A (n=300), we manipulated condition and time point within subjects and order of the presentation and product category between subjects. A mixed effects analysis (Judd, Westfall, and Kenny 2012), revealed significant effects of condition ($F(1, 3.04) = 24.18, p = .02$) and time ($F(3, 2084.18) = 57.35, p < .001$) qualified by a significant condition x time point interaction ($F(3, 2084.18) = 15.59, p < .001$). In study 1B (n=148), we manipulated product category and time point within

subject and condition between subjects. We again found that participants believed that the benefits of meaningful experiences would last longer than the benefits of pleasurable experiences ($F(3, 1618) = 4.84, p = .002$).

In study 2 ($n=404$), we tested this hypothesis with actual consumption experiences. We asked participants to reflect on the meaningful versus pleasurable (per condition) benefits they experience while using streaming entertainment services (HBO, Netflix, Spotify, Sirius XM) and to indicate how successful the service was at providing meaning or pleasure (per condition). A mixed effects analysis revealed a two-way interaction between condition and the extent to which the service was deemed successful ($F(1, 331.82) = 12.9, p < .001$) in predicting enduring benefits, with successfully meaningful services perceived to provide longer lasting benefits. We also find that reflecting on how a service was meaningful made participants more likely to indicate that they would continue to subscribe in the future ($F(1, 374.04) = 3.03, p = .08$).

Minimum Time Investments

Analogous to studies 1a and 1b, here we examined consumers' expectations about the minimum time investment (MTI) for pursuing meaningful versus pleasurable consumption experiences. We again asked participants to consider self-generated stimuli drawn from three different product categories (movies, books, and trips). We instructed participants to think about consuming the product they had just identified and to indicate the minimum amount of time someone could spend consuming the product and still benefit from the consumption.

Both studies were mixed designs. In study 3A ($n=148$), we manipulated condition within subjects and product category between subjects. Using a mixed effects analysis, we found that overall, participants believed that the MTI necessary to benefit from meaningful experiences was greater than the MTI necessary to benefit from pleasurable experiences ($t(144) = -2.866, p = .005$). In study 3B ($n=147$), we manipulated product category within subject and condition between subjects and again found participants believe that the MTI necessary for meaningful experiences is greater than the MTI necessary for pleasurable experiences ($t(144.02) = -2.041, p = .04$).

In our next set of studies, we explore an implication of meaning-oriented consumption being associated with longer MTIs. Because the MTI necessary for meaning is greater than the MTI necessary for pleasure, it is reasonable to expect that longer experiences will lead to more satisfaction when those experiences are associated with meaning. However, this effect should *only* apply to the window of time starting at and immediately following the MTI for meaning; before or beyond that window, we expect that there will be no difference in expected satisfaction. Stated differently, we do not expect that more time is necessarily always better for meaning as compared to pleasure; we expect that having *enough* time is more important for meaning than for pleasure and that what qualifies as enough time is greater for meaning than for pleasure.

In the domains of sexual (4A, $n=588$), musical (4B, $n=680$), and dining experiences (4C, $n=508$), we find that people expect meaningful experiences to be more satisfying than pleasurable experiences when they expect them to be longer, but only within an appropriate time investment window. Importantly, both before and beyond this window the difference in satisfaction associated with meaningful versus pleasurable experiences is attenuated.

Cognitive Effects

Finally, in study 5 ($n=184$), we examine the role of knowledge and expertise in facilitating meaningful but not pleasurable con-

sumption. In this study, we asked participants to watch a short film and to either find pleasure or meaning in the film. We also manipulated whether or not participants received supplementary information explaining the symbolism and message of the film prior to watching and measured baseline expertise with short films. We expected that among participants pursuing meaning, novice participants would benefit from the additional information, expert participants would have worsened experiences as a result of receiving the additional information, and that there would be no effects of expertise or additional information among participants pursuing pleasure. A significant three-way interaction of the condition, manipulated knowledge, and measured expertise supported this hypothesis.

Buying Time Promotes Happiness

EXTENDED ABSTRACT

In a 2010 survey, respondents were asked if they often had time to spare. As Brigid Schulte explains in her book *Overwhelmed*, “exactly zero percent of mothers with children under six said yes.” Fathers and working adults without children express similar concerns about the time famine of modern life. One survey found that over 80% of adults—with and without children—reported wishing they had more time to spend with their families (Duxbury and Higgins 2001). Indeed, trying to keep up with the tasks of daily life can chip away at the time we might otherwise spend engaging in the kinds of activities that endow life with meaning.

Rising incomes could provide people with one way out of the “time famine” of modern life (Perlow 1999). Wealth offers the opportunity to have more free time, such as by paying to live closer to work or paying someone to run errands. Yet, some evidence suggests that wealthier people spend more time engaging in stressful activities, such as commuting (Kahneman et al. 2006). Because time and money are largely interchangeable in the modern economy, it is possible for people to spend money to buy free time. Exchanging discretionary income to buy free time should reduce the negative effects of the modern time famine, promoting well-being.

As an initial test of this hypothesis, we surveyed Mturk workers in the US ($N=366$), a representative sample of employed Americans in the US ($N=1,265$), adults in Denmark ($N=565$) and Canada ($N=325$), a nationally representative sample of individuals in the Netherlands ($N=1,231$), and a sample of Dutch millionaires ($N=818$). In all studies, respondents completed two questions about whether, and how much, money they spent each month to increase their free time by paying someone else to complete unenjoyable daily tasks. In addition, participants were asked to rate their satisfaction with life and to report their annual household income, the number of hours they work each week, age, marital status, and the number of children living at home.

Across samples ($N=4,570$), 28% of respondents spent money to buy time each month ($M_{amount} = \$185.08$ USD). Participants who spent money in this way reported greater life satisfaction, $d=0.24, p<.001$, 95% CI [0.17, 0.31]. This effect held controlling for our key set of covariates ($N=3,988$), $d=0.19, p<.001$, 95% CI [0.11, 0.26].

Across samples, there was also a significant interaction between time-saving purchases and time stress, $Z=3.87, p<.001$. Decomposing this interaction, time stress was associated with lower life satisfaction among people who did not spend money on time-saving purchases ($N=1,504$), $B=-0.18, Z=9.12, p<.001$, 95% CI [-0.22, -0.14]. In contrast, for people who spent money on time-saving purchases ($N=804$), the negative effect of time pressure on life satisfaction was relatively weak, $B=-0.04, Z=1.69, p=.091$, 95% CI [-0.08, 0.01].

By presenting all participants with the same spending questions, we could detect comparable results across diverse samples. A limitation of this approach is that our findings might depend on the specific question wording used. To overcome this limitation, we presented a new sample of working adults in the US ($N=1,802$) with a broader definition of time-saving purchases. Faced with our broader definition, 50% of participants reported spending money in this way each month ($M_{\text{amount}}=\$60\text{-}\79 USD). Again, participants who spent money on time-saving purchases reported greater life satisfaction, $\beta=0.24$, $p<.001$. These results were unchanged controlling for our pre-determined set of covariates, $\beta=0.22$, $p<.001$. These results also held after controlling for how much money participants spent on non-durable expenses (groceries), material goods, and experiential purchases, $\beta=0.15$, $p<.001$. There was a significant interaction between time-saving purchases and time stress, $\beta=0.24$, $p<.001$. Decomposing this interaction, time stress was associated with lower life satisfaction among people who did not spend money on time-saving purchases ($N=901$), $B=-0.17$, $p<.001$, 95% CI [-0.25, -0.10]. For people who spent money on time-saving purchases ($N=901$), the negative effect of time pressure on life satisfaction was non-significant, $B=0.05$, $p=.227$, 95% CI [-0.03, 0.12].

Across seven studies with over 6,000 participants, spending money on time-saving services was linked to greater life satisfaction. From our theoretical perspective, this broad link stems from the cumulative day-to-day mood benefits that are caused by the reduction in time stress that these purchases provide. To zoom in on this causal pathway, we conducted a two-week within-subjects experiment. In this experiment, we recruited working adults to spend two payments of \$40 on two consecutive weekends ($N=60$). On one weekend, participants were randomly assigned to spend \$40 on a purchase that would save them time. On the other weekend, we assigned participants to spend \$40 on a material purchase. We chose this as a comparison because material purchases would be unlikely to save time. Our manipulation checks confirmed this assumption. We counterbalanced the order of the spending weeks: results did not differ by order. After making each purchase, participants received a phone call at 5:00pm and were asked to report on their positive affect, negative affect, and time stress. We hypothesized that people would report greater well-being after making a time-saving (vs. material purchase). We further predicted that these benefits would be explained by reduced feelings of time-stress that day.

Consistent with our hypothesis, participants reported greater end-of-day positive affect after making a time-saving purchase ($M=4.00$, $SD=0.64$) than after making a material purchase ($M=3.71$, $SD=0.81$), $t(59)=2.57$, $p=.007$, 95% CI [0.10, 0.48], $d=0.33$. After making a time-saving (vs. material) purchase, participants also reported lower levels of negative affect, $t(59)=-2.45$, $p=.009$, 95% CI [-0.45, -0.08], $d=0.32$, greater affect balance, $t(59)=2.63$, $p=.006$, 95% CI [0.21, 0.92], $d=0.35$, and lower feelings of time stress, $t(59)=-2.76$, $p=.004$, 95% CI [-1.18, -0.29], $d=0.35$. These results could not be explained by differences between the purchases in social status, exceptionalness, or perceived usefulness. Across all indicators, time-saving vs. material purchases increased well-being by reducing end-of-day feelings of time stress.

Overall, buying time reduces feelings of time pressure on a given day and provides cumulative benefits by buffering against the deleterious effects of time pressure on life satisfaction—potentially enabling people to spend more time engaging in meaningful pursuits.

Moments that Last: Meaningfulness Slows Happiness Decay

EXTENDED ABSTRACT

Although consumers frequently make decisions with the goal of maximizing their own happiness (Chang and Pham 2003; Mogilner, Aaker and Kamvar 2012; Mogilner, Aaker and Kamvar, 2011), little is known about the experience of happiness over time. What we do know indicates that generally, happiness is fleeting and difficult to hold on to. How, then, can this decay of happiness from a prior event be slowed? We propose that one way to prolong happiness is through meaning. While these actions and activities are often less pleasurable than other alternatives, often involving some form of cost or pain, they give people a sense of purpose and allow them to connect to something larger than the present moment (Bronk 2014), two elements that may be key to stepping off of the hedonic treadmill.

In Study 1 ($n=85$), participants were asked to capture five moments throughout a single day of their life, using their iPhone, iPad, or iPod touch. After capturing a moment, they rated how happy and meaningful the moment was, and wrote a short description. A single-item self-report was chosen as preferred measure of happiness, based on previous work suggesting that even single item self-reports tend to correlate well with both longer scales and other non-self-report measures (Sandvik, Diener, and Seidlitz 1993). One day and one week later, participants completed follow-up surveys, where they looked at the pictures they had taken, and rated how happy they were currently, looking back on the moment.

We find that in general, happy moments decayed linearly with time, $b = -0.41$, $p < 0.001$. However, more meaningful moments tended to decay more slowly, such that greater meaningfulness predicted a smaller decrease in happiness after one week, $b = -.18$, $p = .003$, and even after a single day, $b = .14$, $p = .03$.

Study 2 ($n=94$) explored this phenomenon in a more controlled lab setting. Participants were presented with a cupcake and instructed to eat as much or as little as they wanted. Then participants rated happiness and meaning (on 10-point scales). One week later, participants completed a follow-up survey, where they were asked to think back on the cupcake and indicate how happy they were looking back on the moment. As in Study 1, greater meaningfulness predicted less decay, $b = -.28$, $p = .02$. In other words, when the cupcake moment was experienced as more meaningful, the happiness from that moment was more lasting.

Next, we sought to expand happiness decay to a common consumer setting, advertising. To investigate the effect of slowed happiness decay on consumer preferences, in Study 3 ($n=400$), participants watched an excerpt from a video advertisement for a GoPro handheld video camera. They then completed surveys measuring the happiness and meaning they experienced during the commercial. One week later, participants completed a follow-up survey regarding their attitudes toward GoPro and the commercial including purchase intent, willingness to pay, and product interest, as well as current happiness and meaning upon reflecting on the commercial.

Consistent with previous studies, when the advertisement was initially rated as more meaningful, happiness decayed more slowly, $b = -0.15$, $p = 0.03$. Subsequently, those with less happiness decay responded more favorably on all consumer behavior measures used, $ps < .001$. Further, a mediation analysis (with recommended bootstrapping procedures) of the relationship between meaning and consumer attitudes revealed a mediating role of happiness decay, indirect effect = 0.06, 95% CI [0.01, 0.12]. In other words, more meaningful experiences show less happiness decay, relative to their less meaningful counterparts. In turn, this happiness decay influences consumer at-

titudes, such that those who experienced less happiness decay expressed greater purchase intent.

The studies so far show that for everyday life experiences, food, and video commercials, more meaningful experiences are less prone to happiness decay. However, in the preceding studies, meaning is never directly manipulated, but rather varies as a function of the experience captured (Study 1) or individual differences in meaning experienced (Studies 2 and 3). In Study 4 ($n = 141$), we directly manipulated the meaning experienced from the same action. Participants were recruited for an in-lab experiment where they spent 10 minutes on Facebook. In the manipulated condition, participants were asked to spend their time doing things that are happy, with a focus on activities that are meaningful by connecting them with others. In the control condition, participants were instructed to spend their time doing things that are happy, but not particularly meaningful. Immediately after their time on Facebook, and one week later, participants rated happiness and meaning as before.

To test the effect of the manipulation on happiness decay, we ran a mediation analysis, testing the hypothesis that focusing on meaning through connections increases experienced meaning, which in turn decreases happiness decay. The analysis revealed a significant indirect effect for the meaning focus condition on happiness decay, indirect effect = -0.36 ; 95% CI $[-0.67; -0.13]$. In addition, participants did not engage in different activities based on condition, and happiness did not differ by condition, $ps > 0.10$, suggesting that the focus on meaning was the primary distinction driving this effect.

Overall, then, happiness decays over time, such that the happiness experienced when reflecting on an experience a week later is significantly lower than the happiness during the experience itself. However, one way to mitigate this decline in happiness is through more meaningful experiences. Meaningful experiences slow happiness decay, thereby improving consumer attitudes.

Taking Vacation Increases Meaning at Work

EXTENDED ABSTRACT

Americans are not taking their allotted paid vacation days. Up to 42% of employees with paid time off do not use their full entitlement, foregoing an average of \$2,226 in unused benefits per year (Oxford Economics, 2014). What are the implications for the American worker? To answer this question, this research investigates the psychological consequences of taking vacation. Specifically, vacation may be important in fostering engagement and a sense of meaning at work.

When companies seek to cultivate a workplace that is engaging, they tend to focus on features and practices of the work itself. For instance, employers might make efforts to adjust the structure of their employees' tasks, workflow, or communication channels in order to make the work more engaging and fulfilling. Many employers are also beginning to offer a wider array of 'perks' as part of employee wellness programs, including onsite daycares, workout spaces, and cafeterias. These practices are seen as especially important in attracting and retaining 'millennial' employees in high-skill jobs. The aim is to improve the quality of experiences at work, often with the explicit goal of making grueling work schedules more pleasant and meaningful. Most employers – even those that are highly motivated to promote a more purpose-driven workplace – tend to neglect the influence of employees' time *away* from work. We examine the possibility that vacation may help employees find a greater sense of meaning in their work. Breaks from the workplace may present an opportunity for people to step back and evaluate the broader purpose

of their work and how it fits into their life. Two studies explore how taking vacation relates to meaning at work.

Study 1 uses the 2008 National Study of the Changing Workforce (NSCW), a representative sample of the US labor force, to explore associations between utilization of paid leave and various measures of work engagement and fulfillment. Using a sample of 3,502 working adults, the 2008 NSCW captures a wide range of information on practices in the workplace, attitudes about work, and issues related to work-life balance. For our analysis, only fully-employed workers who receive paid vacation were included, leaving a sample of $n=1,898$. Survey respondents provided information on the number of paid vacation days to which they were entitled in the previous calendar year and how many of these days they actually used, so a vacation utilization rate could be determined.

The results show that people who used a larger percentage of their allotted paid vacation reported a greater sense of meaning at work ($r = 0.071$, $p < 0.01$). This association held even after controlling for respondents' overall life satisfaction ($\beta = 0.087$, $p < 0.001$).

Study 2 replicated and extended the findings from this nationally representative sample through a study design using natural variation in vacation utilization. A sample of 689 fully-employed adults in the United States were recruited via Amazon's Mechanical Turk. The study was conducted on Friday January 20, 2017, four days after Martin Luther King Day (MLK), a federal holiday. Since employers in the United States are not obligated to provide federal holidays as paid vacation, a significant portion of the fully-employed workforce continued to work on MLK day. Amongst the 689 working adults sampled for this study, 352 (51.1%) took MLK day off. This even split was found for people working in the majority of industries represented in the sample. The exceptions were government workers, nearly all of whom took MLK as a vacation, and workers in agriculture, manufacturing, and retail industries, in which roughly 35% took MLK day as a vacation.

Consistent with the results of Study 1, the results of a one-way ANOVA show that taking off MLK day as a vacation was associated with a higher sense of meaning at work, $F(1, 688) = 10.56$, $p = 0.001$. The relationship between taking this vacation day and meaning at work again held controlling for overall life satisfaction ($\beta = 0.087$, $p < 0.014$). This finding suggests that even a one-day vacation can lead people to find more meaning in their work. The effect is unlikely to be a result of simply feeling rested and rejuvenated following a vacation since meaning was measured four working days after the long weekend, and earlier studies have shown that temporary rejuvenation effects from vacation tend to wear off after approximately three days (Bloom et al., 2009).

The results of these two studies should be interpreted with caution as they are correlational, but they indicate what may be an important relationship between time *away* from work and finding meaning *at* work. We will soon be conducting studies to establish causation and assess the underlying mechanism for the effect. The implications of the current results are meaningful: employers who are expending great effort and resources to cultivate a purpose-driven workplace may be neglecting the importance of employees' experiences outside of work. These experiences are not only important for employees' overall well-being; they may also be a critical part of developing meaning at work.

REFERENCES

- Baumeister, Roy F., Kathleen D. Vohs, Jennifer L. Aaker, and Emily N. Garbinsky (2013), "Some Key Differences between a Happy Life and a Meaningful Life," *Journal of Positive Psychology*, 8 (6), 505-16.

- Bentham, Jeremy (1789), *An Introduction to the Principle of Morals and Legislations*. Oxford, UK: Blackwell.
- Berry, Leonard L., Ann M. Mirabito, and William B. Baun (2010), "What's the Hard Return on Employee Wellness Programs," *Harvard Business Review*, December 2010.
- Csikszentmihalyi, Mihaly. *Beyond Boredom and Anxiety*. Jossey-Bass, 2000.
- Caruso, Eugene M., Daniel T. Gilbert, and Timothy D. Wilson (2008). "A Wrinkle in Time: Asymmetric Valuation of Past and Future Events," *Psychological Science* 19, no. 8: 796-801.
- Choi, Jongan, Rhia Catapano, and Incheol Choi (2016). "Taking Stock of Happiness and Meaning in Everyday Life: An Experience Sampling Approach," *Social Psychology and Personality Science*.
- Costa, Paul T., and Robert R. McCrae (1980). "Influence of Extraversion and Neuroticism on Subjective Well-Being: Happy and Unhappy people," *Journal of Personality and Social Psychology* 38, no. 4: 668.
- DePaoli, Alexander and Uzma Khan (2014), "Favorites Fall Faster: Greater Liking Leads to Greater Satiation," in *Advances in Consumer Research*, Volume 42.
- De Bloom, Jessica, Michael Kompier, Sabine Geurts, Carolina de Weerth, Toon Taris, and Sabing Sonnentag (2019), "Do We Recover From Vacation? Meta-analysis of Vacation Effects on Health and Well-being," *Journal of Occupational Health*, 51(1), 13-25.
- Deci, Edward L. and Richard M. Ryan (2008), "Hedonia, Eudaimonia, and Well-Being: An Introduction," *Journal of Happiness Studies*, 9 (1), 1-11.
- Duxbury, L. E., and Higgins, C. A. (2002). *The 2001 National Work-life Conflict Study: Report One*. Health Canada.
- Families and Work Institute (2008), "National Study of the Changing Workforce," <http://www.familiesandwork.org/national-study-for-the-changing-workforce/>
- Gilbert, Daniel (2008). "Stumbling on Happiness," *New York, NY: Random House Publishing. Hollis, JF*.
- Kahneman, Daniel (2000), "Experienced Utility and Objective Happiness: A Moment-Based Approach," in *Choices, Values, and Frames*, ed. Daniel Kahneman and Amos Tversky, New York: Cambridge University Press and the Russell Sage Foundation, 673-92.
- Kahneman, Daniel, Edward Diener, and Norbert Schwarz (1999), "Well-Being: Foundations of Hedonic Psychology," ed. Daniel Kahneman, Edward Diener and Norbert Schwarz: Russell Sage Foundation.
- Kahneman, Daniel, Alan Krueger, David Schkade, Norbert Schwarz, and Arthur Stone (2006), "Would you be happier if you were richer? A focusing illusion," *Science*, 312(5782), 1908-1910.
- Lyubomirsky, Sonja, and Heidi S. Lepper (1999), "A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation," *Social Indicators Research* 46, no. 2: 137-155.
- McGregor, Ian and Brian R. Little (1998). "Personal Projects, Happiness, and Meaning: On Doing Well and Being Yourself." *Journal of Personality and Social Psychology*, 74(2).
- Oxford Economics (2014), "Report for the US Travel Association: An Assessment of Paid Time Off in the U.S.," <http://www.oxfordeconomics.com/my-oxford/projects/280061>
- Parducci, Allen (1995), *Happiness, Pleasure, and Judgment: The Contextual Theory and its Applications*, Lawrence Erlbaum Associates, Inc.
- Perlow, L. A. (1999), "The Time Famine: Toward a Sociology of Work Time," *Administrative Science Quarterly*, 44(1), 57-81.
- Quoidbach, Jordi, Elizabeth V. Berry, Michel Hansenne, and Moira Mikolajczak (2010), "Positive Emotion Regulation and Well-Being: Comparing the Impact of Eight Savoring and Dampening Strategies," *Personality and Individual Differences* 49, no. 5: 368-373.
- Ryff, Carol D., and Burton Singer (2000), "Interpersonal Flourishing: A Positive Health Agenda for the New Millennium," *Personality and Social Psychology Review* 4, no. 1: 30-44.
- Waterman, Alan S. (1993), "Two Conceptions of Happiness: Contrasts of Personal Expressiveness (Eudaimonia) and Hedonic Enjoyment," *Journal of Personality and Social Psychology*, 64 (4), 678-91.

Intended and Unintended Signals from Conspicuous Actions

Chair: Adelle Yang, National University of Singapore, Singapore

Paper #1: Prosocial Consequences of Counterfeits: Using Counterfeit Luxury Goods Can Lead to Prosocial Behavior

Jinjie Chen, University of Minnesota, USA
Deborah Roedder John, University of Minnesota, USA
Yajin Wang, University of Maryland, USA
Courtney A. Carufel, UnitedHealthcare, USA

Paper #2: When Modesty Pays

Shalena Srna, University of Pennsylvania, USA
Alixandra Barasch, New York University, USA
Deborah Small, University of Pennsylvania, USA

Paper #3: Promoting Conspicuous Generosity: Justifying the “Brag” by Removing the Choice

Adelle X. Yang, National University of Singapore, Singapore
Christopher K. Hsee, University of Chicago, USA

Paper #4: Prosocial Referral Rewards

Rachel Gershon, Washington University in St. Louis, USA
Cynthia Cryder, Washington University in St. Louis, USA
Leslie John, Harvard University, USA

SESSION OVERVIEW

Because consumers want to be perceived well by others, they are motivated to signal status or generosity to others. However, such conspicuous actions may also convey information about consumers' self-serving motives (Berman et al. 2015, Newman and Cain 2014).

When do consumers' conspicuous actions lead to inferences that their motives are self-serving? And how do consumers strike a balance between their desire to do good deeds and to effectively communicate them to others? This special session explores how consumers manage these interactions between self-interested motives and prosocial behaviors in both directions. In particular, these papers examine how self-serving signals can affect one's own (paper 1) and others' (paper 2) prosocial responses, as well as how anticipating others' interpretation of self-serving signals can affect one's intention to engage in prosocial behaviors (papers 3 & 4). Each paper examines interpretations of conspicuous actions in a different social context, and identifies the corresponding social and prosocial consequences.

The first two papers examine how inferences about self-serving motives from conspicuous actions can affect prosocial responses. That is, status signaling can impact both how consumers feel about themselves and how others treat them. **Chen, John, Wang and Carufel** find that for owners of authentic status goods, using counterfeit goods poses a threat to their self-image and hence increases their willingness to engage in compensatory prosocial behaviors. In other words, consumers may attempt to signal generosity to atone for the inauthenticity of their status signals. Similarly, **Srna, Barasch and Small** show that consumers' use of status goods affects others' inferences of their prosociality. Those engaged in conspicuous consumption are perceived as less cooperative and generous and are thus avoided in situations where cooperation is desired.

The second two papers further investigate these strategic choices, showing how consumers anticipate negative consequences of conspicuous signals and adjust their behavior accordingly. Interestingly, these adjustments can actually result in more prosocial outcomes, with implications for charities and companies hoping to encourage these outcomes. **Yang and Hsee** examine anticipated social inferences of self-serving motives from conspicuous prosocial behaviors. They find that making the public display of a prosocial

behavior mandatory instead of voluntary can assuage consumers' concerns about negative social inferences and motivate them to engage in conspicuous prosocial behaviors they might otherwise avoid. **Gershon, Cryder and John** investigate the anticipated social inferences of self-serving motives in the context of referral programs. They demonstrate that consumers are more likely to refer friends when incentives are purely prosocial, rather than partially or purely self-serving, to avoid conveying the impression that they have self-interested motives.

These findings deepen our understanding of conspicuous actions and their interpretation in a dynamic social context. Together, these papers show how people's sensitivity to the inferences others make about their conspicuous behaviors can motivate them to engage in less status-signaling and more prosocial actions. All four working papers have at least three studies completed. We expect this session to attract researchers interested in a wide variety of topics, including conspicuous consumption, status, prosocial behavior, authenticity, and incentives.

Prosocial Consequences of Counterfeits: Using Counterfeit Luxury Goods Can Lead to Prosocial Behavior

EXTENDED ABSTRACT

Counterfeit luxury products remain popular with consumers, who desire the status-signaling benefit associated with luxury goods at a fraction of the cost of authentic ones. However, there are psychological costs associated with using counterfeit goods. As demonstrated by Gino, Norton, and Ariely (2010), participants felt less authentic and behaved more unethically after using a counterfeit luxury product. For example, counterfeit users were more likely to cheat for a monetary award in a subsequent task.

In contrast, we show that using counterfeit luxury products can have positive consequences, specifically increasing prosocial behavior. In four studies, we give women a counterfeit luxury product to use, followed by an opportunity to engage in prosocial behavior. We find that counterfeit users are more likely to volunteer and donate money to charity (study 1 & 2). Further, we find that this effect is moderated by whether counterfeit users are owners of authentic luxury products. Counterfeit use increases charitable donations primarily among luxury owners versus non-owners (study 3), and these higher donation levels are diminished for luxury owners *if* they are given an opportunity to self-affirm their values in other ways (study 4).

We theorize that using a counterfeit product can constitute a threat to the moral identity of users, and when given an opportunity to compensate for this moral transgression, counterfeit users will engage in more prosocial behavior. This prediction is consistent with prior work on moral cleansing (Jordan et al. 2011; Sachdeva et al. 2009; Tetlock et al. 2000). However, we posit that moral cleansing in the counterfeit luxury context emerges primarily for counterfeit users who own authentic luxury goods and consider luxury goods to be part of their self-concept. This prediction agrees with prior research showing that self-threats are consequential only if individuals identify with the domain in which the threat occurs (Aronson et al. 1999). Thus, when given an opportunity to behave in a prosocial way, these counterfeit users respond in a very generous way to regain their moral self. Further, an opportunity for self-affirmation prior to donation eliminates this effect.

Our findings contribute to a better understanding of the consequences of using counterfeit luxury goods. Contrary to prior research, we show that counterfeit use can result in more positive and prosocial behaviors, particularly for owners of authentic luxury goods. We also contribute to the moral cleansing literature by showing that engaging in an unethical activity may be insufficient to trigger this process. The focus of the immoral/unethical behavior (luxury goods) must also be one where the consumer feels a personal connection to their self-concept, in our case, by having purchased authentic luxury products in the past.

Study 1

We demonstrate that using a counterfeit product constitutes a threat to the user's moral self-image, and to compensate, counterfeit users are more willing to behave pro-socially. Female participants ($n=62$) were randomly assigned to wear either a counterfeit Tiffany bracelet or an unbranded bracelet (control), and afterwards, were asked to indicate their feelings on several personal dimensions (including honest and genuine) and their willingness to help volunteer and donate to charities (6-item moral activity scale, adapted from Shelton and McAdams 1990). Counterfeit users indicated feeling less honest/genuine (6.12 vs. 6.48, $p<0.05$) and were more willing to volunteer and donate to charity than control group participants (4.52 vs. 4.10, $p<0.05$).

Study 2

We replicated the findings from study 1 using actual monetary donation to charity as the measure of prosocial behavior. The procedure was identical to the one described for study 1, except that the moral activity scale was replaced by a real donation opportunity. Participants ($n=58$) were told they would receive \$5 as compensation for participating in the study, and were encouraged to donate a portion of this money to a charity. As expected, counterfeit users donated more money to charity than control group participants (3.61 vs. 2.65, $p<0.05$).

Study 3

We show the effect of counterfeit use on prosocial behavior is moderated by ownership of authentic luxury goods. We predicted that counterfeit users who are luxury owners would donate more money to charity than counterfeit users who are not luxury owners. We reasoned that although use of counterfeit luxury products can be considered a threat to one's moral self-identity, this feeling is most likely to occur among consumers who own and feel a personal connection to authentic luxury goods. Thus, owners of luxury goods who use a counterfeit were expected to donate more money.

The procedure of the main study was similar to that of study 2, except all participants ($n=126$) used a counterfeit luxury item (small Louis Vuitton handbag) and indicated whether they owned products from luxury brands. As predicted, owners of authentic luxury handbags donated more to charity after using the counterfeit handbag than did non-luxury owners (4.13 vs. 3.48, $p<0.05$).

Study 4

We provide additional process evidence by introducing a self-affirmation task, where participants ($n=139$) are encouraged to affirm their personal values (Cohen et al. 2000). The procedure was similar to study 3, with a 2 (Luxury Ownership: owner vs. non-owner) \times 2 (Self-affirmation task: yes, no) between-subjects design. A manipulation check using the self-integrity scale (Sherman et al. 2009) confirmed the efficacy of the self-affirmation task.

An analysis of donation amounts for participants who donated to charity revealed that, among luxury owners, donations were lower in the self-affirmation versus control condition (4.07 vs. 4.64, $p<0.05$). This finding is consistent with our theorizing that counterfeit use is more likely to have consequences for luxury owners, who compensate by larger donations, *unless* they have an opportunity to self-affirm their values in another way. For non-owners, the self-affirmation task did not affect the amount of their donations (4.28 vs. 4.53 $p>0.19$), consistent with the idea that these individuals do not identify with the domain of luxury goods as do luxury owners, and thus feel less need to compensate for their counterfeit use through either prosocial behavior or self-affirmation. This experiment provides additional evidence that threat to the self-concept is what drives the prosocial behaviors among luxury owners after using counterfeit luxury products.

When Modesty Pays

EXTENDED ABSTRACT

The attainment of status, or being higher on dimensions that are valued by society, is a fundamental drive (Nelissen and Meijers 2011; Huberman, Loch and Onculer 2004). People signal status in order to reap the benefits afforded to people who have high status, such as wealth and social influence (e.g., Eastman, Goldsmith and Flynn 1999). A common way to signal status is through conspicuous consumption of luxury goods (e.g., Berger & Ward 2010; Han, Nunes and Dreze 2010), and the demand for luxury goods implies its advantages.

Yet, conspicuous consumption may be socially disadvantageous in certain contexts. Specifically, we propose that signaling status through conspicuous consumption signals self-interest, which is inherently at odds with cooperation (Barasch, Berman, and Small, 2016; Lin-Healy and Small, 2013). Across six studies (total $N = 1,824$), we demonstrate that conspicuous consumers are perceived as less good and cooperative than modest consumers. As a result, people prefer to interact with modest partners in tasks requiring cooperation. We further show that people strategically avoid status signaling in cooperative contexts, suggesting some awareness that conspicuous consumption reduces cooperation.

Studies 1a-1d

We examine judgments of individuals wearing clothes with either high-status brand logos or the same clothes without logos. For example, in Study 1a, participants ($N = 401$, MTurk, behavioral lab) were asked to evaluate a young man in one of two photos. The images were identical except for the presence of a Ralph Lauren logo on the man's shirt. As predicted, participants viewed the individual who was wearing the Ralph Lauren shirt as less good (nice, sincere, a good person, generous; $\alpha = .922$; $F = 6.981$, $p = .009$), less cooperative (scale adapted from Cloninger et al. 1993; $\alpha = .790$; $F = 21.063$, $p < .001$), and more of a show off ($\alpha = .925$; $F = 31.388$, $p < .001$) than the man wearing a plain shirt. In Studies 1b-1d, we replicated these findings using different stimuli and brands (e.g. owning a Chanel handbag; all $ps \leq .05$)

Study 2

We examine whether people prefer to interact with someone who is modest rather than someone who signals status. Participants ($N = 202$, MTurk) were told that they would be working with a virtual partner on a task that was a variant of the Prisoner's Dilemma game. Participants were told that they could choose either a partner who had made an "avatar" or a partner who had not made an ava-

tar. They were further told that the avatar partner chose whether to include luxury-branded clothing (e.g. Prada, Gucci) on their avatar. Participants were then randomly assigned to one of two conditions: in the *branded clothing* condition, the partner who made an avatar chose to dress their avatar in luxury-branded clothing, while in the *unbranded clothing* condition, the partner who made an avatar chose unbranded clothing.

Results showed that when the avatar partner chose unbranded clothing, 71% of participants preferred that partner to the neutral partner. However, when the avatar chose branded clothing, only 27% preferred that partner to the neutral partner ($\chi^2 = 40.12, p < .001$). Replicating Study 1, the branded partner was evaluated as less good and cooperative (p 's $< .001$) than the unbranded partner. Additionally, both measures of goodness (95% CI [-0.571, -0.124]) and cooperativeness (95% CI [-0.532, -0.084]) mediate the effect of clothing condition on participants' partner choice (PROCESS Model 4; Hayes 2013). Furthermore, when asked to predict whether the partner would cooperate or defect, 47% thought the avatar partner wearing unbranded clothing would defect, while 85% of participants thought the avatar partner wearing branded clothing would defect ($\chi^2 = 33.48, p < .001$). Thus, the choice of branded clothing seems to signal that the person is less likely to cooperate, and people do not want to play a Prisoner's Dilemma game with someone who is going to defect.

So far we have examined how people judge others wearing brands that signal status, and how that impacts their behavior towards status-signalers. In the final study, we examine whether individuals choose these brands for themselves in a strategic manner. Specifically, we test if individuals are aware that it pays to signal modesty in cooperative contexts.

Study 3

Participants (N = 214, MTurk) created an avatar of themselves by selecting their hair color, skin tone, and clothing in a web application. After generating their avatar, participants chose whether to put a brand on their selected clothing. They could choose between eight high-status logo options (e.g., Prada, Gucci) or they could choose not to put a logo on their clothing. Participants were then randomly assigned into one of two conditions. In the *neutral* condition, participants were told that their avatar choices would merely be shown to a partner, but that that partner would not make any decisions with regards to them. In the *cooperation* condition, prior to making the avatar, participants learned that they would subsequently play a Prisoner's Dilemma game with their partner, similar to Study 2. We reasoned that when anticipating a Prisoner's Dilemma, individuals would dress their avatar in a way that they believed would influence their partner to cooperate. Thus, if they correctly infer the advantage of remaining modest, then participants in the cooperation condition should be less likely to choose branded clothing compared to the neutral condition. Indeed, 50% chose branded clothing when there was no mention of a game, whereas in the cooperation condition, only 33% of participants chose branded clothing for their avatar ($\chi^2 = 6.592, p = .010$).

In sum, although signaling status is often desirable and advantageous, we find that when the goal is cooperation, modesty pays. Conspicuous consumers are perceived as less good and more self-interested, and are thus less preferred as partners in cooperative tasks. Furthermore, individuals show some awareness of the benefits of modesty and refrain from signaling status when it is advantageous to do so. This work contributes to variety of areas in consumer behavior, including conspicuous consumption, status, and cooperation.

Promoting Conspicuous Generosity: Justifying the "Brag" by Removing the Choice

EXTENDED ABSTRACT

People often feel conflicted about publicizing their pro-social behaviors. Although people want to be considered generous (Ariely, Bracha, Meier 2007, Bénabou and Tirole 2010, Ellingsen and Johannesson 2011, Harbaugh 1998), publicizing one's good deed often leads others to attribute the good deed to the very desire to enhance their reputation (aka the braggart's dilemma, Berman, Levine, Barasch, and Small 2015, Scopelliti, Loewenstein and Vosgerau 2015). As a result, charity organizations often find it difficult to leverage these image motives to increase participation in, or voluntary broadcasting of, conspicuous charity campaigns.

How can this dilemma be resolved so that charity campaigns can be more successful and people's desire for conspicuous generosity can be fulfilled? We propose that, people may be more willing to participate in prosocial campaigns if they are provided with a justification for bragging about their prospective good deed. We term this strategy "brag-binding", that is, making the voluntary publicity of their participation mandatory instead, as a prerequisite for participation or a condition for additional prosocial benefits. We predict that brag-binding may alleviate people's concern for negative social attribution associated with conspicuous prosocial behaviors and hence, increase people's willingness to engage in such behaviors.

This proposition contradicts predictions of normative theories because the terms of a voluntary-brag are more attractive than a mandatory-brag for two reasons. First, before participation, those who dislike social attention may only wish to take part in the voluntary-brag campaign, but not the mandatory-brag campaign. Second, during participation, those in the voluntary-brag campaign will have the freedom to choose whether to publicize their good deed, unlike those in the mandatory-brag campaign.

We present four experiments including one field study. We first examine in Study 1 people's predictions of others' attribution of their prosocial behaviors. In a 3(no-brag, voluntary-brag, mandatory-brag) x 2(scenario replica) between-subjects design, 293 participants ($M_{age} = 36, 49\%$ Male) read one of two scenarios in which they contributed to a charity and another person accidentally found out about their good deed. In all conditions, participants' contribution was posted on social media to further promote the charitable campaign. In addition, the other person either did not see the post (no-brag), or saw it and learned that it was participants' voluntary action (voluntary-brag), or saw it and learned that it was a prerequisite for contributing (mandatory-brag). Participants then answered how much they believe the other person would attribute their prosocial behavior to image motives (e.g., desire for reputation) vs. genuine generosity. There was no effect of scenario so we combined them. Overall, participants indicated that others would be more likely to attribute their good deed to genuine generosity in both the no-brag (3.2) and mandatory-brag (3.4) conditions than the voluntary-brag condition (4.2; $F(1, 290) = 9.5, p < .001, \eta_p^2 = .06$). The difference between no-brag and voluntary-brag conditions (3.2 vs. 4.2, $p < .001$) is consistent with actual social attribution found in prior work (Berman et al. 2015). More importantly, predicted social inference was more favorable for mandatory-brag than voluntary-brag (3.4 vs. 4.2, $p = .001$). Therefore brag-binding can assuage participants' concern for negative social inference.

Then in a field experiment, students at a dining hall in a Midwestern University were approached by hypothesis-blind research assistants to fill out a one-page questionnaire about the St. Jude children's research hospital. Students who completed the questionnaire

($N=162$, $M_{\text{age}}=22$, 57%Male) were asked if they would take another 4 minutes to color a cartoon image with encouraging messages (e.g., “Feel better soon!”) to help cheer up the recovering children at the hospital. Volunteers for the task would receive a large fluorescent yellow sticker that says “I provided my creative help to St. Jude children’s research hospital, have you?” to further promote campus awareness of the campaign. Participants either read that each volunteer could choose to wear the sticker for a day (voluntary-brag), or read that each volunteer must commit to wear the sticker for a day in order to participate (mandatory-brag). Every participant was told that the same information that they received was given to all students who were approached in the campaign. The results revealed that brag-binding was more effective in soliciting volunteers: more participants in the mandatory-brag condition agreed to help than those in the voluntary-brag condition (41.0% vs. 23.5%, $\chi^2=4.5$, $p=.045$, $\eta_p^2=.17$).

Next, we further compare the effect of brag-binding (mandatory-brag) to no-brag and voluntary-brag conditions on donations (Study 3), and explore a theoretical moderator - information asymmetry between people considering prosocial actions and their potential audience (Study 4). In Study 3, we randomly assigned 661 mturkers ($M_{\text{age}}=35$, 55%Male) to 3(no-brag, voluntary-brag, mandatory-brag) conditions. Participants read that if they were to donate \$28 to a community charity, they would achieve VIP donor status and their donation would be matched. The manipulation across conditions was similar to earlier experiments. Participants donated more to the campaign in the mandatory-brag condition than no-brag or voluntary-brag conditions (\$24.0 vs. \$18.0, \$19.3; $F(2, 658)=5.7$, $p=.003$, $\eta_p^2=.017$). Plus, more participants donated to achieve VIP status in the mandatory-brag condition (54.6% vs. 42.6%, 41.7%, $\chi^2=9.3$, $p=.009$).

In Study 4, 304 social media users ($M_{\text{age}}=34$, 36%Male) were randomly assigned to voluntary-brag or mandatory-brag conditions for a social-media campaign that solicits volunteers for a local animal shelter. We measured participants’ frequency in using social media as a proxy for perceived information asymmetry between people and their audience on the social media platform – the more frequent, the greater overlap of information. We predicted that the effect of brag-binding would be stronger when participants believe that others have sufficient information to interpret their brag. Overall, participants indicated greater willingness to volunteer in mandatory-brag than voluntary-brag condition ($M=5.3$ vs. 4.9, $t(302)=2.0$, $p=.049$). This effect was marginally stronger among heavy social media users ($F(1, 298)=3.7$, $p=.056$, $\eta_p^2=.012$).

In sum, by removing contributors’ choice about whether to brag and justifying their prospective conspicuous prosocial behavior, “brag-binding” makes people more willing to both help and to spread word about the charitable cause, and facilitates a win-win situation among contributors, charity organizations, and their recipients.

Prosocial Referral Rewards

EXTENDED ABSTRACT

Previous research has shown that incentives can effectively increase customer referrals, however, it remains unclear how companies can optimize their reward structure. Some research finds that referral rewards, while often beneficial to a firm, can also produce a negative effect in the form of psychological costs, whereby the addition of an incentive makes the recommender feel selfish or disingenuous (Ryu and Feick 2007).

In this research, we propose that consumers will be most likely to refer friends when there is no personal incentive, and instead, their

referred friend receives the entire referral reward. With such “prosocial” referral rewards, customers can reap all of the psychological benefits of helping a friend (Aknin et al. 2013; Dunn, Aknin, & Norton 2008), without incurring the psychological costs of feeling selfish. Our hypothesis has important implications because while many companies use referral rewards to increase customer acquisition, very few offer the full reward to the referred friend; instead they often opt to share the reward between the referrer and referee, or, to allocate the entire reward to the referrer.

Study 1

Mechanical Turk participants ($N=750$) were randomly assigned to one of 4 conditions: 1) No Reward, 2) Selfish Reward: Participants were told that they would receive \$10 for each friend that joined a new program, 3) Shared Reward: The participant and their friend would each receive \$5, or 4) Prosocial Reward: The referred friend would receive \$10. We also manipulated context sensitivity, using either a sensitive context (health clinic) or a non-sensitive context (Amazon loyalty program). We manipulated reward context both as a robustness check, and because previous research suggests that consumers may find (selfish) incentives particularly distasteful when the context is personal or sensitive (Kornish and Li 2010).

In the study, participants were asked to imagine that they were either members of an Amazon loyalty program or patients at a free health clinic. They were asked, “How likely are you to refer a friend to become a member of this program (go to this health clinic)?” There were no significant differences between consumer contexts, so moving forward those results are collapsed.

Across contexts, participants were most likely to refer a friend in the “Prosocial Reward” condition. The propensity to refer a friend was significantly higher for the Prosocial Reward condition (70.89% likelihood) versus No Reward (58.28%; $p<.001$), Selfish Reward (52.04%; $p<.001$) and Shared Reward (61.63%; $p=.006$) conditions. In sum, study 1 suggests that consumers are most likely to refer when offered a generous rather than a selfish or shared reward.

Study 2

Study 2 explores the process underlying this preference for prosocial referral rewards. Specifically, we manipulated the transparency of the referral in a 2(reward: selfish, generous) x 2(transparency: control, opaque) between-subjects design. Using the Amazon loyalty program from Study 1, we showed participants a sample referral email that Amazon was interested in sending to their friend. In the opaque condition, we mentioned after the e-mail that their friend would NOT be informed that the referrer will receive (or will not receive) a reward if they join. We then asked “How likely are you to refer your friend to Amazon BOLD?” along with additional questions designed to measure feelings of selfishness and generosity due to the referral.

There was a significant interaction between reward type and transparency ($p < .001$). In the Control condition, participants were again more likely to refer their friend when the reward was prosocial (76.8%) versus selfish (66.3%, $p=.006$). We find the opposite pattern in the opaque condition, however; in the opaque condition, where participants knew their friend would not learn of their generous role, participants were more likely to refer when the reward was selfish rather than prosocial. While psychological costs (feelings of selfishness) were higher for the selfish reward across conditions, feelings of generosity were only significantly higher in the control condition. This indicates that when participants believed their friend would not know whether they are being generous or selfish, participants preferred to gain the selfish reward.

Study 3

We further tested the degree to which the preference for prosocial referral rewards occurs because referrers seek social benefit. The study used a 2(reward: selfish, prosocial) x 2(recipient: friend, stranger) between-subjects design. 575 participants were asked to imagine that they were members of Amazon BOLD and again saw a sample referral email that Amazon is interested in sending to either 1) their close friend or 2) a potential customer (who the participant doesn't know). We then ask "How likely are you to refer your friend (this potential customer), to Amazon BOLD?"

We find a significant interaction between referral reward and referral recipient on referral likelihood ($p < .001$). Consistent with our previous studies, participants were more likely to refer a friend when offered a prosocial (79.2) rather than a selfish referral reward (70.3%; $p = .005$). However, when asked to refer a stranger, the selfish reward (64.8%) was more successful than the generous reward (41.7%; $p < .001$). This suggests that consumers are not universally more motivated by prosocial referral rewards, but rather, prefer prosocial incentives when a meaningful social relationship is involved.

Currently, companies typically incentivize referrals by rewarding the referrer or both the referrer and their friend. We find evidence that consumers may instead be most likely to refer friends when the entire reward goes to their friend. However, this effect relies on social benefit; it reverses when the referred individual is a stranger (versus a close friend) or when the referred friend will not know the terms of the referral (whether the reward was selfish or generous). This preference was found in two different consumer contexts and provides both conceptual insight about prosocial rewards and practical insight into successful referral reward strategies.

REFERENCES

- Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Burns, J., Biswas-Diener, R., ... & Norton, M. I. (2013). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology*, 104(4), 635.
- Ariely, Dan, Anat Bracha, and Stephan Meier. "Doing good or doing well? Image motivation and monetary incentives in behaving prosocially." (2007).
- Aronson, Joshua, Micheal J. Lustina, Catherine Good, Kelli Keough, Claude M. Steele, and Joseph Brown (1999), "When White Men Can't Do Math: Necessary and Sufficient Factors in Stereotype Threat," *Journal of Experimental Social Psychology*, 35 (1), 29-46.
- Barasch, Alixandra, Jonathan Z. Berman, and Deborah A. Small, (2016), "When payment undermines the pitch: On the persuasiveness of pure motives in fundraising," *Psychological Science*, 27, 1379-87.
- Bénabou, Roland, and Jean Tirole. "Individual and corporate social responsibility." *Economica* 77, no. 305 (2010): 1-19.
- Berger, Jonah and Morgan Ward (2010), "Subtle signals of inconspicuous consumption," *Journal of Consumer Research*, 37(4), 555-69.
- Berman, Jonathan Z., Emma E. Levine, Alixandra Barasch, and Deborah A. Small. "The braggart's dilemma: On the social rewards and penalties of advertising prosocial behavior." *Journal of Marketing Research* 52, no. 1 (2015): 90-104.
- Cloninger, C. Robert, Dragan M. Svrakic, and Thomas R. Przybeck (1993), "A psychobiological model of temperament and character," *Archives of general psychiatry*, 50(12), 975-90.
- Cohen, Geoffrey L., Joshua Aronson, and Claude M. Steele (2000), "When Beliefs Yield to Evidence: Reducing Biased Evaluation by Affirming the Self," *Personality and Social Psychology Bulletin*, 26 (9), 1151-64.
- Critcher, Clayton R., and David Dunning. "No good deed goes unquestioned: Cynical reconstruals maintain belief in the power of self-interest." *Journal of Experimental Social Psychology* 47, no. 6 (2011): 1207-1213.
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, 319(5870), 1687-1688.
- Eastman, Jaqueline K., Ronald E. Goldsmith, and Leisa Reinecke Flynn (1999), "Status consumption in consumer behavior: Scale development and validation," *Journal of Marketing Theory and Practice*, 7(3), 41-52.
- Effron, Justin. "Op-ed: Five Secrets to Uber's Success." CNBC. N.p., 04 Feb. 2016. Web. 18 July 2016.
- Ellingsen, Tore, and Magnus Johannesson. "Conspicuous generosity." *Journal of Public Economics* 95, no. 9 (2011): 1131-1143.
- Gino, Francesca, Michael I. Norton, and Dan Ariely (2010), "The Counterfeit Self: The Deceptive Costs of Faking It," *Psychological Science*, 21 (5), 712-20.
- Harbaugh, William T. (1998a), "The Prestige Motive for Making Charitable Transfers," *American Economic Review*, 88 (2), 277- 82.
- Harbaugh, W. T., Mayr, U., & Burghart, D. R. (2007). Neural responses to taxation and voluntary giving reveal motives for charitable donations. *Science*, 316(5831), 1622-1625.
- Han, Young Jee, Joseph C. Nunes, and Xavier Drèze (2010), "Signaling status with luxury goods: The role of brand prominence," *Journal of Marketing*, 74(4), 15-30.
- Hayes, Andrew F. (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*, Guilford Press.
- Huberman, Bernardo A., Christoph H. Loch, and Ayse Öncüler (2004), "Status as a valued resource," *Social Psychology Quarterly*, 67(1), 103-14.
- Jin, Liyin, and Yunhui Huang. "When giving money does not work: the differential effects of monetary versus in-kind rewards in referral reward programs." *International Journal of Research in Marketing*, 31.1 (2014): 107-116.
- Jordan, Jennifer, Elizabeth Mullen, and J. Keith Murnighan (2011), "Striving for the Moral Self: The Effects of Recalling Past Moral Actions on Future Moral Behavior," *Personality and Social Psychology Bulletin*, 37 (5), 701-13.
- Kornish, L. J., & Li, Q. (2010). Optimal referral bonuses with asymmetric information: Firm-offered and interpersonal incentives. *Marketing Science*, 29(1), 108-121.
- Lin-Healy, Fern and Deborah A. Small (2013), "Nice guys finish last and guys in last are nice: The clash between doing well and doing good," *Social Psychological and Personality Science*, 4(6), 693-99.
- Nelissen, Rob M.A. and Marijn H.C. Meijers (2011), "Social benefits of luxury brands as costly signals of wealth and status," *Evolution and Human Behavior*, 32(5), 343-55.
- Newman, George E., and Daylian M. Cain. "Tainted Altruism When Doing Some Good Is Evaluated as Worse Than Doing No Good at All." *Psychological science* 25, no. 3 (2014): 648-655.

- Ryu, G., & Feick, L. (2007). A penny for your thoughts: Referral reward programs and referral likelihood. *Journal of Marketing*, 71(1), 84-94.
- Sachdeva, Sonya, Rumen Iliev, and Douglas L. Medin (2009), "Sinning Saints and Saintly Sinners: The Paradox of Moral Self-Regulation," *Psychological Science*, 20 (4), 523-28.
- Scopelliti I., Loewenstein G., & Vosgerau J. (2015) You Call It 'Self-Exuberance,' I Call It 'Bragging.' Miscalibrated Predictions of Emotional Responses to Self-Promotion, *Psychological Science*, 26(6), 903-914.
- Shelton, Charles M. and Dan P. McAdams (1990), "In Search of an Everyday Morality: The Development of a Measure," *Adolescence*, 25 (100), 923-43.
- Sherman, David K., Geoffrey L. Cohen, Lief D. Nelson, A. David Nussbaum, Debra P. Bunyan, and Julio Garcia (2009), "Affirmed Yet Unaware: Exploring the Role of Awareness in the Process of Self-Affirmation," *Journal of Personality and Social Psychology*, 97 (5), 745-64.
- Tetlock, Philip E., Ori V. Kristel, S. Beth Elson, Melanie C. Green, and Jennifer S. Lerner (2000), "The Psychology of the Unthinkable: Taboo Trade-offs, Forbidden Base Rates, and Heretical Counterfactuals," *Journal of Personality and Social Psychology*, 78 (5), 853-70.
- Verlegh, Peeter WJ, et al. "Receiver responses to rewarded referrals: the motive inferences framework." *Journal of the Academy of Marketing Science*, 41.6 (2013): 669-682.

A New Look into Intrinsic and Extrinsic Motivations of Variety-seeking

Chairs: Nicole Y. Kim, University of Maryland, USA

Liang Huang, University of Arizona, USA

Paper #1: When Variety Isn't Life's Spice: The Impact of Implicit Self-theories and Preference Forecasting on Anticipated Consumption Variety

Joshua J. Clarkson, University of Cincinnati, USA

Joshua T. Beck, University of Oregon, USA

Mary C. Murphy, Indiana University, USA

Paper #2: The Impact of Pain of Payment on Variety Seeking Behavior

Liang Huang, University of Arizona, USA

Rafay Siddiqui, The Hong Kong Polytechnic University, Hong Kong

Anastasiya Pocheptsova Ghosh, University of Arizona, USA

Paper #3: When Experience is Costly: How Choice Variety Signals Expertise and Status

Nicole Y. Kim, University of Maryland, USA

Yajin Wang, University of Maryland, USA

Paper #4: Assortment Variety and Perceived Expertise

Aner Sela, University of Florida, USA

Siân Morgan, University of Florida, USA

Michal Maimaran, Northwestern University, USA

SESSION OVERVIEW

What motivates consumers to avoid rather than seek variety in their choices? The importance of variety seeking in consumer choice and its practical implications has long been recognized by consumer researchers. In this special session, we investigate consumer variety seeking from two novel perspectives: the intrinsic drivers that lead consumers to prefer less variety in their choices and extrinsic social signals that a choice of lower variety can convey to others. Four papers in this session present previously unexplored motivations for variety seeking and provide compelling empirical evidence for these propositions.

The first two papers approach variety seeking from an intrinsic motivation perspective. While previous work has identified various extrinsic influences on variety seeking, such as product display (Simonson and Winer 1992) and environmental constraints (Levav and Zhu 2009), the first two papers examine two novel intrinsic factors: consumers' implicit self-theory and pain of payment. In the first paper, *Clarkson, Beck, and Murphy* investigate the role that implicit self-theory plays in determining consumers' preference for variety. Across seven studies, they show that a belief that the self is fixed (vs. malleable) can induce more stable future preference predictions, which in turn, results in lower preference for variety. They further show that such reduction in variety increases consumers' satisfaction in the long run. The second paper by *Huang, Siddiqui, and Pocheptsova Ghosh* show how the pain of payment a consumer incurs affects their decisions to include more or less variety in their choice. Five studies demonstrate that when consumers experience higher (vs. lower) pain of payment, they perceive the options to be less attractive, and choose less variety.

The next two papers investigate extrinsic motivations for variety seeking, offering a fresh take on how variety affects interpersonal perceptions. *Kim and Wang* test a novel social consequence of choosing less variety: status perception. Through four studies, they show that less (vs. more) varied choices in a high-cost product category (i.e. luxury) signals greater status, due to inferences of a costly prior

preference learning stage. Finally, *Sela, Morgan, and Maimaran* examine how assortment variety serves as an expertise signal. In three studies, they find that when consumers want to appear as experts, novices choose more variety whereas experts choose less variety.

In sum, this session enriches our understanding of consumer variety seeking behaviors by demonstrating novel motivations for variety seeking, ranging from internal processes such as certainty in one's self-concept and psychological pain, to external considerations such as status and expertise perceptions. This session will appeal to a broad set of scholars interested in variety seeking, affective forecasting, preference formation, luxury and conspicuous consumption, and consumer knowledge.

When Variety Isn't Life's Spice: The Impact of Implicit Self-theories and Preference Forecasting on Anticipated Consumption Variety

EXTENDED ABSTRACT

Many of our routine decisions involve anticipating future consumption. This act of anticipation forces consumers to *guess* about their future preferences (Ratner, Kahn, and Kahneman 1999; Simonson 1990). While a wealth of research demonstrates that consumers opt for variety in their experiences and products to reduce their uncertainty of future preferences (Kahn and Lehmann 1991; Simonson 1990; Simonson and Winer 1992), not all consumers opt for variety in their future preferences. In other words, when anticipating future consumption, some consumers diversify their experiences whereas others opt to repeat the same experience. The focus of the present research is to provide a novel perspective on this question by understanding the impact of consumers' *implicit self-theories* on this decision to seek out the same versus different experiences when considering future consumption.

Across a series of experiments, the findings repeatedly demonstrate a consistent influence of consumers' beliefs in the stability of the self-concept—that is, their implicit self-theory—on their tendency to repeat versus diversify future consumption experiences. In particular, those who believe the self to be fixed (entity theorists) preferred less variety than did those who believe the belief to be malleable (incremental theorists). Moreover, this effect occurred across a host of products (e.g., candybars, toothpastes, sodas), held when the choices were consequential, and occurred regardless of whether implicit self-theories were measured or manipulated. Thus, implicit self-theories appear to exert a robust influence on the diversity in consumers' anticipatory consumption.

Additionally, we document the role of preference forecasting in explaining this robust influence. Preference forecasting is defined as the perceived durability consumers attribute to their preferences over time. We argued that, given that entity theorists view the self-concept as durable over time, they should also view features of the self-concept such as preferences as equally durable (Dweck, Chiu, and Hong 1995; see Dweck 2000). This perception of durability is critical, as heightened durability should heighten preference certainty and thus decrease the need for variety to cope with uncertainty in future preferences (Kahn and Lehmann 1991; Simonson 1990; Simonson and Winer 1992). Consistent with this logic, entity theorists not only perceived their preferences as more stable than incremental theorists, but this difference in preference forecasting mediated the

effect of implicit self-theories on variety-seeking. Indeed, directly manipulating consumers' beliefs in the temporal stability of their preferences impacted variety-seeking, such that those who viewed their preferences as more (versus less) stable over time were less likely to anticipate variety.

Moreover, the mediating role of preference forecasting was independent of several alternative motivations related to variety-seeking. For instance, the desire for life change, curiosity, or impulsivity could not account for the documented effect of implicit self-theories on variety-seeking. Additionally, showing this difference by directly manipulating consumers' preference forecasts offers further support against alternative explanations related to broader motivations stemming from consistency-seeking. Of course, this is not to say that consumers' implicit self-theories are irrelevant to these alternative motivations; rather, we would argue that these motivations could still impact the effect of implicit theories on variety-seeking under specific circumstances. In general, however, the results offer clear support for the importance of preference forecasting to this decision to seek out the same versus different experiences when considering future consumption.

As further evidence of this preference forecasting mechanism, the findings demonstrate the effect of implicit self-theories on variety-seeking is pronounced when consumers are required to engage in preference forecasting (i.e., anticipate future consumption); when consumers focus on their immediate preferences, we see no differences in preference variety as a function of their implicit self-theories. This finding outlines a critical boundary condition for the influence of implicit self-theories on variety-seeking while also offering unique insight into when consumers are satisfied with less—as opposed to more—variety in their actual consumption (cf. Ratner et al. 1999). Indeed, entity theorists reported greater satisfaction with their actual choices despite consuming less variety than incremental theorists. Thus, perceiving the self—and one's preferences—as durable over time can cause consumers to not only more accurately anticipate the actual amount of variety they consume but can also maintain satisfaction in this consumption despite a lack of variety.

Finally, this effect of implicit self-theories on consumers' decision to seek out the same versus different experiences when considering future consumption was shown to influence preferences for different subscription and reward programs. In particular, entity theorists valued initiatives that promoted low levels of variety consumption; incremental theorists, on the other hand, valued initiatives that promoted high levels of variety consumption. We believe these findings provide a clear illustration for the managerial implications of the present findings, especially with regards to the efficacy of loyalty initiatives so critical to consumer retention (Watson, Beck, Henderson, and Palmatier 2015).

In sum, then, the present research provides clear and consistent support for the role of implicit self-theories (i.e., beliefs about the malleability of the self) in anticipated consumption variety. Specifically, those who perceive their preferences as durable (entity theorists) are less likely to seek out diversified consumption experiences than are those who perceive their preferences as tenuous (incremental theorists). In doing so, these findings offer several conceptual and strategic insights into consumers' tendency to repeat versus diversify future consumption experiences. In particular, these findings speak to both when and why consumers (i) anticipate less variety in their future experiences (rather than more: Kahn and Lehmann 1991; Read and Loewenstein 1995; Simonson 1990) and (ii) gain greater satisfaction in this desire for less variety in future experiences (rather than more: Etkin and Mogilner 2016; Ratner, Kahn, and Kahneman 1999). Thus, this conceptual framework provides an alternative

means by which to understand consumers' (mis)calibration with anticipatory choice, a potent downside of 'growth mindsets' in evoking overestimation errors, and implications for actual experiential satisfaction as well as loyalty programs that incentivize different levels of future consumption variety.

The Impact of Pain of Payment on Variety Seeking Behavior

EXTENDED ABSTRACT

Frequently, consumers acquire multiple products in the same product category and may choose a greater or lesser variety of products. Research on factors affecting variety-seeking behavior has been of great interest to marketing researchers (Kahn and Isen 1993; Ratner and Kahn 2002; Read, Loewenstein, and Kalyanaraman 1999; Read and Loewenstein 1995). We propose that a novel predictor, pain of paying for consumption, would influence consumers' desire for variety in their choices.

When consumers purchase products, the manner in which they pay for the products can vary. One may pay with cash or credit card; similarly, one might pay for products before or after consumption. The different methods and schedules of payment have been shown to influence consumers' experienced pain of payment and change consumer preferences (Prelec and Loewenstein 1998, Monger and Feinberg 1997; Raghuram and Srivastava 2008; Thomas, Desai, and Seenivasan 2011). We extend these findings to the previously unexplored domain of variety seeking.

Specifically, we propose that lower pain of payment will increase consumers' propensity to seek variety. We build our proposition on prior work by Chatterjee and Rose (2012), that demonstrates that priming consumers with the concept of cash (i.e., a more painful payment method) can focus them more on the costs and negative attributes of products while making the concept of credit card (i.e., less painful payment method) more salient makes consumers focus more on the benefits of products and, consequently, form more favorable evaluations of the choice set. Since variety seeking has been found to increase when more options in the choice set have favorable evaluations (Goukens et al. 2007; Faraji-Rad, Jazani, and Warlop 2013), we propose that lower pain of payment will increase the number of favorable options in the choice set and, therefore, lead to more variety-seeking.

We test our proposition in five studies. In study 1, we test whether low (versus high) pain of payment, which we manipulated by changing the timing of payments (pre-pay vs. post-pay), leads to greater variety seeking. Participants imagined buying tickets to visit a museum in one month, and then chose four museum sections to visit from four general categories (e.g., "History," "Science"). Participants in the low pain (vs. high pain) condition were told that the ticket payment was made one month before their visit (vs. must be made one month after their visit). The number of different categories that participants selected served as our measure of variety seeking. As predicted, participants who prepaid for their museum visit demonstrated greater variety seeking compared to those who paid one month after the visit ($M_{LowPain} = 2.65$, $M_{HighPain} = 2.23$; $F(1, 40) = 6.03$, $p < 0.05$).

In study 2, we replicate the effect and rule out timing of consumption as an alternative explanation (Simonson 1990). Participants imagined a trip to Sri Lanka either right now or in one month and then selected different vacation activities. Pain of payment was again manipulated by pre- versus post-payment. Pre-payment led to greater variety seeking regardless of whether consumption occurred in the future or in the present, ruling out timing of consumption as

an alternative explanation ($M_{LowPainPresent} = 2.93$, $M_{HighPainPresent} = 2.68$, $SD = .80$, $M_{LowPainFuture} = 2.92$, $M_{HighPainFuture} = 2.73$; $F(1, 296) = 5.79$, $p < .05$).

In study 3, we replicate our findings using a different pain of payment manipulation. Instead of manipulating the timing of payment, we manipulate the method of payment. Participants were asked to imagine choosing online services to subscribe to for a four-month period, and paying for those services using either cash or credit. Results were consistent with our prior studies, demonstrating that participants in the low pain of payment, i.e., credit, condition chose a greater variety of services compared to those in the high pain of payment, i.e., cash, condition ($M_{LowPain} = 2.07$, $M_{HighPain} = 1.69$; $F(1, 90) = 4.60$, $p < .05$).

In study 4, we tested whether the effect of pain of payment on variety seeking will be attenuated for products with highly favorable evaluations. Participants were given 18 ice cream flavors to rank. Participants chose five scoops of ice cream from their top-ranked (vs. low-ranked) flavors. Pain of payment was manipulated as in study 3. The results revealed the expected interaction ($F(1, 155) = 3.54$, $p = .06$). When choosing among least favorable flavors, participants who experienced low rather than high pain of payment chose greater variety ($M_{Lowpain_lowrank} = 3.59$, $M_{Highpain_lowrank} = 2.95$; $F(1, 155) = 5.69$, $p < .05$), replicating our previous findings. However, as expected, there was no effect of pain of payment on variety seeking when the choice set included highly favorable options ($M_{Lowpain_highrank} = 3.68$, $M_{Highpain_highrank} = 3.74$; $F(1, 155) = .058$, n.s.).

In study 5, we tested whether the predicted effect replicates for real choices. Participants received either cash or a coupon with which they could buy either five candy bars (highly attractive product) or five drink powders (less attractive product) of various flavors (between subjects; based on pre-test). Replicating our prior results, a significant interaction ($F(1, 199) = 6.67$, $p < .05$) revealed that lower pain of payment led to greater variety seeking when participants chose between energy drink powders ($M_{Lowpain_powder} = 3.15$, $M_{Highpain_powder} = 2.71$; $F(1, 199) = 5.67$, $p < .05$), but not when they chose between candy bars ($p > .1$).

In five studies we demonstrate that pain of payment affects consumers' variety-seeking behavior, providing evidence that lower pain of payment can increase variety in consumers' choices. We make a contribution to the literature by establishing a causal link between pain of payment and variety seeking, thereby integrating these two important streams of research. While past research has focused on a number of extrinsic factors which may influence variety seeking, we show how a factor intrinsic to any purchase situation, the mode and timing of payment, may influence variety seeking. Further, past research has shown the negative consequences of a low pain of payment, such as becoming more indulgent (Thomas et al. 2011). We demonstrate a new positive consequence of experiencing a low pain of payment: a greater diversity in consumption and experiences.

When Experience is Costly: How Choice Variety Signals Expertise and Status

EXTENDED ABSTRACT

Past research has demonstrated that incorporating high variety in choices lead to more positive impressions such as appearing more interesting, unique, and expressive, while low variety in product choices may have negative social connotations of being boring and rigid (Fishbach, Ratner, and Zhang 2011; Kim and Drolet 2003; Ratner and Kahn 1999). We demonstrate that under contexts where consumption experiences are costly, for instance, luxury products,

the pattern will reverse such that low variety will convey a positive impression on one's expertise and status.

We propose that consumers perceive a preference learning process for high cost product categories, through its behavioral manifestation in others' consumption choice variety. It is believed that consumers initially go through an exploration stage mirrored in greater variety-seeking to accumulate knowledge and experience, and subsequently make less variety choices once their preferences are stable. Such inferences are particularly salient when the product category is high cost, due to greater perceived motivations to search for the best option, and less ambiguity in attributing consumption decisions to one's preference. Thus, when a consumer chooses less variety in high cost contexts, observers infer greater expertise of the consumer in the product category. Furthermore, we propose that the nature of high cost products introduces an interesting downstream social consequence of such expertise perceptions. Specifically, perceived prior consumption experiences in contexts where experience is costly (e.g. luxury products) translate into greater status perception.

Study 1 aimed to test the main hypothesis that low variety signals expertise, only when the product category is high cost. A 2 (product category: high cost vs. low cost) X 2 (choice pattern: low vs. high variety) between-subjects design was conducted. After reading a description of a consumer purchasing four bottles of wine with *low variety* (i.e. all Pinot Noir), or *high variety* (one of each Champagne, Chardonnay, Pinot Noir, and Zinfandel) at either a high-end or regular wine store, participants (N=140) rated perceived expertise of the consumer. Consistent with our prediction, participants inferred that the consumer purchasing low variety had significantly greater expertise than one purchasing high variety ($M_s = 5.26$ vs. 4.28, $F(1, 136) = 11.587$, $p = .001$) in a high-end wine store scenario, but not in a regular wine store scenario ($M_s = 4.99$ vs. 4.97, NS).

In Study 2, we replicate the main effects on perceived expertise found in Study 1 and demonstrate its impact on perceived status, focusing on the high cost product category. Participants (N=123) read a description of a consumer visiting a premium beer shop in a 2 (choice pattern: low vs. high variety)-cell between-subjects design. They were told that the consumer purchased three bottles of craft beer with *low variety* (i.e. all from one brewery) or *high variety* (i.e. all different breweries). Results for perceived expertise replicated results of Study 1 ($p = .004$). Perceived status mirrored the effects, such that low variety signaled greater status than high variety ($M_s = 5.77$ vs. 5.29, $F(1, 121) = 3.746$, $p = .055$). Furthermore, perceived expertise mediated the main effect of choice pattern on status perception (95% CI: [.0584, .4688]).

In Studies 1 and 2, we find a boost in status perception for low variety, and demonstrate that this effect is driven by perceived expertise. Both perceptions arise from an inference of prior costly preference learning processes. We posit that if low variety choices are framed around features that are non-specific to a high cost product category, low variety may not convey information regarding one's costly prior consumption experiences, and thus lose its signaling impact on expertise and status. In Study 3, participants (N=273) imagined a consumer at a luxury chocolate store. We manipulated the focal feature of choice variety by framing the choices around their choice of wrapper colors (*non-specific feature* condition) or around their choice of chocolate flavors (*specific feature* condition). Next, in a similar fashion to prior experiments, participants are told to imagine that the consumer's choice was *low variety* (i.e. just one flavor/color) or *high variety* (i.e. six different flavors/colors). A 2 (choice pattern: low variety vs. high variety) 2 (focal feature: color vs. flavor) ANOVA on status perception supported our predictions. While low (vs. high) variety conveyed greater status in the specific

feature condition ($M_s = 7.13$ vs. 6.14 , $F(1,269) = 7.817$, $p = .006$), there was no difference in the non-specific feature condition ($M_s = 6.40$ vs. 6.63 , *NS*).

Study 4 sought to explore the boundary condition where high variety seeking can also convey high status by manipulating the process directly. Specifically, if high variety choices can be seen as selections equally based on one's expertise as low variety choices, then we should observe no difference between two choices sets in terms of status perception. A 2 (quality of choice: control vs. high) X 2 (choice pattern: low variety vs. high variety) between-subjects design was conducted. Participants ($N=255$) read a similar description as Study 1's high cost wine store. Participants in the *high quality* condition were told that both low and high variety selections of wine purchased by the consumer were all ranked as the best wine by a respected wine magazine. Participants in the *control* condition were not given such information. As predicted, in the *control* condition, the results replicated the previous studies, where low variety signaled greater status than high variety ($M_s = 5.87$ vs. 5.15 , $F(1, 251) = 9.603$, $p = .002$). However, when both choice sets were explicitly told to be comprised of the best quality, participants inferred that both consumers had similar levels of status ($M_s = 5.81$ vs. 5.75 , *NS*).

This research makes several important contributions. First, these studies expand the variety-seeking literature by examining its novel link to status perception. Moreover, we identify an important construct (i.e. consumption cost) that moderate traditional findings in favor of high variety. Second, while the notion that preference is shaped through experience and knowledge is not new – decades of research suggest variety-seeking and consistency's sequential relationship (Chernev 2003; Clarkson et al. 2013; Hoyer and Ridgway 1984) – this research contributes by showing that lay consumers intuit this relationship and use it when observing purchase behaviors. Finally, this research also contributes to the luxury consumption literature, suggesting that the pattern in which choices are made within luxury products matters.

Assortment Variety and Perceived Expertise

EXTENDED ABSTRACT

Choice conveys information about the chooser's level of expertise. Consumers who wish to portray themselves as experts often choose unique, rare, or sophisticated options, and they often draw spontaneous inferences about others' expertise from the type of options others choose (Feick and Higie 1992; Gershoff, Broniarczyk, and West 2001). But regardless of the specific type of options chosen, might the mere level of assortment variety chosen also serve as a signal of expertise? And, if so, does more or less variety signal greater expertise?

We propose that consumers strategically use assortment variety as a means of signaling their category expertise to others. Moreover, the relationship between assortment variety and perceived category expertise varies as a function of the perceiver's own level of expertise in that category. Specifically, category experts perceive less assortment variety as an indication of greater expertise in that category (and consequently choose less varied assortments to portray themselves as experts), whereas novices perceive more assortment variety as an indication of expertise (and choose accordingly when they wish to appear as experts).

We suggest this based on findings in expertise, impression management, and variety research. Both novices and experts want to be respected and viewed as knowledgeable (Leonard-Barton 1985; Feick and Price 1987), but they have different knowledge structures (Alba and Hutchinson 1987), and when they wish to accumulate

product category knowledge, experts seek narrower and more specialized options whereas novices seek breadth (Clarkson, Janiszewski, and Cinelli 2013). Consequently, we propose that novices see greater assortment variety as an indication of category expertise, and choose more variety when they wish their selection to be seen as reflecting expertise. Conversely, experts perceive less assortment variety as an indication of expertise, and accordingly, choose less varied assortments when they wish to showcase their expertise.

Three experiments test these hypotheses. Experiment 1 examines how experts and novices interpret another person's choice of either high or low assortment variety. First, participants rated their own level of expertise in the gourmet chocolate category. Then, following several filler tasks, participants read one of two descriptions of a hypothetical consumer who bought a box containing individually selected gourmet chocolate truffles. In the high assortment variety condition, we told participants that the protagonist chose many different truffle flavors. In the low assortment variety condition, the protagonist chose only a few different truffle flavors. The quantity bought, sixteen truffles, was the same across conditions. Participants rated the likelihood that the protagonist was a gourmet chocolate connoisseur. Consistent with our prediction, an assortment variety (high vs. low) x own-expertise (continuous) regression analysis revealed a crossover interaction effect on perceived expertise of the protagonist ($p < .001$), with no main effects. Whereas novices (i.e., participants one SD below the mean level of expertise) perceived the protagonist as more of an expert in the large variety condition than in the small variety condition, experts (i.e., those one SD above the mean expertise) perceived the protagonist as more of an expert in the small variety condition than in the large variety condition.

Experiment 2 examines how consumers strategically choose variety to demonstrate expertise. Participants chose an assortment of fine chocolate truffles for an important friend. We manipulated participants' motivation to showcase their expertise by framing the friend as a fine chocolate connoisseur in one condition only. A pretest confirmed that our manipulation increased participants' motivation to showcase their expertise, equally for experts and novices. Participants saw a list of 22 different truffle flavors and indicated the number of units they wanted to buy of each type (the total number of units participants could choose was not limited). To measure assortment variety, we calculated for each participant a Herfindahl index, a measure of assortment diversity, and controlled for the number of units selected (see Dhar, Hoch, and Kumar 2001; Simonson and Winer 1992). Finally, participants rated their own level of expertise in the category (ratings were unaffected by the experimental manipulation). Analysis revealed the predicted crossover recipient-framing X own-expertise interaction ($p = .01$), with no main effects. Compared with the control condition, novices increased and experts decreased the variety in their assortments (holding total quantity constant) when selecting for a connoisseur and hence motivated to showcase their expertise.

An alternative explanation for these results is that experts simply know which options are best, and thus choose less variety for the connoisseur. Experiment 3 rules out this possibility by using fictitious craft beer brands (validated in a pretest), of which neither experts nor novices had any prior knowledge. We told participants that they would be helping a specialty gift basket company to design a beer gift basket. In one condition (expertise-signaling goal), we asked participants to design a beer basket that would be especially appealing to beer connoisseurs, and we told them that they would receive \$25 if a panel of experts rated their basket highest on expertise. In the control-goal condition, we used an identical procedure except that we asked participants to design a beer basket that would appeal

to average customers, and we told them that they would receive \$25 if a panel of average customers evaluated their gift basket as the most appealing. Participants then chose from a list of fictitious beer brands. Finally, participants rated their own expertise in beer. Analysis revealed the predicted choice-goal X own-expertise crossover interaction effect ($p < .001$), with no main effects. Compared with the control goal condition, novices selected a more varied assortment whereas experts selected a less varied assortment when attempting to get a high expertise rating.

Variety is often used to convey uniqueness and interestingness to others, but we show that it can also be used to signal expertise. Furthermore, whereas prior research suggests that people unidirectionally choose more variety when self-presentation concerns are present, we show that people may choose smaller or larger assortment variety to signal expertise, depending on their own levels of category expertise.

REFERENCES

- Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (4), 411-54.
- Chatterjee, P., & Rose, R. L. (2012). Do payment mechanisms change the way consumers perceive products? *Journal of Consumer Research*, 38(6), 1129-1139.
- Chernev, Alexander (2003), "When More is Less and Less is More: The Role of Ideal Point Availability and Assortment in Consumer Choice," *Journal of Consumer Research*, 30(2), 170-183.
- Clarkson, Joshua J., Chris Janiszewski, and Melissa D. Cinelli (2013), "The Desire for Consumption Knowledge," *Journal of Consumer Research*, 39(6), 1313-1329.
- Dhar, Sanjay K., Stephen J. Hoch, and Nanda Kumar (2001), "Effective Category Management Depends on the Role of the Category," *Journal of Retailing*, 77(2), 165-184.
- Dweck, Carol S. (2000). *Self-theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press.
- Dweck, Carol S., Chi-yue Chiu, and Ying-yi Hong (1995), "Implicit Theories: Elaboration and Extension of the Model," *Psychological Inquiry*, 6 (4), 322-33.
- Etkin, Jordan, and Cassie Mogilner (2016), "Does Variety Among Activities Increase Happiness?," *Journal of Consumer Research*, 43 (2), 210-29.
- Faraji-Rad, A., Moeini-Jazani, M., & Warlop, L. (2013). Women seek more variety in rewards when closer to ovulation. *Journal of Consumer Psychology*, 23(4), 503-508.
- Feick, Lawrence and Robin A. Higie (1992), "The Effects of Preference Heterogeneity and Source Characteristics on Ad Processing and Judgements About Endorsers," *Journal of Advertising*, 21 (2), 9-24.
- Feick, Lawrence F., and Linda L. Price (1987), "The market maven: A diffuser of marketplace information." *The Journal of Marketing*, January, 83-97.
- Fishbach, Ayelet, Rebecca K. Ratner, and Ying Zhang (2011), "Inherently Loyal or Easily Bored?: Nonconscious Activation of Consistency versus Variety-seeking Behavior," *Journal of Consumer Psychology*, 21(1), 38-48.
- Gershoff, Andrew D., Susan M. Broniarczyk, and Patricia M. West (2001), "Recommendation or Evaluation? Task Sensitivity in Information Source Selection," *The Journal of Consumer Research*, 28 (3), 418-38.
- Goukens, C., Dewitte, S., Pandelaere, M., & Warlop, L. U. K. (2007). Wanting a bit (e) of everything: Extending the valuation effect to variety seeking. *Journal of Consumer Research*, 34(3), 386-394.
- Hoeffler, Steve and Dan Ariely (1999), "Constructing Stable Preferences: A Look into Dimensions of Experience and Their Impact on Preference Stability," *Journal of Consumer Psychology*, 8(2), 113-139.
- Hoyer, Wayne D. and Nancy M. Ridgway (1984), "Variety Seeking as an Explanation for Exploratory Purchase Behavior: A Theoretical Model," *NA-Advances in Consumer Research Volume 11*.
- Kahn, Barbara E. and Donald R. Lehmann (1991), "Modeling Choice among Assortments," *Journal of Retailing*, 67 (3), 274-99.
- Kahn, Barbara E., and Alice M. Isen. (1993) The influence of positive affect on variety seeking among safe, enjoyable products. *Journal of Consumer Research*, 20(2): 257-270.
- Kim, Heejung S. and Aimee Drolet (2003), "Choice and Self-expression: a Cultural Analysis of Variety-seeking," *Journal of Personality and Social Psychology*, 85(2), 373.
- Leonard-Barton, Dorothy (1985), "Experts as negative opinion leaders in the diffusion of a technological innovation." *Journal of Consumer Research*, 11 (4), 914-26.
- Monger, J. E., & Feinberg, R. A. (1997). Mode of payment and formation of reference prices. *Pricing Strategy and Practice*, 5(4), 142-147.
- Prelec, D., & Loewenstein, G. (1998). The red and the black: Mental accounting of savings and debt. *Marketing science*, 17(1), 4-28.
- Raghubir, P., & Srivastava, J. (2008). Monopoly money: the effect of payment coupling and form on spending behavior. *Journal of Experimental Psychology: Applied*, 14(3), 213.
- Ratner, Rebecca K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences for the Sake of Variety," *Journal of Consumer Research*, 26 (June), 1-15.
- Ratner, Rebecca K. and Barbara E. Kahn (2002), "The Impact of Private Versus Public Consumption on Variety-seeking Behavior," *Journal of Consumer Research*, 29(2), 246-257.
- Read, Daniel, and George Loewenstein (1995), "Diversification bias: Explaining the discrepancy in variety seeking between combined and separated choices," *Journal of Experimental Psychology: Applied*, 1 (1), 34-49.
- Read, D., Loewenstein, G., & Kalyanaraman, S. (1999). Mixing virtue and vice: Combining the immediacy effect and the diversification heuristic. *Journal of Behavioral Decision Making*, 12(4), 257.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27 (May), 150-162.
- Simonson, Itamar, and Russell S. Winer (1992). "The influence of purchase quantity and display format on consumer preference for variety," *Journal of Consumer Research*, 19 (1), 133-38.
- Thomas, M., Desai, K. K., & Seenivasan, S. (2011). How credit card payments increase unhealthy food purchases: visceral regulation of vices. *Journal of consumer research*, 38(1), 126-139.
- Watson, George F., Joshua T. Beck, Conor M. Henderson, and Robert W. Palmatier (2015), "Building, measuring, and profiting from customer loyalty," *Journal of the Academy of Marketing Science*, 43 (6), 790-825.

Spending and Construing Time to Enhance Well-Being

Chair: Jordan Etkin, Duke University, USA

Paper #1: Goal Conflict Encourages Work and Discourages Leisure

Jordan Etkin, Duke University, USA
Aimee Chabot, Duke University, USA

Paper #2: Control over Time Predicts Greater Life Satisfaction among Millionaires

Ashley Whillans, Harvard University, USA
Paul Smeets, Maastricht University, The Netherlands
Rene Bekkers, VU Amsterdam, The Netherlands
Michael Norton, Harvard University, USA

Paper #3: To Thrive or to Suffer at the Hand of Busyness: How Lay Theories of Busyness Influence Psychological Empowerment and Volunteering

Mahdi Ebrahimi, University of Houston, USA
Melanie Rudd, University of Houston, USA
Vanessa M. Patrick, University of Houston, USA

Paper #4: Rethinking Time for Well-Being

Hal E. Hershfield, UCLA, USA
Cassie Mogilner Holmes, UCLA, USA
Jennifer Aaker, Stanford University, USA

SESSION OVERVIEW

Time is one of our most precious resources. With only 24 hours a day seven days a week, consumers must decide how best to allocate their finite time to maximize well-being. Reflecting the importance of this decision, researchers have devoted themselves to understanding the happiest ways to mentally construe and spend time (e.g., Aaker, Rudd, and Mogilner 2011; Etkin and Mogilner 2016; Mogilner and Aaker 2009; Mogilner and Norton 2016). This stream of work has yielded many important insights: thinking about time (vs. money; Mogilner 2010; Mogilner and Aaker 2009) and expanding one's sense of time (Chance, Mogilner, and Norton 2011; Rudd, Vohs, and Aaker 2012) increase happiness. Time spent socializing, volunteering, and on leisure pursuits make people happier than work (Aaker et al. 2011; Kahneman et al. 2004; Thoits and Hewitt 2001), and time spent on freely chosen activities makes people happier than imposed ones (Csikszentmihalyi and Hunter 2003).

While the prior work informs how to think about time and what to spend time on in order to enhance well-being, what leads consumers to construe and spend time in these beneficial ways has received less attention. Time spent on leisure may make people happier than work, for example, but what affects how people allocate time between work and leisure? Feeling time constrained may detract from well-being, but how can people construe their time in a more positive light?

This session tackles these questions. Four papers investigate factors that affect the expenditure and construal of time to enhance well-being. Papers 1 and 2 examine time spent on work versus leisure. Etkin and Chabot investigate the role of goal conflict and time scarcity. Five experiments show that perceiving greater conflict between one's personal goals makes time seem scarcer, which leads people to spend more time on work and less on leisure. Whillans, Smeets, Bekkers, and Norton focus on wealth and autonomy. Two large-scale surveys of millionaires and the general population show that wealth predicts life satisfaction by enabling greater autonomy in work and leisure. Paper 3 (Ebrahimi, Rudd, and Patrick) examines time spent volunteering and the role of busyness and empowerment.

Five studies show that holding the lay theory that busyness is good (vs. bad) increases psychological empowerment, which makes people more likely to volunteer. Finally, Paper 4 (Hershfield, Mogilner, and Aaker) proposes a theory of how to re-conceptualize time—by taking a “bird’s-eye” view of the past, present, and future—to improve well-being.

Together these papers inform what affects the use and construal of time to enhance well-being. Going beyond identifying specific happy ways to spend and perceive time, this session demonstrates a variety of novel factors—goal conflict, wealth, busyness beliefs, abstraction—that influence consumers' propensity to spend and construe time in these beneficial ways. The findings advance understanding of the psychology of time allocation and perception and its connections to well-being, and suggest numerous interventions to improve consumer well-being. The session should have broad appeal to scholars interested in time, well-being, happiness, work vs. leisure, and volunteering.

Goal Conflict Encourages Work and Discourages Leisure

EXTENDED ABSTRACT

Aside from basic needs, leisure is one of the most desired human behaviors. Leisure activities are enjoyable and done for their own sake, rather than their external benefits (Grazia 1962; Neulinger 1974). People desire leisure more than social interaction and sex, and even more than addictive behaviors like smoking (Hofmann, Vohs, and Baumeister 2012).

The desire for leisure is well-founded. In addition to being fun, leisure provides many physical and psychological benefits. Leisure alleviates stress, increases positive affect, reduces burnout, boosts life satisfaction, and improves well-being (Kahneman et al. 2004; Reich and Zautra 1981; Tinsley and Tinsley 1986).

Nevertheless, people frequently forgo leisure in favor of other activities (Gershuny 2005; Hofman et al. 2012)—namely, work. Even when working more provides few additional benefits (e.g., one's basic needs are already met), many people choose to spend more time on work rather than leisure (Kuhn and Lozano 2008; Schor 1991). Given the appeal and benefits of leisure, why do people so often choose work instead?

We suggest that goal conflict plays an important role. Building on recent research, which shows that perceiving greater conflict between one's personal goals makes people feel that they have less time (Etkin, Evangelidis, and Aaker 2015), we argue that goal conflict should increase the need to feel justified in how time is spent. Because activities that feel productive tend to be more justifiable than merely enjoyable ones (Giner-Sorolla 2001; Kivetz and Simonson 2002; Southerton and Tomlinson 2005), we predict that perceiving greater goal conflict will increase time spent on activities that feel productive (i.e., “work,” Laran and Janiszewski 2011) and decrease time spent on activities that feel enjoyable (i.e., “leisure”)—even when those tasks are unrelated to the conflicting goals.

Five experiments tested our predictions. The first four followed the same basic paradigm: first, we manipulated perceived goal conflict by asking participants to list two personal goals and then describe a time when they did versus did not feel conflict between them; second, as an ostensibly unrelated task, we measured time spent on work versus leisure either via engagement in an activity (experiments 1a and 1b) or choice (experiments 2a and 2b).

Experiment 1a examined coloring. After manipulating perceived goal conflict, participants read that they would spend more time coloring simple shapes, and we manipulated how coloring was framed. Coloring is a simple activity that is fun to do (Lepper, Greene, and Nisbett 1973). Accordingly, in the “work-frame” condition, we told participants, “coloring is useful for cultivating creativity...spending time coloring helps people be more creative in their work”); in the “leisure-frame” condition, we simply allowed coloring to be fun (as it naturally seems). We recorded how long participants spent coloring, then tested the effect of goal conflict in each frame condition. As predicted, when framed as work, goal conflict increased time spent coloring ($M_{\text{high-conflict}} = 218.33$ seconds vs. $M_{\text{low-conflict}} = 164.53$ seconds; $F(1, 311) = 3.27, p = .071$), but when coloring seemed fun, goal conflict decreased time spent coloring ($M_{\text{high-conflict}} = 186.61$ seconds vs. $M_{\text{low-conflict}} = 238.19$ seconds; $F(1, 311) = 8.29, p = .004$).

Experiment 1b replicated the results of experiment 1a with a different activity: watching a video. After manipulating perceived goal conflict, we framed watching a movie either as work (“Documentaries are a good way to learn and develop critical thinking...”) or leisure (“Movies are a good way to relax and be entertained...”), then measured time spent watching. As predicted, when framed as work (leisure), goal conflict increased (decreased) time spent watching the video.

Experiments 2a and 2b explored the proposed underlying process. Experiment 2a tested for mediation. After manipulating perceived goal conflict, we asked participants to choose a puzzle (one that would be effortful and feel like “work” vs. one that would be enjoyable and feel like “leisure”), then measured feelings of time affluence (five-items on 7-point scales from Etkin et al. 2015). Supporting our theory, perceiving greater goal conflict made participants feel that they had less time ($M_{\text{high-conflict}} = 2.93$ vs. $M_{\text{low-conflict}} = 3.54$; $F(1, 148) = 7.12, p = .008$), and these reduced time perceptions increased choice of the work task over the leisure one ($\chi^2(1) = 4.04, p = .045, \eta^2 = .027$). Experiment 2b examined moderation. After the goal conflict manipulation, we manipulated feelings of time affluence (via an awe induction, Rudd, Vohs, and Aaker 2012), then asked participants to allocate their next 15 minutes between a “work” activity (catching up on school or work email) and a “leisure” activity (browsing social media). Supporting our reasoning, in the control condition, participants allocated more time to work versus leisure, but encouraging participants to feel as if they had more time attenuated this effect.

Our final experiment examined whether, despite choosing to spend more time on work, people who perceive greater goal conflict would be happier if they instead spent more time on leisure. To test this, we modified the previous paradigm in two ways: first, all participants received the high goal conflict manipulation, and second, rather than measuring time spent on work versus leisure, we manipulated how long people spent. Like in experiment 1b, we framed watching a video as work versus leisure, manipulated the time spent, then measured happiness (2-items on 7-point scales from Etkin and Mogilner 2016). Results showed that, while spending more time watching the video framed as work had no impact on subsequent happiness ($M_{\text{long-time}} = 4.18$ vs. $M_{\text{short-time}} = 4.21$; $F < 1$), spending more time watching the video framed as leisure made participants happier ($M_{\text{long-time}} = 4.78$ vs. $M_{\text{short-time}} = 4.21$; $F(1, 176) = 4.35, p = .039$).

These findings contribute to understanding of the effects of goal conflict in people’s everyday lives. Leisure has many benefits: alleviating stress, increasing positive affect, boosting happiness, and improving life satisfaction (Kahneman et al. 2004; Reich and Zautra 1981; Tinsley and Tinsley 1986). In addition to increasing feelings of time pressure, goal conflict further undermines well-being by en-

couraging people to spend less time on what would make them better off.

Control over Time Predicts Greater Life Satisfaction among Millionaires

EXTENDED ABSTRACT

When and why does wealth result in greater life satisfaction? Wealthier people experience greater stress than the general population and do not necessarily experience greater life satisfaction (Kahneman et al., 2006), such that the relationship between income and life satisfaction is non-linear (Kahneman & Deaton, 2010). However, wealth enables people to exert greater control over their lives, including greater autonomy over how they spend their time (Kraus et al., 2012). Although past research has explored time use in the general population, the number of very wealthy individuals in these samples is small, and the very wealthy often behave quite differently than the less wealthy (Smeets, Bauer, Gneezy, 2015). Using two large-scale surveys of millionaires ($N=863$ $N=690$) and the general population ($N=1232$, $N=306$), we examine whether wealth predicts life satisfaction to the extent that wealth shapes time-use. Specifically, we examine whether millionaires are happier than the general population in part because they exert greater control over two critical domains that occupy most of their time: leisure and work.

Study 1 examines whether millionaires exert greater control over leisure activities by engaging in more active (e.g., volunteering, exercising, socializing) than passive leisure (e.g., relaxing, napping, watching television). Active leisure requires greater personal control (Whillans et al., 2017). Study 2 examines whether millionaires exert greater control over work activities, including time spent engaged in self-chosen goals.

In Study 1, Dutch millionaires ($N=863$, $M_{\text{wealth}} = \text{€}2,375,905$) reported their life satisfaction and how they had spent time in the last 24 hours. A nationally representative sample of Dutch adults completed the identical survey ($N=1,232$, $M_{\text{wealth}} = \text{€}37,500$).

Millionaires reported greater life satisfaction ($M=8.12$, $SD=1.00$) than the general population ($M=7.48$, $SD=1.32$); t -test $p < 0.001$. Millionaires reported the same amount of overall leisure as the general population (40.4% and 40.7% respectively) but spent this leisure time differently. Millionaires spent significantly more of their time on active leisure (16.1% versus 10.5%; $p < 0.001$) and significantly less of their time on passive leisure (24.3% versus 30.2%, $p < 0.001$). These results held controlling for differences between the two samples including age, gender, and employment status.

Active leisure was positively – and passive leisure was negatively – associated with life satisfaction for both millionaires and the general population. These results were robust controlling for differences in observable characteristics of the wealthy and general population. Further, we observed two significant indirect effects: (1) to the extent that wealth predicted active leisure, wealth in turn predicted greater life satisfaction and (2) to the extent that wealth predicted lower levels of passive leisure, wealth in turn predicted greater life satisfaction. These results held controlling for demographic differences between the rich and non-rich. Overall, both groups derived benefit from active leisure, but the rich engaged in more active leisure and therefore reported greater life satisfaction.

Millionaires spent less time working and commuting than the general population; yet, this was entirely explained by the larger fraction of millionaires who were retired. Among the employed, millionaires spent a larger fraction of their time at work and commuting than the general population: 29.5% versus 24.5%, $p < 0.01$. Among the retired, millionaires also spent a larger fraction of their time

working and commuting: 9.1% versus 6.2%, $p < 0.01$. Time spent working was not associated with life satisfaction, suggesting that work hours could not explain higher life satisfaction among the rich.

Study 1 revealed that the amount of time spent working did not predict differences in life satisfaction. In Study 2, we focused not on the amount but rather on the type of work that individuals completed. We suggest that the relationship between work and life satisfaction may critically depend on the extent to which people have control over the activities that they complete while at work. Thus, we assessed respondents' level of autonomy at work, predicting that millionaires would report greater autonomy than the general population, and that this autonomy would be linked to greater life satisfaction.

Dutch millionaires ($N=690$, $M_{wealth} = €3,351,234$) and a nationally representative sample of Dutch adults ($N=306$, $M_{wealth} = €101,677$) indicated the number of hours that they worked yesterday and the fraction of those hours that they had control over work tasks. Both samples also reported on three components of work autonomy: the extent to which they had control over the methods they used at work, the extent they could control when they worked, and the extent they could control the goals they pursued at work. Respondents also completed the identical life satisfaction measure from Study 1.

Once again, the rich reported greater life satisfaction ($M=8.10$, $SD=0.84$) than the general population ($M=7.60$, $SD=1.09$); t -test $p < 0.001$. Consistent with research demonstrating a positive association between income and job autonomy using representative samples (Bryson & MacKerron, 2016), millionaires reported greater job autonomy than the general population. Among employed individuals, both millionaires and the general population worked approximately 7.5 hours in the last 24 hours.

Of those hours, millionaires decided what to do and how to do it during 92.6% of the hours that they spent working as compared to 76.4% for the general population ($p < 0.01$). Millionaires also reported having more control over the methods that they used at work, when they worked, and their goals at work ($ps < 0.01$).

Work autonomy predicted life satisfaction for both millionaires and the general population. Yet, as with active leisure, to the extent that wealth predicted job autonomy, wealth in turn predicted greater life satisfaction. Although both samples reported higher life satisfaction from greater job autonomy, the rich experienced greater job autonomy, which contributed to the gap in life satisfaction between the rich and non-rich.

An emerging body of research focuses on the distinct contributions of time and money to life satisfaction. While previous research has focused on the direct relationships between money and life satisfaction—in many cases directly plotting income against life satisfaction—our results suggest that wealth translates into life satisfaction to the extent that it influences a third key variable: time. When wealth enables people to take control over leisure and work activities, wealth is more likely to translate into greater life satisfaction.

To Thrive or to Suffer at the Hand of Busyness: How Lay Theories of Busyness Influence Psychological Empowerment and Volunteering

EXTENDED ABSTRACT

Time is becoming an increasingly precious human resource and, with each passing decade, consumers report feeling increasingly busy (Gershuny 2005; Szollos 2009). Research finds that feeling busy has a negative psychological impact on consumers, hindering work-life balance and increasing distress, depression, and anxiety (Roxburgh 2004; Roxburgh 2006). The current research argues that how individuals view their busyness can have social and societal

implications and asks, if people feel busy, are they simply less likely to volunteer?

Volunteering rates in the US have been declining for over a decade (Bureau of Labor Statistics 2007, 2011, 2016), and society's current busyness epidemic is often blamed as the culprit. But although some empirical evidence does indeed support the notion that busyness breeds a lack of volunteering intent (Johnson 2004), is that the full picture? Other evidence suggests that it is busy individuals who are more likely to volunteer (Corporation for National and Community Service 2007). For instance, amongst full time workers, those who work more hours are more likely to volunteer (Wilson and Musick 1997). In an example close to home, reviewers for academic journals or conference special sessions (volunteers) are often also the most prolific (busy) researchers (Lindsey 1976). To help resolve this evidentiary inconsistency, we propose that it is *not* busyness per se, but rather people's lay theory about the feeling of busyness (i.e., feeling "busy=good" or feeling "busy=bad") that influences volunteering behavior.

We suggest that, when feeling busy, consumers who hold the lay theory that feeling busy is good should feel more invigorated, intrinsically motivated, and in control of their lives—feelings which give rise to greater feelings of psychological empowerment (Zimmerman and Rappaport 1988). In contrast, holding the lay theory that feeling busy is bad causes the individual to focus on the stress, hassle, and inflexibility associated with busyness. Stressful situations narrow individuals' focus and deploy cognitive and emotional resources to deal with the immediate threat (LeDoux 1995) and lower feelings of empowerment (Mullainathan and Shafir 2013). Notably, we propose that even keeping objective busyness constant, holding one lay theory (feeling "busy=good") allows individuals to psychologically thrive, while holding the other (feeling "busy=bad") causes them to suffer. Moreover, because individuals who feel psychologically empowered are more likely to reach out to satisfy other people's needs (Erez, Mikulincer, van Ijzendoorn, and Kroonenberg 2008; Wilson 2012), we also propose that holding the lay theory that "busy=good" (vs. "busy=bad") should lead to greater volunteering.

Across five studies, we predicted and found that people are more inclined to volunteer when they hold the lay theory that feeling "busy=good" (vs. "busy=bad") and that this effect is driven by enhanced feelings of empowerment.

Using a correlational design, study 1a measured the valence of participants' busyness lay theory and their feelings of empowerment. Our findings reveal that people naturally hold different beliefs about the valence of feeling busy: Approximately 50% of participants believed the "busy=good" lay theory and 50% believed "busy=bad". As predicted, the "busy=good" lay theory was significantly positively correlated with feelings of empowerment.

In study 1b, participants' lay theories were manipulated by randomly assigning participants to listen to one of two ostensibly real science podcasts that discussed scientific findings that showed that feeling busy is good (vs. bad). Participants then responded to manipulation checks and reported feelings of empowerment (e.g. "I feel in control"). Analyses revealed that, as predicted, participants in the "busy=good" (vs. "busy=bad") condition felt significantly more empowered.

Study 2 used a different lay theory manipulation: an ostensibly real science magazine article that claimed either that feeling busy is good or bad. After reflecting on the article's findings by providing supporting examples from their own lives, participants responded to manipulation checks, reported their empowerment, and (in a purportedly unrelated survey) responded to a scenario-based measure of volunteering intentions (e.g. "How likely would you be to volunteer

your time to help at a senior citizens' home?"; Henderson, Huang, and Chang 2012). Participants in the "busy=good" (vs. "busy=bad") condition were significantly more likely to volunteer and felt significantly more empowered. The effect of busyness lay theory on volunteering intentions was mediated by feelings of empowerment.

Study 3 provided additional support for the mediating role of empowerment by manipulating both lay theories of busyness (as in study 2) and empowerment (by having participants recall a time they either did or did not feel empowered). We expected that when people hold the lay theory that feeling "busy=good," they already feel empowered and thus the empowerment manipulation should not influence their volunteering. However, when people believe that feeling "busy=bad," they feel disempowered and thus boosting their feelings of empowerment should lead to greater volunteering. As predicted, our analyses revealed that participants in "busy=bad" condition reported greater willingness to volunteer their time in the high (vs. low) empowerment condition, but participants in the "busy=good" condition were equally likely to volunteer across empowerment conditions.

Study 4 sought to conceptually replicate the prior effects of lay theory on volunteering using measures of real volunteering behavior. After completing the same lay theory manipulation from study 2, participants reported feelings of empowerment, and (in a purportedly unrelated survey) were given the opportunity to participate in at least one real volunteering event 1-2 weeks after the survey. Whether participants signed up for at least one event served our first measure of volunteering. Last, at the end of the experimental session, participants were asked to volunteer their time to assemble first-aid kits for families in need. Whether or not participants actually made at least one kit served as another measure of volunteering. The results revealed that participants in the "busy=good" (vs. "busy=bad") condition felt significantly more empowered, were significantly more likely to sign up for a volunteering event, and were significantly more likely to assemble first-aid kits. Further, empowerment mediated the effect of lay theory on both measures of volunteering behavior.

Taken together, our research elucidates the link between feeling busy and volunteering behavior; connects the lay theory, empowerment, and volunteering literatures; and offers firms and consumers a novel volunteering intervention.

Rethinking Time for Well-Being

EXTENDED ABSTRACT

In this conceptual paper, we examine the construct of time with the goal to improve how consumers think about and use time to advance consumers' well-being, not just in terms of happiness but in terms of health, financial well-being, and a deeper sense of meaning (Aaker 2014; Baumeister, Vohs, Aaker, and Garbinsky 2013; Mick 2006). To this end, we briefly review prior work on time in the consumer behavior literature, and document a predominantly dichotomized view of time, which assumes a stark distinction between the present and the future. We then find inspiration from three other domains (emotions, financial decision-making, and social relationships) where researchers have demonstrated the positive effects of treating their given domain in a more integrated way. Finally, we propose our new, integrated treatment of time and discuss one way consumers can adopt it – by taking a "bird's-eye" view of time where the future, present, and past become equally visible and thus subjectively relevant. From this perspective, events from different time points are treated and experienced as part of one's overall life and being.

Much Western psychology-based research on time reduces it to a linear construct placing the consumer as the center point (Gra-

ham 1981; Ji, Guo, Zhang, and Messervey 2009). From that point, the line is parsed between the past, present, and future. Investigating how consumers navigate the journey from the present to the future is of utmost relevance to behavior and decision-making (Seligman, Railton, Baumeister, and Sripada 2013). Thus, in an effort to understand time in a way that makes sense for consumers' lives, the way that we as consumers and researchers have come to understand time is largely through temporal dichotomies between the present and the future, or the near versus distant future. For example, the influential research on temporal construal dichotomizes time between the near and distant future to understand how viewing potential outcomes through either temporal lens affects consumers' judgments and predictions (e.g., Trope and Liberman 2010). Similarly, the research on intertemporal choice builds off the notion that consumers are perpetually choosing and making tradeoffs between the present and the future.

And yet, research from at least three domains speaks to the power of integrating across formerly bi-furcated categories. This work has shown that a more integrated approach leads to positive outcomes and enhanced well-being in the domains of (1) emotions (i.e., allowing for the experience of mixed emotions wherein oppositely valenced emotions co-occur; e.g., Larsen, Hemenover, Norris, and Cacciopo 2003), (2) financial decision making (i.e., when debt and savings are thought of as components of an overall goal; e.g., Sussman and O'Brien, in press), and (3) social relationships (i.e., when other people are included in the self-concept; e.g., Aron, Paris, and Aron 1995).

Here, we argue for a similar re-construal in the domain of time. Rather than pitting the present against the future, we propose a different lens on time: one that does not force a tradeoff between the two, and instead allows the present and future to co-exist. Our proposed rethinking of time wherein the present and the future are not dichotomized reflects the fact that the future will at some point be the present, and the present is perpetually shifting. As the writer Harriet Beecher Stowe anecdotally observed, "The past, the present and the future are really one: they are today." To take an example from biology, the genetic blueprint of butterfly wings exists inside the caterpillar, and the "spine" of the caterpillar continues to exist within the newly formed butterfly. This approach to time highlights that all pieces of one's time are equally relevant to one's existence. The present is ultimately important, not because it should be weighed more heavily than the future, but because it *is* the future (or will be at some point). And along the same lines, the future is ultimately important because in a way, it is contained within the present.

One way to utilize this re-conceptualization of time involves adopting a new perspective of one's time course, whereby individuals pull up and away from the ground-level linear trajectory where only the immediate present is visible, and instead assume a bird's-eye view where the future, present, and past are equally visible and subjectively relevant. Namely, we propose a rethinking of time that involves consumers mentally lifting up and away from that shackled temporal line, obtaining a view over one's time course such that moments and days and years in the future or past are equally visible and thus personally relevant. This approach is much like looking down on one's calendar, with the squares representing each day or month laid out alongside each other. Every equivalent unit of time is the same size and is equally visible, reflecting its equal importance. A day is the same size as any other day; it is not distorted by its proximity to the square representing the current day.

Lastly, we discuss three ways that this analogy might benefit well-being. First, by shifting decisions from *whether* one can do something to *when* one can do something, assuming a bird's-eye

view of time releases people from the cognitive and circumstantial constraints that previously kept them from spending time in personally important ways. Second, a bird's-eye view may help consumers act more patiently: if a future reward is equally visible to a more immediate reward, consumers will focus on actual differences in value between two rewards, and the temporal distance will become less relevant. Third, a bird's-eye view of time may boost meaning in life: past research has found that people who had an easier time simulating the past and future (measured both neurally and behaviorally) also reported greater meaning in their lives (Waytz, Hershfield, and Tamir 2015). Rather than needing to traverse great temporal distances in a linear fashion, a bird's eye perspective could prompt consumers to more nimbly mentally jump from one period of time to another, leading to elevated levels of meaning.

REFERENCES

- Aaker, Jennifer (2014), "Meaningful choice," *Journal of Consumer Research*, 43(3).
- Aaker, Jennifer L., Melanie Rudd, and Cassie Mogilner (2011), "If money does not make you happy, consider time," *Journal of Consumer Psychology*, 21(2), 126-130.
- Aron, Arthur, Meg Paris, and Elaine N. Aron (1995), "Falling in love: Prospective studies of self-concept change," *Journal of Personality and Social Psychology*, 69, 1102-1112.
- Baumeister, Roy, Kathleen Vohs, Jennifer Aaker, and Emily Garbinsky (2013), "Some key differences between a happy life and a meaningful life," *The Journal of Positive Psychology*, 8(6), 505-516.
- Bryson, Alex and George MacKerron (2016), Are You Happy While You Work? *The Economic Journal*, 127(2), 106-125.
- Bureau of Labor Statistics (2007), "Volunteering in the United States – 2006," research report, United States Department of Labor, Washington, DC.
- (2011), "Volunteering in the United States – 2010," research report, United States Department of Labor, Washington, DC.
- (2016), "Volunteering in the United States – 2015," research report, United States Department of Labor, Washington, DC.
- Corporation for National and Community Service (2007), "Volunteering in America: 2007 City Trends and Rankings," research report, Office of Research and Policy Development, Washington, DC.
- Csikszentmihalyi, Mihaly. & Jeremy Hunter. "Happiness in Everyday Life: The Uses of Experience Sampling," *Journal of Happiness Studies*, 4, 185-199.
- Erez, Ayelet, Mario Mikulincer, Marinus H. van Ijzendoorn, and Pieter M. Kroonenberg (2008), "Attachment, personality, and volunteering: Placing volunteerism in an attachment-theoretical framework," *Personality and Individual Differences*, 44(1), 64-74.
- Etkin, Jordan, Ioannis Evangelidis, and Jennifer Aaker. "Pressed for Time? Goal Conflict Shapes How Time Is Perceived, Spent, and Valued," *Journal of Marketing Research* 52, no. 3 (2015): 394-406. doi:10.1509/jmr.14.0130.
- Etkin, Jordan and Cassie Mogilner (2016), "Does Variety among Activities Increase Happiness?" *Journal of Consumer Research*, 43 (2), 210-229.
- Gershuny, Jonathan (2005), "Busyness as the Badge of Honor for the New Superordinate Working Class," *Social Research*, 72 (2), 287-314.
- Giner-Sorolla, Roger (2001), "Guilty Pleasures and Grim Necessities: Affective Attitudes in Dilemmas of Self-Control," *Journal of Personality and Social Psychology*, 80(2), 206-21.
- Graham, Robert J. (1981), "The role of perception of time in consumer research," *Journal of Consumer Research*, 7(4), 335-342.
- Grazia, Sebastian de (1962), *Of Time, Work and Leisure*, NY: The Twentieth Century Fund.
- Henderson, Marlone D., Szu-chi Huang, and Chiu-chi Angela Chang (2012), "When Others Cross Psychological Distance to Help: Highlighting Prosocial Actions Toward Outgroups Encourages Philanthropy," *Journal of Experimental Social Psychology*, 48 (1), 220-25.
- Hofmann, Wilhelm, Kathleen D. Vohs, and Roy F. Baumeister (2012), "What People Desire, Feel Conflicted About, and Try to Resist in Everyday Life," *Psychological Science*, 23(6), 582-8.
- Ji, Li-Jun, Tiejuan Guo, Zhiyong Zhang, and Deanna Messervey (2009), "Looking into the past: Cultural differences in perception and representation of past information," *Journal of Personality and Social Psychology*, 96(4), 761-769.
- Johnson, Christopher (2004), "Infrastructure of Volunteer Agencies: Capacity to Absorb Boomer Volunteers," in *Reinventing Aging: Baby Boomers and Civic Engagement*, Center for Health Communication, ed. Boston, MA: Harvard School of Public Health, 91-123.
- Kahneman, Daniel and Angus Deaton (2010), "High Income Improves Evaluation of Life but Not Emotional Well-Being," *Proceedings of the National Academy of Sciences*, 107 (38), 16489-16493.
- Kahneman, Daniel, Alan B. Krueger, David A. Schkade, Norbert Schwarz, and Arthur A. Stone (2004), "A survey method for characterizing daily life experience: The day reconstruction method," *Science*, 306(5702), 1776-1780.
- Kivetz, Ran and Itamar Simonson (2002), "Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence," *Journal of Consumer Research*, 29(2), 199-217.
- Kraus, Michael W., Paul K. Piff, Rodolfo Mendoza-Denton, Michelle L. Rheinschmidt, and Dacher Keltner (2012), "Social Class, Solipsism, and Contextualism: How the Rich are Different from the Poor," *Psychological Review*, 119 (3), 546-572.
- Kuhn, Peter, and Fernando Lozano (2008), "The Expanding Workweek? Understanding Trends in Long Work Hours among U.S. Men, 1979-2004," *Journal of Labor Economics*, 26(2), 4th ser., 311-343.
- Laran, Juliano, and Chris Janiszewski (2011), "Work or Fun? How Task Construal and Completion Influence Regulatory Behavior," *Journal of Consumer Research*, 37(6): 967-83.
- Larsen, Jeff T., Scott H. Hemenover, Catherine J. Norris and John T. Cacioppo (2003), "Turning adversity to advantage: On the virtues of the coactivation of positive and negative emotions," In *A psychology of human strengths: Fundamental questions and future directions for a positive psychology*, eds. Lisa G. Aspinwall and Ursula M. Staudinger, Washington, DC: American Psychological Association.
- LeDoux, Joseph E. (1995), "Emotion: Clues from the brain," *Annual review of psychology* 46(1), 209-235.
- Lepper, Mark R., David Greene, and Richard E. Nisbett (1973), "Undermining children's intrinsic interest with extrinsic reward: A test of the 'overjustification' hypothesis," *Journal of Personality and Social Psychology*, 28(1), 129-137.

84 / Spending and Construing Time to Enhance Well-Being

- Lindsey, Duncan (1976), "Distinction, Achievement, and Editorial Board Membership," *American Psychologist*, 31 (11), 799-804.
- Mick, David Glen (2006), "Meaning and mattering through transformative consumer research," *Advances in Consumer Research*, 33, 1-4.
- Mogilner, Cassie. (2010), "The Pursuit of Happiness: Time, Money, and Social Connection," *Psychological Science*, 21(9), 1348-1354.
- Mogilner, Cassie, and Jennifer Aaker. (2009). "The Time vs. Money Effect: Shifting Product Attitudes and Decisions through Personal Connection," *Journal of Consumer Research*, 36(2), 277-291.
- Mogilner, Cassie, Zoe Chance, and Michael I. Norton (2012), "Giving Time Gives You Time," *Psychological Science*, 23(10), 1233-1238.
- Mogilner, Cassie, and Michael I. Norton (2016), "Time, money, and happiness," *Current Opinion in Psychology*, 10, 12-16.
- Mullainathan, Sendhil and Eldar Shafir (2013), *Scarcity: Why Having Too Little Means So Much*. New York, NY: Henry Holt and Company.
- Neulinger, John (1974), *The Psychology of Leisure: Research Approaches to the Study of Leisure*. Oxford, England.
- Reich, John W. and Alex Zautra (1981), "Life Events and Personal Causation: Some Relationships with Satisfaction and Distress," *Journal of Personality and Social Psychology*, 41(5), 1002-12.
- Roxburgh, Susan (2004), "'There Just Aren't Enough Hours in the Day': The Mental Health Consequences of Time Pressure," *Journal of Health and Social Behavior*, 45 (2), 115-31.
- (2006), "'I Wish We Had More Time to Spend Together...': The Distribution and Predictors of Perceived Family Time Pressures among Married Men and Women in the Paid Labor Force," *Journal of Family Issues*, 27 (4), 529-53.
- Rudd, Melanie, Kathleen D. Vohs, and Jennifer Aaker (2012), "Awe Expands People's Perception of Time, Alters Decision Making, and Enhances Well-Being," *Psychological Science*, 23 (10), 1130-1136.
- Schor, Juliet (1991), *The Overworked American: The Unexpected Decline of Leisure*. New York, NY: Basic Books.
- Seligman, Martin, Peter Railton, Roy Baumeister, and Chandra Sripada (2013), "Navigating into the future or driven by the past," *Perspectives on Psychological Science*, 8(2), 119-141.
- Smeets, Paul, Rob Bauer, and Uri Gneezy (2015), "Giving Behavior of Millionaires," *Proceedings of the National Academy of Sciences*, 112 (34), 10641-10644.
- Southerton, Dale and Mark Tomlinson (2005), "'Pressed for Time'—The Differential Impacts of a 'Time Squeeze,'" *The Sociological Review*, 53(2), 215-39.
- Sussman, Abigail B. and Rourke L. O'Brien (2017). "Knowing when to spend: Unintended financial consequences of earmarking to encourage savings." *Journal of Marketing Research*. 53 (5), 790-803.
- Szollos, Alex (2009), "Toward a Psychology of Chronic Time Pressure: Conceptual and Methodological Review," *Time & Society*, 18 (September), 332-50.
- Thoits, Peggy A., & Lyndi N. Hewitt (2001), Volunteer Work and Well-Being. *Journal of Health and Social Behavior*, 42(2), 115.
- Tinsley, Howard E. A. and Diane J. Tinsley (1986), "A Theory of the Attributes, Benefits, and Causes of Leisure Experience," *Leisure Sciences*, 8(1), 1-45.
- Trope, Yaacov, and Nira Liberman (2010), "Construal-level theory of psychological distance," *Psychological Review*, 117(2), 440-463.
- Waytz, Adam, Hal E. Herschfield, and Diana I. Tamir (2015), "Mental simulation and meaning in life," *Journal of Personality and Social Psychology*, 108(2), 336-355.
- Whillans, Ashley, Paul Smeets, Rene Bekkers, and Michael Norton, "Active Leisure Requires More Personal Control," *Unpublished Data*, The University of British Columbia.
- Wilson, John (2012), "Volunteerism research: A review essay," *Nonprofit and Voluntary Sector Quarterly*, 41(2), 176-212.
- Wilson, John and Marc Musick (1997), "Work and Volunteering: The Long Arm of the Job," *Social Forces*, 76 (1) 251-72.
- Zimmerman, Marc A. and Julian Rappaport (1988), "Citizen Participation, Perceived Control, and Psychological Empowerment," *American Journal of Community Psychology*, 16 (5), 725-50.

Effects of Resource Scarcity on the Consumer Decision Making Process

Chair: Linying (Sophie) Fan, Hong Kong Polytechnic University, Hong Kong

Paper #1: Resource Scarcity Spurs Effortful Pursuit of Rewards

Linying (Sophie) Fan, Hong Kong Polytechnic University,
Hong Kong

Zhu Meng, Johns Hopkins University, USA

Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Paper #2: Childhood Resource Scarcity and Planning Fallacy

Chiraag Mittal, Texas A&M University, USA

Juliano Laran, University of Miami, USA

Vladas Griskevicius, University of Minnesota, USA

Paper #3: When Thoughts of “Having Less” Promote the Desire to Become One’s Best: Reminders of Resource Scarcity Increase the Desire for Self-Improvement

Kelly Goldsmith, Vanderbilt University, USA

Ali Tezer, Université de Montréal, Canada

Caroline Roux, Concordia University, Canada

Paper #4: Too Constrained to Converse: Financial Constraints Reduce Word-of-Mouth

Anna Paley, The Ohio State University, USA

Stephanie M. Tully, University of Southern California, USA

Eesha Sharma, Dartmouth College, USA

SESSION OVERVIEW

Consumers are surrounded with cues that emphasize the limited nature of resources. Given the pervasiveness of scarcity cues, consumer researchers have started to document the impact of resource scarcity on various aspects of consumer behavior, such as cognition (Laran and Salerno 2013; Mehta and Zhu 2016; Sharma and Alter 2012), motivation (Roux, Goldsmith, and Bonezzi 2015), attention (Mani et al. 2013), physiological responses (Sevilla and Redden 2014; Zhu and Ratner 2015), and decision making (Griskevicius et al. 2013).

Despite the recent findings demonstrating the linkage between resource scarcity and consumer behavior, we are still scratching the surface of the effects of scarcity. As an attempt to provide deeper insights into the range of scarcity effects on the consumption process, the four papers in the current special session illustrate the impact of resource scarcity on the following consumer decision making stages: need recognition, purchase planning, purchase decision, and post-purchase behaviors (Kotler and Armstrong 2004). Enhancing our knowledge of the interplay between resource scarcity and consumer decision making, these papers examine how various constraints influence consumers’ pursuit of rewards, planning, product choice, and word-of-mouth engagement.

The first two papers examine how resource scarcity shapes consumers’ need recognition and purchase planning. **Fan, Zhu and Jiang** show that the salience of resource scarcity stimulates consumers’ desire to demonstrate their achievement, which consequently spurs consumers’ effortful pursuit of rewards. **Mittal, Laran and Griskevicius** further find that when facing financial scarcity, people growing up wealthier tend to have higher self-efficacy beliefs, increasing the likelihood of the planning fallacy because of their underestimation of task time. The third paper by **Goldsmith, Tezer and Roux** reveals the impact of resource scarcity on consumer’s product choice. Specifically, they find that resource scarcity increases consumers’ interest in and willingness to pay for products that offer self-improvement related benefits. Finally, the fourth paper by **Paley, Tully and Sharma** examine the post-purchase behaviors under scar-

city. They argue that consumers with financial constraints reduce purchase-related word-of-mouth because of the decreased pleasure of discussing monetary outlays.

Taken together, the four papers in the current special session demonstrate the impact of resource scarcity on consumer behavior at various decision making stages. With an attempt to integrate the impacts of resource scarcity in consumer research, this session should appeal to a broad ACR audience interested in topics such as scarcity, consumer motivation, social sharing, planning, and consumer judgment and decision making.

Resource Scarcity Spurs Effortful Pursuit of Rewards

EXTENDED ABSTRACT

The face of human society is ever changing. As we mastered mass production, resource availability has emerged as the order of living in modern industrialized societies, starting to supplant scarcity (Côté 1993, 1996; Riesman 1950). Simultaneously, individuals’ drive to exert effort and achieve rewards has been a fundamental force propelling human society forward (McClelland 1961).

One question that arises is: how does the increasing resource availability in our society affect individuals’ effort exertion during the pursuit of rewards? More importantly, will activating a general sense of resource scarcity versus resource abundance lead to different level of effort tolerance? While extant literature has extensively examined the impact of resource availability on consumers’ cognitive performance (Mani et al. 2015; Mehta and Zhu 2016; Mittal et al. 2015), attention allocation (Mullainathan and Shafir 2013; Shah, Mullainathan, and Shafir 2012) and choice strategies (Griskevicius et al. 2013; Laran and Salerno 2013; Roux, Goldsmith, and Bonezzi 2015; Zhu and Ratner 2015), the motivational consequences of scarcity versus abundance on consumer effort exertion remains an intriguing, uninvestigated question. This issue holds significance as consumers are frequently exposed to contextual cues that may remind them of resource scarcity or resource abundance in daily lives, and such encounters can impact their motivational orientation and affect subsequent reward achievements.

The current research proposes that overall perception of scarcity versus overall perception of abundance increases consumers’ effort tolerance. We argue that this effect occurs because scarcity induces an achievement orientation in the reward-seeking process, i.e., the motivation by which individuals strive to be competent after effort inputs (Elliot and Church 1997). The activated tendency to seek achievement subsequently enhances consumers’ effort exertion during the pursuit of rewards. Our theorization is based on several separate streams of research suggesting that scarcity brings higher perceived constraints and deprives people’s sense of personal control (Lachman and Weaver 1998; Mittal and Griskevicius 2014), the feeling of achievement can potentially serve as a mean to restore personal control through the behaviour-outcome contingency (Heckhausen 1993; Seligman 1975), and that effortful process often provides a sense of value and competence (Aronson and Mills 1959; Norton, Mochon, and Ariely 2012; Weiner 1972).

In experiment 1, participants (N = 171) were asked to either recall three or four situations where they felt that resources are scarce or abundant (Fischhoff et al 2003; Mehta and Zhu 2016; Roux et al. 2015), or recall three or four things they did during the past week as a baseline control condition. Next, in an ostensibly unrelated task,

participants were asked to type some randomly generated 6-letter strings (e.g., “rlgows”) in the reversed order (e.g., “swoglr”). For each correct string typed, participants received a monetary reward and they were given a maximum of 3 minutes for the task. As expected, participants in the scarcity condition typed more strings and persisted longer in the task than those in the abundance and control conditions (No significant difference was found between the two).

Experiment 2 demonstrates that, rather than activating a general motivation to earn monetary incentives, scarcity only increases consumers’ intention to pursue rewards when the reward-seeking process requires effort exertion. We employed a 2 (scarcity vs. abundance) \times 2 (effortful vs. effort-free) between subject design ($N = 447$). After completing the same resource manipulation as experiment 1, participants indicated their intention to join a customer reward program. We manipulated effort perception by informing participants that they would need to call the customer service and provide a 10-digit validation code to the representative in order to receive a monetary rebate after each purchase (effortful condition), or that they would receive the monetary rebate after each purchase without any extra procedure (effort-free condition). Whereas participants in the scarcity (vs. abundance) condition indicated higher intention to join the effortful reward program, there was no significant difference across the two groups when the reward program was effort-free.

Experiment 3 provides direct process evidence by showing the mediating role of achievement orientation and the moderating role of consumers’ lay belief about the relationship between effort and achievement. After finishing the same resource (scarcity vs. abundance) recall manipulation as in experiments 1 and 2, undergraduates ($N = 209$) indicated their intention to join an effortful reward program provided by a chain coffee shop, which required consumers to download a smartphone app and enter a 10-digit validation code into the app to receive a future discount after each purchase. Consistent with our theorization, participants in the scarcity (vs. abundance) condition indicated higher intention to join the reward program, an effect mediated by achievement motivation and attenuated for those participants who did not believe that greater effort leads to greater achievement (Mirels and Garrett 1971).

Experiment 4 provides further process evidence by demonstrating the moderating role of self-affirmation through a 2 (scarcity vs. abundance) \times 2 (affirmation vs. control) between subject design. Participants ($N = 470$) first read a fictitious news article that highlighted either the scarcity or abundance of five natural resources, and wrote about how the article could be relevant to them and affect their personal life. Next, while half of the participants wrote about three or four positive aspects of themselves, or occasions in which they behaved positively (Blanton et al. 2001; the self-affirmation condition), the other half listed three or four features of their immediate environment (the control condition). Finally, all participants indicated their intention to join a customer reward program similar to the one used in experiment 3. As expected, participants in the scarcity (vs. abundance) condition indicated higher intention to join the reward program, a difference that disappeared when the participants’ sense of achievement was restored through self-affirmation.

The current research contributes to the existing scarcity literature by documenting a positive linkage between scarcity and consumers’ effort tolerance during reward-seeking. By systemically investigating the mechanism underlying this effect, this research also extends our understanding of achievement orientation in the marketing context. Further, our research offers rich practical implication for marketers in terms of how to better utilize the level of consumer effort embedded in their marketing activities.

Childhood Resource Scarcity and Planning Fallacy

EXTENDED ABSTRACT

25% of children in the U.S. live below the poverty line and 23% more can be classified as living in low-income households (Addy and Wight 2012). How does growing up in a world of resource scarcity affect people’s judgment and decision making? Previous research has predominantly found that growing up in resource-deprived conditions is associated with poor judgment and decision making. This paper suggests that this may not always be true.

We report results from three experiments showing that people growing up wealthier are more likely to exhibit a planning fallacy by underestimating the time it would take them to carry out future tasks. Additionally, consistent with recent research, the effects of childhood environment on planning fallacy were observed only under current conditions of financial threat. This suggests that the effects of childhood resource scarcity on people’s planning psychology may be dormant until they experience a threat later in life.

The goal of Study 1 ($N=138$) was to examine whether childhood resources influence people’s estimates of task completion times. Participants were randomly assigned to one of two conditions: financial threat or control. Those in the financial threat condition wrote three indicators that suggest the economy is becoming increasingly unpredictable and that resources are becoming scarcer. Those in the control condition wrote three indicators that suggest the economy is getting better and that resources are becoming abundant. Next, participants were informed that they would be seeing a piece of text on the next screen and that their task was to accurately count the number of times the letter ‘e’ appears in it. But before they started, they were asked to estimate the time they thought it would take them to complete the task. The number of seconds participants entered served as the dependent variable. Finally, a validated measure assessed participants’ level of childhood resource-availability (Rindfleisch et al. 1997).

Results from Study 1 show that people from different childhood environments had significantly different task completion estimates in response to threat ($F(1, 134)=13.46, p < .001$). As predicted, people who reported higher childhood resources estimated that it would take them a shorter time to complete the task especially in the financial threat condition ($\beta = -.26, p = .030$) but not in the control condition. This means that those from resource-rich backgrounds exhibited a planning fallacy during conditions of financial threat. No effects were observed for the actual time spent on the task.

Study 2 replicated the results of Study 1 using a consumer shopping task. Participants ($N = 141$) were randomly assigned to either a control or a financial threat condition as in Study 1 and were told that their task was to search and report the current prices for products on a ‘holiday shopping’ list from three popular retail websites: Amazon.com, Target.com, and Walmart.com. Before beginning the shopping task though, they were asked to estimate the time they think it would take them to do the task given that most people took about 325 seconds to do it (based on a pretest).

Results from Study 2 once again showed that people’s estimates of how long it would take them to complete the shopping task depended on resource availability during childhood as well as their current condition ($F(1, 137)=6.3, p = .013$). Further analysis confirmed that people with greater level of childhood resources estimated lower amount of time (planning fallacy) but only in the financial threat condition ($\beta = -.29, p = .016$). As predicted, there were no differences in actual time taken to complete the shopping task indicating that time estimates do reflect an error in judgment.

Study 3 investigated the psychological mechanism underlying the effect of childhood resource scarcity on planning fallacy. Considerable past research suggests that the tendency to have lower time estimates for future tasks (i.e. planning fallacy) occurs because of people's optimistic beliefs regarding their own abilities (Buehler, Griffin, and Peetz 2010; Kruger and Dunning 1999; Taylor and Brown 1988). Based on this work, we predicted that people from different socioeconomic backgrounds may have different estimates of task completion times because of varying levels of self-efficacy. Thus, we tested whether self-efficacy may be a psychological mechanism underlying this effect.

The procedures and materials for Study 3 ($N=152$) were identical to those used in Study 1. The only major change in Study 3 was the inclusion of an established measure of self-efficacy beliefs (Lachman and Weaver 1998). Results again showed that people from wealthier childhoods underestimated task completion times especially in response to financial threat ($F(1, 148) = 5.48, p = .021$), replicating findings from Studies 1 and 2. Furthermore, we also found a similar interaction for self-efficacy beliefs ($F(1, 148) = 6.57, p = .011$), such that participants from wealthier childhoods reported significantly higher self-efficacy in the financial threat condition ($\beta = .45, p < .001$) but not in the control condition. Finally, a 5000 resample bootstrap using PROCESS macro revealed an indirect effect of childhood resources and financial threat on time estimates via self-efficacy beliefs, $b = -3.08, 95\% \text{ CI } [-8.89, -.42]$, establishing statistical mediation.

Taken together, three studies showed that people from wealthier backgrounds underestimated the time it would take them to complete future tasks in response to conditions of threat, indicating a planning fallacy. Furthermore, mediation analyses showed that the reason for this effect is that facing financial threat changed people's perceptions of self-efficacy as a function of their childhood environment. People from wealthier backgrounds indicated greater self-efficacy in response to threat, leading them to commit a planning fallacy. These studies are among the first to show that growing up wealthy can have negative effects on consumers' judgment and decision making.

When Thoughts of "Having Less" Promote the Desire to Become One's Best: Reminders of Resource Scarcity Increase the Desire for Self-Improvement

EXTENDED ABSTRACT

Although a great deal of research has investigated how consumers make trade-offs between choice outcomes that offer comparatively utilitarian versus hedonic benefits (e.g., Dhar and Wertenbroch 2000), far less is known about the psychological antecedents of how consumers weigh self-improvement related benefits in their decision making (Allard and White 2015). The current research addresses this by examining how considerations of resource scarcity affect the desire for self-improvement and the relevant consequences for consumer decision making.

We draw from previous research demonstrating that reminders of resource scarcity promote the desire to advance one's own welfare (e.g., Aarøe and Petersen 2013; Durante et al. 2015; Roux, Goldsmith and Bonezzi 2015) to offer the novel prediction that considerations of resource scarcity will increase the desire for self-improvement, and accordingly will increase consumers' interest in and willingness to pay for products offering self-improvement related benefits. Indeed, products that offer self-improvement related benefits contribute to advancing one's own welfare through the improvement of one's relative standing (Sedikides and Skowronski 2000; Sedikides et al. 2006). Having superior qualities or skills can be considered as

a resource that an individual possess over others (Brock and Brannon 1992). Further, these types of resources can be particularly useful for the advancement of one's own welfare in contexts of heightened interpersonal competition (e.g., an economic recession; Durante et al. 2012; Griskevicius et al. 2012; Hill et al. 2012).

We tested our predictions in four experiments. Experiments 1 ($N=82$) first examined whether considerations of resource scarcity increase the desire for self-improvement. Participants in the scarcity condition were asked to recall times when they felt resources were scarce, whereas those assigned to the control condition were asked to list activities they did in the past week (Roux et al. 2015). Next, all participants completed a 4-item desire for self-improvement measure (Allard and White 2015). Finally, all participants completed a 4-item measure designed to assess their perceptions of scarcity (Roux et al. 2015). Participants in the scarcity condition showed an increased desire for self-improvement ($M_{\text{Scarcity}} = 2.45$ vs. $M_{\text{Control}} = 2.06; p = .04$). Further, participants' perceptions of scarcity mediated the effect of scarcity on the desire for self-improvement (95% CI = [.013; .396]).

Next, experiment 2 ($N=116$) tested whether the effect of scarcity on self-improvement carries over to product choice. Participants first completed the scarcity manipulation used in experiment 1. Next, participants were presented with a choice between two bottles of VitaminWater, one which was framed as offering self-improvement related benefits (i.e., improving mental performance) and one which was not (i.e., providing hydration; Allard and White 2015). Considerations of scarcity increased choice of the self-improvement related product ($P_{\text{Scarcity}} = 65.9\%$ vs. $P_{\text{Control}} = 46.7\%; p = .05$).

Experiment 3 ($N=170$) tested whether the effect of scarcity on the desire for self-improvement had implications for willingness-to-pay (WTP) using an incentive-compatible, consequential choice task (adapted from Becker, DeGroot and Marschak 1964). Participants first completed the scarcity manipulation used in studies 1 and 2. Next, participants were presented with a set of Post-it Notes, for which self-improvement benefits were either highlighted or not (adapted from Allard and White 2015). WTP was assessed using 20 binary choices, where participants had to indicate their preference between receiving the product they had been shown or a certain amount of money (\$0.10-\$2.00 in \$0.10 increments). Participants were instructed that, following the completion of the experiment, the computer would randomly select one of their choices and they would receive the option selected. Results showed an interaction between scarcity and self-improvement related benefits ($p < .01$). When self-improvement related benefits were highlighted, scarcity increased WTP ($M_{\text{Scarcity}} = \$0.73$ vs. $M_{\text{Control}} = \$0.47; p = .03$), but conversely decreased WTP ($M_{\text{Scarcity}} = \$0.43$ vs. $M_{\text{Control}} = \$0.56; p = .04$) when these benefits were not highlighted.

Experiment 4 ($N=81$) tested whether individual differences in desire for control (DFC; Burger and Cooper 1979) moderated the effect of scarcity on self-improvement. Prior research has shown that the desire for self-improvement is rooted in the desire to control future outcomes (Sedikides and Skowronski 2000; Sedikides et al. 2006; Trope, Gervy, and Bolger 2003), suggesting that the preference for self-improvement related benefits, following considerations of resource scarcity, should be accentuated (attenuated) for individuals that have a higher (lower) DFC. Participants first completed the 20-item Desirability of Control Scale (Burger and Cooper 1979). Next, scarcity was manipulated by asking participants to list things they would be unable to do if certain resources were unavailable (e.g., water; Roux et al. 2015). Participants in the control condition were asked to list things that they could do with the same resources. Finally, participants reported their likelihood of trying a smartphone application offering self-improvement related benefits (Allard and

White 2015). Results revealed that scarcity increased trial intentions ($M_{Scarcity}=5.07$ vs. $M_{Control}=4.26$; $p=.04$). Further, there was a significant interaction between scarcity and DFC ($\beta=.86$; $p=.014$), with scarcity (vs. control) increasing trial intentions for participants whose DFC score was 5.00 ($\beta=.38$; $p=.05$) and above.

In summary, across four experiments, we demonstrate that considerations of resource scarcity promote the desire for self-improvement, which in turn increases consumers' interest in and willingness to pay for products offering self-improvement related benefits. Although further research is necessary to fully understand the boundaries of these effects, this research provides an important step towards a better understanding of the specific desires that are instantiated in response to considerations of resources scarcity and their consequences.

Too Constrained to Converse: Financial Constraints Reduce Word-of-Mouth

EXTENDED ABSTRACT

Financial constraints are defined as the belief that one's financial situation restricts her desired consumption (Tully, Hershfield, and Meyvis 2015). Such constraints are prevalent and span multiple socioeconomic levels (Lusardi, Schneider, and Tufano 2011; Moore 2013), and researchers have demonstrated how such constraints impact a range of preferences and purchasing decisions. However, less research has examined whether financial constraints influence post-purchase behavior. In this work, we examine one form of post-purchase behavior that has been shown to greatly impact both consumers' future behavior and company performance: word-of-mouth.

Word-of-mouth (WOM) is the highest ranked source for trustworthy recommendations of products and services (Nielsen 2015). Accordingly, it is increasingly important for companies to understand factors that drive purchase-related WOM. In this work, we argue that financial constraints reduce the propensity to engage in WOM. Although it may be enjoyable for people to tell others about purchases they have made, we argue that the pleasure of discussing one's purchases is lessened when one feels financially constrained, because monetary outlays are less pleasant to discuss. Accordingly, we do not expect financial constraints to reduce consumers' likelihood of sharing in general. Instead, we expect this effect to be specific to one's monetary outlays (e.g., products they have purchased vs. received as gifts).

We demonstrate the predicted effect with consumers' real purchases using a range of purchase categories, measures of WOM, and audience types. Through both mediation and moderation, we provide evidence for the proposed process, while ruling out other possible accounts (e.g., impression management concerns, decreased interest in sharing in general).

In study 1, we assessed the relationship between WOM frequency and perceived financial constraints. In counterbalanced order, we measured participants' financial constraints using a 4-item scale. We also measured the frequency with which participants discuss both products and brands they buy. Participants who felt more financially constrained indicated talking less frequently about products they purchase, $b = -.248$, $t(398) = -3.81$, $p < .001$. They also reported having less frequent discussions about brands they buy, $b = -.330$, $t(398) = -4.89$, $p < .001$. This relationship emerged irrespective of whether participants indicated their financial constraints before or after reporting their frequency of purchase-related word-of-mouth.

In study 2, we explored the association between consumers' financial constraints and their decision to discuss their purchases in an anonymous online context. We created two real online chat rooms

and invited participants to engage with others about their purchases (vs. a pretested alternative topic: local/state parks). We measured participants' financial constraints using the 4-item scale from study 1 and then tracked their posting behavior. Results revealed that those who felt financially constrained were less likely to choose to post in the purchases chatroom, $b = -.186$, $SE = .082$, $p = .023$.

In study 3, participants first identified an upcoming discretionary purchase. Next, they were randomly assigned to one of two between-subjects conditions. They either reflected on the factors contributing to their financial constraints (financial constraint condition) or listed 10 facts they know to be true (control condition). Then, participants indicated their likelihood of engaging in WOM. As predicted, financially constrained consumers were less likely to engage in both online and interpersonal WOM about the purchase they mentioned, $F(1, 251) = 5.23$, $p = .023$. This effect was explained by reduced anticipated pleasure from discussing one's purchase, 95% CI [-.8788, -.1251] (Hayes 2013).

In study 4, we considered whether financially constrained consumers were less likely to share because they did not want to publicize unnecessary spending for fear of negative judgments from others. Therefore, we examined whether the proposed effect persisted for utilitarian purchases. Participants wrote about an upcoming hedonic or utilitarian purchase and then were assigned to one of the two financial constraint conditions from study 3. Although participants were more willing to discuss hedonic (vs. utilitarian) purchases, $F(1, 400) = 27.96$, $p < .001$, this effect did not depend on their level of financial constraints, $F < 1$. Critically, financially constrained participants were less likely to share regardless of purchase type, $F(1, 400) = 7.18$, $p = .008$. Participants in the financially constrained condition anticipated less pleasure from discussing their purchases. These feelings mediated the effect of financial constraints on reduced WOM, 95% CI [-.4843, -.0177], and other process accounts (e.g., self-presentation concerns) could not similarly explain the effect, $F_s < 1$.

We have proposed that financially constrained consumers are less likely to engage in word-of-mouth because of the reduced pleasure associated with discussing their monetary expenditures. If this effect is indeed a function of financially constrained consumers' aversion to discussing their monetary outlays, then our results should not apply to all word-of-mouth contexts. Instead, the effect should be specific to contexts in which participants are discussing their own monetary expenditures. Thus, study 5 followed a 2(financial constraint vs. control) x 2(product: purchase vs. gift) design. Conducted during the holiday season, all participants identified a future discretionary purchase and then imagined either purchasing that item or receiving it as a gift. They then received either the financial constraint or control manipulation. We expected that participants in the financial constraint and control conditions would be equally likely to engage in WOM about products received as gifts (vs. ones they purchased themselves). Results aligned with this prediction, $F_{interaction}(1, 852) = 5.85$, $p = .016$. Among those who imagined purchasing the item mentioned, participants in the financial constraint condition had lower posting intentions than participants in the control condition, $F_{purchase\ simple\ effect}(1, 852) = 9.85$, $p = .002$; however, the same difference did not emerge among those who imagined receiving the item as a gift, $F_{gift\ simple\ effect} < 1$.

In sum, we find that financially constrained consumers are less likely to engage in WOM for their purchases. This research is among the first to examine how financial constraints affect consumers' post-purchase behavior, and contributes to our understanding of the drivers of WOM. From a managerial perspective, it suggests that the extent to which companies can dissociate purchases from the costs spent, they may more effectively increase social media engagement.

REFERENCE

- Aarøe, Lene and Michael Bang Petersen (2013), "Hunger Games: Fluctuations in Blood Glucose Levels Influence Support for Social Welfare," *Psychological Science*, 24 (12), 2550-56.
- Addy, Sophia and Vanessa R. Wight (2012), *Basic Facts about Low-income Children, 2010: Children under Age 6*, National Center for Children in Poverty, Columbia University.
- Allard, Thomas and Katherine White (2015), "Cross-Domain Effects of Guilt on Desire for Self-Improvement Products," *Journal of Consumer Research*, 42 (3), 401-19.
- Aronson, Elliot and Judson Mills (1959), "The Effect of Severity of Initiation on Liking for a Group," *The Journal of Abnormal and Social Psychology*, 59 (2), 177-81.
- Becker, Gordon M., Morris H. DeGroot, and Jacob Marschak (1964), "Measuring Utility by a Single Response Sequential Method," *Behavioral Science*, 9 (3), 226-32.
- Blanton, Hart, Brett W. Pelham, Tracy Dehart, and Mauricio Carvallo (2001), "Overconfidence as Dissonance Reduction," *Journal of Experimental Social Psychology*, 37 (5), 373-85.
- Brock, Timothy C., and Laura A. Brannon, "Liberalization of Commodity Theory," *Basic and Applied Social Psychology*, 13 (1), 135-44.
- Buehler, Roger, Dale Griffin, and Johanna Peetz (2010), "The Planning Fallacy. Cognitive, Motivational, and Social Origins," *Advances in Experimental Social Psychology*, 43 (C), 1-62.
- Burger, Jerry M., and Harris M. Cooper (1979), "The Desirability of Control," *Motivation and Emotion*, 3 (4), 381-93.
- Côté, James E. (1993), "Foundations of a Psychoanalytic Social Psychology: Neo-Eriksonian Propositions Regarding the Relationship between Psychic Structure and Cultural Institutions," *Developmental Review*, 13 (1), 31-53.
- Côté, James E. (1996), "Sociological Perspectives on Identity Formation: the Culture-identity Link and Identity Capital," *Journal of Adolescence*, 19 (5), 417-28.
- Dhar, Ravi and Klaus Werthenbroch (2000), "Consumer Choice Between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (1), 60-71.
- Durante, Kristina M., Vladas Griskevicius, Joseph P. Redden, and Andrew Edward White (2015), "Spending on Daughters versus Sons in Economic Recessions," *Journal of Consumer Research*, 42 (3), 435-57.
- Elliot, Andrew J. and Marcy A. Church (1997), "A Hierarchical Model of Approach and Avoidance Achievement Motivation," *Journal of Personality and Social Psychology*, 72 (1), 218-32.
- Fischhoff, Baruch, Roxana M. Gonzalez, Deborah A. Small, and Jennifer S. Lerner (2003), "Judged Terror Risk and Proximity to the World Trade Center," *Journal of Risk and Uncertainty*, 26 (2/3), 137-51.
- Griskevicius, Vladas, Joshua M. Tybur, Joshua M. Ackerman, Andrew W. Delton, Theresa E. Robertson, and Andrew E. White (2012), "The Financial Consequences of Too Many Men: Sex Ratio Effects on Saving, Borrowing, and Spending," *Journal of Personality and Social Psychology*, 102 (1), 69-80.
- Griskevicius, Vladas, Joshua M. Ackerman, Stephanie M. Cantu, Andrew W. Delton, Theresa E. Robertson, Jeffrey A. Simpson, Melissa Emery Thompson, and Joshua M. Tybur (2013), "When the Economy Falts, Do People Spend or Save? Responses to Resource Scarcity Depend on Childhood Environments," *Psychological Science*, 24 (2), 197-205.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY: Guilford Press.
- Heckhausen, Jutta. (1993), "The Development of Mastery and its Perception within Caretaker-child Dyads," In David. J. Messer (Ed.), *Mastery Motivation: Children's Investigation, Persistence, and Development* (pp. 55-79). London: Routledge.
- Hill, Sarah E., Christopher D. Rodeheffer, Vladas Griskevicius, Kristina Durante, and Andrew Edward White (2012), "Boosting Beauty in an Economic Decline: Mating, Spending, and the Lipstick Effect," *Journal of Personality and Social Psychology*, 103 (2), 275 - 91.
- Kotler, Philip and Gary Armstrong (2004), *Principles of Marketing*, 1st ed., Upper Saddle River: Pearson Education.
- Kruger, Justin and David Dunning (1999), "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments," *Journal of Personality and Social Psychology*, 77 (6), 1121-34.
- Lachman, Margie E. and Suzanne L. Weaver (1998), "The Sense of Control as a Moderator of Social Class Differences in Health and Well-being," *Journal of Personality and Social Psychology*, 74 (3), 763-73.
- Laran, Juliano and Anthony Salerno (2013), "Life-History Strategy, Food Choice, and Caloric Consumption," *Psychological Science*, 24 (2), 167-73.
- Lusardi, Annamaria, Daniel J. Schneider, and Peter Tufano, (2011), "Financially Fragile Households: Evidence and Implications", No. w17072. *National Bureau of Economic Research*.
- Mani, Anandi, Sendhil Mullainathan, Eldar Shafir, and Jiaying Zhao (2013), "Poverty Impedes Cognitive Function," *Science*, 341 (6149), 976-80.
- Mehta, Ravi and Meng Zhu (2016), "Creating When You Have Less: The Impact Of Resource Scarcity on Product Use Creativity," *Journal of Consumer Research*, 42 (5), 767-82.
- McClelland, David C (1961), *The Achieving Society*. Princeton, N.J.: Van Nostrand.
- Mirels, Herbert L. and James B. Garrett (1971), "The Protestant Ethic as a Personality Variable," *Journal of Consulting and Clinical Psychology*, 36 (1), 40-44.
- Mittal, Chiraag and Vladas Griskevicius (2014), "Sense of Control under Uncertainty Depends on People's Childhood Environment: A Life History Theory Approach," *Journal of Personality and Social Psychology*, 107 (4), 621-37.
- Mittal, Chiraag, Vladas Griskevicius, Jeffrey A. Simpson, Sooyeon Sung, and Ethan Young (2015), "Cognitive Adaptations to Stressful Environments: When Childhood Adversity Enhances Adult Executive Function," *Journal of Personality and Social Psychology*, 109 (4), 604 -21.
- Moore, Heidi. (2013). Debt a common theme as Americans struggle to feel benefits of recovery. *The Guardian*. Retrieved from <http://www.guardian.co.uk/commentisfree/2013/mar/29/debt-us-economy-recovery-americans>.
- Mullainathan, Sendhil and Eldar Sharif (2013), *Scarcity: Why Having Too Little Means So Much*. London: Allen Lane.
- Nielsen (2015). Recommendations From Friends Remain Most Credible Form of Advertising Among Consumers". *Nielsen Trust in Advertising Survey*. Retrieved from <http://www.nielsen.com/us/en/press-room/2015/recommendations-from-friends-remain-most-credible-form-of-advertising.html>.

- Norton, Michael I., Daniel Mochon, and Dan Ariely (2012), "The 'IKEA Effect': When Labor Leads to Love," *Journal of Consumer Psychology*, 22 (3), 453-60.
- Riesman, David (1950), *The Lonely Crowd: A Study of the Changing American Character*. New Haven, CT: Yale University Press.
- Rindfleisch, Aric, James E. Burroughs, and Frank Denton (1997), "Family Structure, Materialism, and Compulsive Consumption," *Journal of Consumer Research*, 23 (March), 312-325.
- Roux, Caroline, Kelly Goldsmith and Andrea Bonezzi (2015), "On the Psychology of Scarcity: When Reminders of Resource Scarcity Promote Selfish (and Generous) Behavior," *Journal of Consumer Research*, 42 (2), 615-31.
- Sedikides, Constantine, and John J. Skowronski (2000), "On the Evolutionary Functions of the Symbolic Self: The Emergence of Self-Evaluation Motives," *Psychological Perspectives on Self and Identity*, 91-117.
- Sedikides, Constantine, John J. Skowronski, and Robin I. M. Dunbar (2006), "When and Why the Human Self Evolve," in *Evolution and Social Psychology*, ed. Mark Schaller, Jeffrey A. Simpson, and Douglas T. Kendrick, New York: Psychology Press, 55-80.
- Seligman, Martin E. P. (1975), *Helplessness: On Depression, Development, and Death*. San Francisco: W.H. Freeman.
- Sevilla, Julio and Joseph P. Redden (2014), "Limited Availability Reduces the Rate of Satiation," *Journal of Marketing Research*, 51 (2), 205-17.
- Shah, Anuj K., Sendhil Mullainathan and Eldar Shafir (2012), "Some Consequences of Having Too Little," *Science*, 338 (6107), 682-85.
- Sharma, Eesha and Adam L. Alter (2012), "Financial Deprivation Prompts Consumers to Seek Scarce Goods," *Journal of Consumer Research*, 39 (3), 545-60.
- Taylor, Shelley E. and Jonathon Brown (1988), "Illusion and Well-Being: A Social Psychological Perspective on Mental Health," *Psychological Bulletin*, 103 (March), 193-210.
- Trope, Yaacov, Ben Gervy, and Niall Bolger (2003), "The Role of Perceived Control in Overcoming Defensive Self-Evaluation," *Journal of Experimental Social Psychology*, 39 (5), 407-19.
- Tully, Stephanie M., Hal E. Hershfield, and Tom Meyvis (2015), "Seeking Lasting Employment with Limited Money: Financial Constraints Increase Preference for Material Goods over Experiences," *Journal of Consumer Research*, 42, 59-75.
- Weiner, Bernard (1972), *Theories of Motivation: From Mechanism to Cognition*. Chicago: Rand McNally College Pub. Co.
- Zhu, Meng and Rebecca Ratner (2015), "Scarcity Polarizes Preferences: The Impact on Choice among Multiple Items in a Product Class," *Journal of Marketing Research*, 52 (1), 13-26.

Willing and Wanting versus Impervious and Resisting: When Consumers Filter In and Out Motivational Cues

Chair: Kathleen D. Vohs, University of Minnesota, USA

Paper #1: Motivated Construals: How Goals Implicitly Change Object Meaning

Melissa Ferguson, Cornell University, USA
Szu-chi Huang, Stanford University, USA
Ying Zhang, Peking University, USA
Ayelet Fishbach, University of Chicago, USA

Paper #2: The Effect of Implicit Theories on Progress or Proficiency in Self-Learning

Lama Lteif, Baruch College, CUNY, USA
Ozge Aybat, Penn State Harrisburg, USA
Pragya Mathur, Baruch College, CUNY, USA
Lauren Block, Baruch College, CUNY, USA

Paper #3: Images Change Implicit Attitudes More than Text: Evidence from Corrective Advertising Attempts

Olivier Trendel, Grenoble Ecole de Management, France
Kathleen D. Vohs, University of Minnesota, USA
Marc Mazodier, Nottingham University, China

Paper #4: When Less is More: Counter-Attitudinal Appeals are More Effective When They Are Ignored

Steven K. Dallas, New York University, USA
Gavan J. Fitzsimons, Duke University, USA

SESSION OVERVIEW

Consumers often are actively voracious in their attention to cues fitting their momentary goals, sucking in relevant information. Yet, just as common is the contrasting situation, when external influences (such as by change agents) attempt to make inroads with consumers who have little motivation to comply. This session's papers present cutting-edge research aimed at identifying when, why, and how goal-directed efforts by consumers and external agents alike meet with success.

Two talks (Huang, Lteif) focus on features of goal-relevant environments that are differentially effective as a function of people's goals. Huang and colleagues took a fine-grained approach. They found that when consumers have an active goal, their basic perceptual processes change. Consumers are sensitive to features of goal-relevant objects that are particularly suited for their goal, thereby transforming the very meaning of objects to enhance the odds of goal attainment. Lteif and colleagues explored an increasingly common consumer goal setting — attempts to gain new skills or knowledge via self-learning. Using features of common smartphone applications (e.g., Duolingo, Luminosity), they found that consumers' entity versus incremental theories of self-change alter the effectiveness of learning cues. Consumers holding a chronic or temporary entity theory are motivated to learn and actually learn more when feedback details progress (e.g., number of tasks completed) than when providing proficiency feedback (e.g., skilled learned). Incremental theorists are motivated by and learn more when given proficiency cues.

The latter two talks (Trendel, Dallas) discuss persuasive attempts that prior literatures suggest would run the risk of being ineffectual at best or counterproductive at worst. Each finds how these approaches can in fact be successful. Trendel and colleagues studied corrective advertising and warnings about fraudulent brands as a vehicle to understand how to change implicit attitudes. In these cases, consumers lack intrinsic drives to change their attitudes about a brand; rather, a

third-party (e.g., U.S.'s Federal Trade Commission) seeks to make that change. They found that most common route of conveying information verbally (e.g., press releases) changes only explicit attitudes while leaving the implicit attitude unchanged — and thus positive. Images, though, are successful in changing both explicit and implicit attitudes, thereby making imagery the most powerful route to changing attitudes. Last, Dallas and Fitzsimons detail a surprising new route to getting through to recalcitrant consumers. Tightly-controlled experiments studying adults and a naturalistic field study of teens showed that allowing people to habituate to a message that would otherwise resist not only diffuses it of its reactance power — but can flip the typical effect and produce the desired behavior.

These talks will be of interest to scholars interested in changing consumer behavior, from goals scholars to those concerned with policy efforts. Together, they raise questions concerning how marketers can identify, ex-ante, when consumers possess relevant goals and when they do not, and how to create settings, applications, and messages that are efficient and effective at changing consumer behavior.

Motivated Construals: How Goals Implicitly Change Object Meaning

EXTENDED ABSTRACT

The last two decades of work in social and cognitive psychology suggests that the meaning of an object is extremely fluid and context-based (e.g., Aarts, Dijksterhuis, and DeVries 2001; Balcetis and Dunning 2006; Bruner 1957; Forster, Liberman, and Higgins 2005). Any given object has myriad features and memories associated with it, and people's understanding—or construal—of the object depends on which are most accessible in memory at the moment. Water, for example, can be construed in terms of swimming, bathing, drinking, or farming features. The particular features that end up populating a given construal then influence behavior toward the object. When people's construal of water happens to be based on its bathing features, for example, they should be less likely to use it to quench their thirst.

This fluidity in object construal has important implications for consumers' self-regulation. Our research shows that an individual's currently active goal implicitly constrains the meaning of objects in a way that makes him/her more likely to attain this goal. We also found that those with goal-driven construals showed more goal-facilitative behaviors. Together, our findings reveal a new route of motivated cognition: goals change the implicit construal of objects to be more goal-facilitative, which then increases goal-facilitative behavior toward those objects. In this way, what consumers want subtly transforms their mental assessment of the environment in a way that nudges behavior toward attaining their goal.

In Study 1, we tested whether activating a goal of fitness would change the implicit construal of tempting foods. We first manipulated the activation of the fitness goal between subjects using a scrambled sentence task. Participants then moved on to the second task—a lexical decision task, through which we measured the kinds of features most accessible for each of a series of tempting foods to capture participants' implicit construal of temptations. Specifically, the prime stimuli consisted of 5 temptation foods (chocolate, burger, chips, cake, and steak) or a nonsense stimulus (“zxcvbnm”). The targets consisted of features that were specific to each primed temptation

and were either typical and thus eating-related (e.g., for burger: juicy, hot, grilled) or atypical and thus eating-irrelevant (for burger: disk, round, and brown). We measured the time it took participants to categorize each target word as a real or non-word.

We submitted reaction times to a repeated-measures ANOVA with Prime (temptation, nonsense) and Target (eating-relevant, eating-irrelevant) as the within-subject variables, Goal Condition (fitness, control) as the between-subject variable, and reaction times to neutral target trials as a covariate to control for individual differences in responding. We found the hypothesized 3-way interaction between Goal Condition, Prime, and Target, $F(1, 69) = 8.77, p = .004, \eta_p^2 = .113$. Decomposing this 3-way interaction, we found a significant 2-way interaction between Target and Goal Condition for temptation primes, $F(1, 69) = 8.30, p = .005, \eta_p^2 = .107$, but not for nonsense primes. Specifically, for eating-irrelevant target words, participants were faster to respond in the fitness ($M = 519$ ms, $SE = 13.6$) versus control condition ($M = 567$ ms, $SE = 16.62$), $F(1, 69) = 4.88, p = .03, \eta_p^2 = .066$. For eating-relevant targets, however, participants responded directionally slower in the fitness ($M = 541$ ms, $SE = 8.34$) versus control ($M = 522$ ms, $SE = 10.1$) condition, $F(1, 69) = 2.15, p = .15, \eta_p^2 = .030$. As predicted, when participants' fitness goal was activated, they responded significantly faster on trials where temptations were followed by "eating-irrelevant" features, e.g., construing a burger as something round and brown instead of juicy.

We hypothesized that this motivated construal is goal-facilitative, which would discourage the consumption of unhealthy food. We tested this possibility in Study 2. We used the same 5 tempting foods as in Study 1, and directly manipulated whether those temptations were associated with eating-irrelevant features (or not) using a lexical decision task. For those in the "Eating-Irrelevant" condition, the 5 temptation primes were always paired with the eating-irrelevant targets in the 15 trials (e.g., burger-round), and the nonsense prime stimulus was always paired with the neutral targets. For those in the "Control" condition, the temptation primes were always paired with the nonsense targets, and the nonsense prime stimulus was always paired with the eating-irrelevant targets. We then measured participants' desire to consume these temptations. We found that for those who believed that these temptations were unhealthy (and thus wanted to reduce their consumption), they reported significantly lower likelihood of consuming the temptations in the eating-irrelevant condition ($M = 6.65$) than in the control condition ($M = 7.74$), $B = -1.10, t(109) = -2.92, p = .004$; associating temptations with eating-irrelevant features thus reduced their intent to consume these items. We did not find this effect among participants who believed that these temptations were healthy.

Study 3 used a similar paradigm as Study 2 but with a different goal—drinking water to quench thirst. Based on our hypothesis, when people think of water in terms of drinking-irrelevance such as bathing, farming, and swimming, they should be less likely to drink water. We first made half of the participants thirsty (by eating pretzels) and another half not thirsty (by eating cherry-tomatoes) under the cover story of snack tasting. Then we experimentally manipulated participants' construal of water by strengthening (vs. not strengthening) the association between water and drinking-irrelevant stimuli through a lexical decision task. We then measured participants' intake of water. We found that participants whose thirst was experimentally increased (vs. not thirsty) responded more slowly to pairings of water and drinking-irrelevant words, but did not respond differently to the control pairings. This suggests that thirsty people are less likely to construe water in terms of "irrelevant associations" that would discourage them from drinking it. In addition, exposure to these drinking-irrelevant pairings decreased thirsty participants'

actual consumption of water, compared with the control conditions. Therefore, changing the construal of an object influences the consumption of that object.

The Effect of Implicit Theories on Progress or Proficiency in Self-Learning

EXTENDED ABSTRACT

The marketplace has seen a proliferation of products, such as websites, fitness trackers, and smartphone applications that encourage consumers to engage in self-learning behaviors. These products often provide feedback that informs users about the extent of their self-learning, highlighting the extent of completion on the learning task (i.e., task-progress cues), or emphasizing performance and proficiency (i.e., task-proficiency cues). Examples abound. Duolingo, a language learning application, tells gives completion rates (e.g., language lessons per week), thus providing task-progress cues. Elevate, a cognitive training application, gives feedback on the specific skills users have learned, thus giving task-proficiency feedback. Still others, such as Luminosity, blend the two feedback cues. The two types of feedback seem to map onto differences in how consumers approach learning opportunities, namely differences in implicit theories of change.

We proposed that entity-theorists, who have performance-completion goals, view achievement situations as tests designed to evaluate their competence. Therefore, entity-theorists favor cues that allow them to document the adequacy of their abilities, and signal their positive traits. Incremental-theorists, in contrast, seek to improve their performance. They are driven by learning-goals, and view achievement situations as opportunities to increase their competence. Thus, we predicted that by enhancing their sense of accomplishment, task-progress cues help entity-theorists, while task-proficiency cues only help for incremental-theorists.

Study 1 investigated how learning behaviors of individuals with different implicit-theory orientations are impacted by task-progress cues. At the beginning of a semester, undergraduates ($n=104$) completed the Implicit-Theory Scale (Levy et al. 1998). As an extra credit self-learning task, students were asked to read four different marketing-related chapters and complete a brief assignment after each chapter. Students were allowed to submit quizzes at their convenience, but were given a recommended weekly schedule for submission dates. After submitting assignments, respondents received progress feedback stating how many assignments they had thus far completed. Number of assignments submitted on schedule served as a measure of their learning behavior. Results revealed that entity-theorists evaluated the extra credit assignment more favorably than incremental-theorists ($M_{ET} = 5.98, M_{IT} = 5.38, p < .001$). Importantly, more incremental (vs. entity) theorists adhered to the recommended schedule ($M_{IT} = 22.2\%, M_{ET} = 15.2\%, p < .05$) thereby demonstrating stronger learning behaviors.

Study 1 established that entity (vs. incremental) theorists possess a systematic preference for task-progress cues. Study 2 tested how self-learning behavior would be impacted by task-progress, task-proficiency, as well as mixed-cues. In a 2 (implicit-theory) \times 3 (cue: progress vs. proficiency vs. mixed) between-subject computerized study ($n=291$), participants were induced with either an entity or incremental orientation (Poon and Koehler 2006), and then completed a (fictitious) Morse code training course in four modules. After each module, respondents viewed task-progress cues (i.e., progress bar showing percent completed), task-proficiency cues (i.e., statements of skills learned), or mixed-cues (i.e., progress bars showing the skill learned). Participants then evaluated how much they liked

the product, and answered questions about the Morse codes; the number of correct answers measured performance. Results revealed that entity-theorists evaluated the product less favorably when given task-proficiency cues as compared to task-progress or mixed-cues ($M_{ET\text{-}proficiency} = 4.34$, $M_{ET\text{-}mixed} = 4.21$; $p < .05$; $M_{ET\text{-}progress} = 5.37$; $p < .001$). Incremental-theorists evaluated the product more favorably when they encountered task-proficiency (vs. task-progress) cues ($M_{IT\text{-}proficiency} = 5.55$, $M_{IT\text{-}progress} = 5.03$; $p < .05$). As anticipated, entity-theorists' product evaluations did not differ when they viewed task-progress or mixed-cues ($p = .09$). Incremental-theorists' evaluations were similar when they encountered mixed and task-proficiency cues ($p > .30$). Performance measures indicated that incremental-theorists' self-learning behavior was unaffected by any feedback forms, and entity-theorists' performance declined when under task-progress cues.

The objective of Study 3 was to identify conditions for when an individual's learning behaviors would be immune to the interactive effects of implicit-theory and feedback cues. In a 2 (implicit-theory) \times 2 (task-progress cue: present vs. absent) \times 2 (perceived task-difficulty: low vs. high) study, 220 participants were told that they would be learning to proofread. Implicit-theory was manipulated as in Study 2. After learning basic proofreading skills, participants in the difficult learning task proofread a chemistry article, whereas those in the low-difficulty task proofread a celebrity gossip article. Furthermore, half the respondents received feedback in the form of task-progress cues. Outcome measures were participants' evaluations of liking the task, and performance measures computed as the difference between number of typographical errors identified by respondents and actual number of errors. Results revealed that for the demanding task, entity (vs. incremental) theorists were less accurate when progress cues were present ($M_{ET\text{-}Cue} = -26.70$, $M_{IT\text{-}Cue} = -19.61$; $p < .05$), but not when absent ($M_{ET\text{-}no\text{-}Cue} = -19.11$, $M_{IT\text{-}no\text{-}Cue} = -19.48$; $F < 1$), thus suggesting that their self-learning behavior was less effective in the presence of task-progress cues. In contrast, incremental-theorists' performance was unaffected by the presence of task-progress cues ($F < 1$). A similar analysis on the task evaluation index revealed a three-way interaction among the predictor variables ($p < .05$), and a significant two-way interaction between implicit-theory and task-progress cues conditions ($p < .05$). In the presence (vs. absence) of task-progress cues, entity-theorists evaluated the task more favorably ($p < .001$), whereas incremental-theorists evaluated the task less favorably ($p = .07$). For the less demanding task, both theorists evaluated the task similarly regardless of the presence or absence of task-progress cues ($F_s < 1$).

In conclusion, the present research demonstrates that an individual's implicit-theory orientation is a critical determinant of the kind of product feedback cues that are most effective. In demonstrating these effects in a self-learning setting, this work has the potential to contribute to self-motivation, learning, and goal pursuit literatures.

Images Change Implicit Attitudes More than Text: Evidence from Corrective Advertising Attempts

EXTENDED ABSTRACT

The primary goal of marketing arguably is persuasion. Information aimed at changing attitudes is one of the most central and significant aims of marketing messages. Two basic routes by which marketers can convey their message are text or pictures, each of which have advantages and drawbacks. The current research compared the effectiveness of text versus image-based information in changing implicit (i.e., spontaneous, unintentional) attitudes using corrective advertising and product recall as contexts for our investigation.

Perhaps surprisingly, research on implicit attitude change has primarily examined responses to verbal information (see Gawronski and Sritharan 2010 for a review). Yet, images are a central component of marketing promotions in print, television, and online formats.

Furthermore, to our knowledge, studies on the effectiveness of text versus image-based information to attitude change have been limited to explicit, self-reported attitudes (Wyer, Hung, and Jiang 2008). Explicit attitudes are evaluative judgments about a target, whereas implicit attitudes are evaluative reactions that are automatically activated upon exposure to the target. Given that both attitudes independently predict behavior (Perugini, Richetin, and Zogmeister 2010), neglecting predictors of implicit attitude change means missing a potentially powerful influence of consumer behavior.

Based on the characteristics of visual imagery as well as dual-process theories, we expected image-based information to be particularly effective in changing implicit attitudes (Epstein and Pacini 1999; Sloman 1996). The rationales undergirding expectations that pictures will alter implicit attitudes better than text are anchored in the characteristics of visual imagery as well as dual-process theories. Visual imagery involves image-based representations in long-term memory that can be evoked without the original stimulus (Kosslyn, Ganis, and Thompson 2001). Dual-process theories and empirical findings point to System 1 — which underlies implicit attitudes — as better able to comprehend concrete, as compared to abstract, information (Epstein and Pacini 1999; Sloman 1996). Imageability (i.e., imagery-evoking aspects) and concreteness ratings of words share up to 72% of variance (Kousta et al. 2011).

The main hypotheses were that even when pictures and text lead to the same change in explicit attitudes, pictures are more effective than text in changing implicit attitudes. Further, our work sought to establish that pictures are superior to text because they produce visual mental images (i.e., visual imagery) of counterattitudinal valence. That is, pictures have the power to produce a representative scene in people's minds, replete with evaluative tags that can modify implicit evaluations. Furthermore, we aimed to show that text that can create visual imagery also can change implicit attitudes.

For all experiments, the counterattitudinal stimuli were extensively pretested to ensure equivalent levels of explicit persuasiveness (resulting in equivalent levels of explicit attitude change) between conditions. These tests were aimed at guarding against the concern that image-based information may be more influential in changing implicit attitudes because they are more persuasive as measured by explicit assessments. In all experiments, we also tested and found that text versus image-based information led to largely equivalent changes in explicit attitudes. A meta-analysis of all six experiments that compared imagery-based conditions to conditions that did not allow for visual imagery confirmed that there was not a significant difference in affecting explicit attitude change.

Six experiments tested the hypotheses. Experiments 1-4 used similar procedures. Participants first were given positive information (e.g., ads) about a novel brand, after which we assessed participants' implicit and explicit brand attitudes. Participants then were assigned to one of the counterattitudinal conditions (i.e., unfavorable pictures, unfavorable text, unfavorable imagery-provoking text), after which we reassessed participants' implicit and explicit attitudes toward the brand.

Experiment 1 tested and found support for the prediction that pictures and imagery-provoking text would change implicit attitudes better than would text, as well as that visual imagery valence would mediate the change in implicit attitudes. Experiment 1 also ensured that the order of the implicit and explicit measures did not influence the results. Experiment 2 replicated experiment 1's finding that pic-

tures change implicit attitudes more than does text, and found again that highly-valenced visual imagery accounts for the change. This experiment also extended experiment 1's findings by showing that instructions to imagine a scene were just as effective as seeing pictures in changing implicit attitudes.

Experiment 3 tested a boundary condition based on individual differences in visual and verbal information processing, and showed that the previous mediation of visual imagery valence is moderated by consumers' cognitive style.

Experiment 4 showed that when people do not possess clear mental images of a brand, seeing brand-relevant pictures produces vivid mental imagery, which in addition to the images' valence, mediated the effect of text-based versus pictorial counterattitudinal information on implicit attitude change. Experiment 5 also addressed, and ruled out, concerns that the hypothesized effects were due to different levels of affective reactions elicited by the counterattitudinal information.

Last, experiment 6 directly manipulated people's ability to visualize mental images. It found that a visual load task that prevented people's ability to engage in visualization also prevented implicit attitude change, whereas a cognitive load task did not affect implicit attitude change. This last finding supports the contention that System 1 (i.e., automatic processes) underlies implicit attitude change from pictures. Experiment 6 also replicated experiment 5's key findings that a visual load task hampered pictures' ability to alter implicit attitudes whereas a cognitive load task had no interfering effect.

In summary, imagery-based materials consistently changed both explicit and implicit attitudes, whereas non-imagery based materials changed only explicit attitudes. This work has the potential to fundamentally alter not only the effectiveness of warnings and product recall campaigns, but could enhance the capability of a variety of health messages or public service campaigns that aim to make powerful, fast, and enduring changes in consumer attitudes.

When Less is More: Counter-Attitudinal Appeals are More Effective When They Are Ignored

EXTENDED ABSTRACT

Changing behavior is no trivial task. From an early age, people learn that the world is filled with individuals and organizations that are interested in changing their behavior, be they family, friends, employers, advertisers, or governments. As a result, people become skeptical of persuasion attempts and develop a defensive machinery as children that is designed to actively resist such appeals (Friestad and Wright 1994). What is a well-intentioned persuasion agent to do to counter the often potent defensive response to their attempts to change a person's behavior, often in the best interests of that person? We suggest a novel and counter-intuitive path that can effectively "nudge" behavior change. We propose that when using a counter-attitudinal persuasion appeal, a subtle appeal that consumers are able to habituate to leads to greater behavior change. Accordingly, we suggest that the typical approach of using in-your-face, attention-grabbing persuasion appeals is less effective than more subtle appeals when the message is counter-attitudinal. This hypothesis builds on research demonstrating that habituation leads to decreased attention (Glanzer 1953), and that decreased attention can increase persuasion (Festinger and Maccoby 1964). We tested this hypothesis in three studies.

Study 1 tested whether habituation to a counter-attitudinal appeal increases its effectiveness. Undergraduate business students ($N=37$) were randomly assigned to either a habituation or non-habituation condition, and were exposed to a counter-attitudinal poster

criticizing capitalism. Participants in the non-habituation condition, who were given no time to habituate to the counter-attitudinal appeal, responded to the dependent variable immediately after viewing the poster, which was whether they were willing to provide their email address to receive more information about volunteering at a soup kitchen. We predicted that the counter-attitudinal poster criticizing capitalism would make participants defensive and supportive of capitalism, which would make them resistant to helping others for no economic gain. In the habituation condition, participants only responded to the dependent variable after completing an hour of unrelated studies, which gave them plenty of time to habituate to the counter-attitudinal poster (which was constantly in their peripheral field of vision). As predicted, a chi-square test revealed that significantly more participants in the habituation condition (38.89%) requested additional information about volunteer opportunities at the soup kitchen than participants in the non-habituation condition (5.88%; $X^2(1) = 5.40, p = .020$). Accordingly, people who had habituated to the persuasive appeal were significantly more likely to behave consistently with the appeal—by volunteering to help the needy without any economic gain—than people who had not habituated to the persuasive message.

In Study 2, we sought to rule out repeated exposure (Zajonc 1968) as an alternative explanation for our results. Specifically, participants in the habituation condition were exposed to the counter-attitudinal poster for longer before responding to the dependent variable than participants in the non-habituation condition, so it is possible that they consciously exposed themselves to the poster multiple times before responding to the DV, and that this repeated exposure led to increased behavior change. Thus, in this study, participants ($N=224$) were exposed to a counter-attitudinal poster admonishing city life and encouraging people to spend more time in the country (this study was completed by students in New York City) at the beginning of the study, and, in both the habituation and non-habituation conditions, they did not respond to the dependent variable (their likelihood to sign up for an outdoor education program) until the end of the hour session. However, right before responding to the DV, participants in the non-habituation condition were asked to look at the poster again, whereas participants in the habituation condition were not. Thus, both conditions had similar levels of conscious exposure to the poster, but only the non-habituation condition experienced dishabituation prior to responding to the DV. As expected, participants in the habituation condition ($M=4.03$) were significantly more likely to indicate that they would participate in the outdoor education program than participants in the non-habituation condition ($M=3.44; t(201)=1.98, p=.049$).

In the third study, we wanted to demonstrate the impact of habituation to a counter-attitudinal appeal in the real world. Accordingly, we partnered with a high school and placed a sign in its student center that warned students to not be late to school, and we tracked when tardy students arrived at school over the course of several months. We predicted that the poster would have no effect initially but, after students habituated to it, it would lead to a meaningful decrease in students' tardy behavior. We first tested whether the poster had an effect on lateness behavior and, as predicted, it did. Prior to the poster being hung, students who arrived late were, on average, over 33.63 minutes late to school whereas, when the poster was up, students who arrived late were only 14.85 minutes late for school, on average ($t(229)=2.64, p=.009$). A similar drop in lateness times did not occur for middle school students ($F(1, 301)=2.80, p=.096$), or for high school students the previous year ($F(1, 429)=3.96, p=.047$).

We next tested our main hypothesis—that the influence of the poster on lateness times increased over time as students habituated

to it. A one-way ANOVA revealed a significant effect of week ($F(2, 45) = 3.89, p = .028$), such that students who were late during the first week the poster was up ($M=26.60$) were significantly later than students who were tardy during week 2 ($M=12.47; p=.022$) or week 3 ($M = 14.29; p=.046$). However, there was no significant difference in lateness times for weeks 2 and 3 ($p=.831$). Once students habituated to the motivational poster (after week 1) and it faded into the background, it had a greater influence.

In summary, we have evidence that subtle counter-attitudinal persuasion appeals that consumers can habituate to may be an effective way to “nudge” behavior change among resistant consumers.

REFERENCES

- Aarts, Henk, Ap Dijksterhuis, and Peter De Vries (2001), “On the Psychology of Drinking: Being Thirsty and Perceptually Ready,” *British Journal of Psychology*, 92, 631–642.
- Balcetis, Emily and David Dunning (2006), “See What You Want to See: Motivational Influences on Visual Perception,” *Journal of Personality and Social Psychology*, 91, 612–625.
- Bruner, Jerome S. (1957), “On Perceptual Readiness,” *Psychological Review*, 64, 123–152.
- Epstein, Seymour and Rosemary Pacini (1999), “Some Basic Issues Regarding Dual-process Theories from the Perspective of Cognitive-Experiential Self-Theory,” in *Dual-Process Theories in Social Psychology*, Shelly Chaiken and Yaacov Trope, eds. New York, NY: Guilford Publishers, 462–82.
- Festinger, Leon and Nathan Maccoby (1964), “On Resistance to Persuasive Communications,” *The Journal of Abnormal and Social Psychology*, 68 (4), 359–66.
- Forster, Jens, Nira Liberman, and Tory E. Higgins (2005), “Accessibility from Active and Fulfilled Goals,” *Journal of Experimental Social Psychology*, 41, 220–239.
- Friestad, Marian and Peter Wright (1994), “The Persuasion Knowledge Model: How People Cope with Persuasion Attempts,” *Journal of Consumer Research*, 21 (1), 1–31.
- Gawronski, Bertram and Rajees Sritharan (2010), “Formation, Change, and Contextualization of Mental Associations: Determinants and Principles of Variations in Implicit Measures,” in *Handbook of Implicit Social Cognition: Measurement, Theory, and Applications*, Bertram Gawronski and B. Keith Payne, eds. New York, NY: Guilford Press, 216–40.
- Glanzer, Murray (1953), “Stimulus Satiation: An Explanation of Spontaneous Alternation and Related Phenomena,” *Psychological Review*, 60, 257–68.
- Kosslyn, Stephen M., Giorgio Ganis, and William L. Thompson (2001), “Neural Foundations of Imagery,” *Nature Reviews – Neuroscience*, 2, 635–42.
- Kousta, Stavroula-Thaleia, Gabriella Vigliocco, David P. Vinson, Mark Andrews, and Elena Del Campo (2011), “The Representation of Abstract Words: Why Emotion Matters,” *Journal of Experimental Psychology: General*, 140 (1), 14–34.
- Levy, Sheri R., Steven J. Stroessner, and Carol S. Dweck (1998), “Stereotype Formation and Endorsement: The Role of Implicit Theories,” *Journal of Personality and Social Psychology* 74 (6) 1421–1436.
- Perugini, Marco, Juliette Richetin, and Cristina Zogmeister (2010), “Prediction of Behavior,” in *Handbook of Implicit Social Cognition: Measurement, Theory, and Applications*, Bertram Gawronski and B. Keith Payne, eds. New York, NY: The Guilford Press, 255–77.
- Poon, Connie SK, and Derek J. Koehler, (2006), “Lay Personality Knowledge and Dispositionist Thinking: A Knowledge-Activation Framework,” *Journal of Experimental Social Psychology*, 42 (2), 177–191.
- Sloman, Steven A. (1996), “The Empirical Case for Two Systems of Reasoning,” *Psychological Bulletin*, 119 (1), 3–22.
- Wyer, Robert S. Jr., Iris W. Hung, and Yuwei Jiang (2008), “Visual and Verbal Processing Strategies in Comprehension and Judgment,” *Journal of Consumer Psychology*, 18 (4), 244–57.
- Zajonc, Robert B. (1968), “Attitudinal Effects of Mere Exposure,” *Journal of Personality and Social Psychology*, 9 (2 part 2), 1–27.

Forward Looking Consumers and Firms: Biases and Economic Consequences

Chairs: Liz Friedman, Yale University, USA
Joy Lu, University of Pennsylvania, USA

Paper #1: Putting Duration in Durable Goods: Length of Ownership Neglect in Consumer Choice

Liz Friedman, Yale University, USA
Ravi Dhar, Yale University, USA
Shane Frederick, Yale University, USA

Paper #2: Planning to Binge: How Consumers Choose to Allocate Time to View Sequential Versus Independent Media Content

Joy Lu, University of Pennsylvania, USA
Uma R. Karmarkar, Harvard University, USA
Vinod Venkatraman, Temple University, USA

Paper #3: Don't Fear the Meter: How Time Limits Bias Employment Contract Choices

Indranil Goswami, University at Buffalo, USA
Oleg Urminsky, University of Chicago, USA

Paper #4: Variance Neglect in Consumer Search

Nicholas Reinhardt, University of Colorado Boulder, USA
Daniel M. Bartels, University of Chicago, USA
Jonathan Levav, Stanford University, USA
Oded Netzer, Columbia University, USA

SESSION OVERVIEW

To make optimal choices and maximize happiness, consumers and firms must be forward looking: decisions made today should account for expectations about the uncertain future. For example, the utility people get from products and experiences depends on how much they will use them and the sequence in which they are enjoyed. Or the amount of time spent engaging in a task may depend on the cost of your time, an estimate of how long the task will take, and the expected benefits from task completion. Past research has documented numerous mistakes in decisions involving time, including neglecting duration in retrospective evaluations (Fredrickson and Kahneman 1993), mispredicting future enjoyment (Nelson, Meyvis, and Galak 2009), and misperceiving future slack (Zauberman and Lynch 2005). The current session adds to this literature by documenting four novel ways, across a variety of domains, in which forward-looking decision makers fail to maximize utility and monetary value.

Taken together, the four papers seek to address two questions: In what ways do consumers and firms inadequately incorporate the future into their decisions? What are potential monetary consequences of these forward-looking mistakes?

The first two papers specifically look at whether people anticipate temporal effects on consumption utility. Paper 1 (Friedman, Dhar, and Frederick) focuses on how consumers fail to spontaneously consider time and product usage when making purchase decisions, and therefore underweight the time benefits of each product. The authors demonstrate that when consumers are reminded to consider future usage of durable goods, they may increase their preferences for higher quality options. Paper 2 (Lu, Karmarkar, and Venkatraman) looks at binge-watching, which is encouraged by streaming services like Netflix. The authors show that when planning future consumption, consumers are willing to pay more to binge-watch, particularly if episodes are sequentially connected rather than independent with points of closure. These results run counter to prior research that suggests people would get greater utility from spreading consumption experiences out.

Papers 3 and 4 focus on the cost-benefit tradeoffs associated with forward-looking behavior. Paper 3 (Goswami and Urminsky) demonstrates through a series of incentive-compatible studies that managers often prefer flat-fee payment structures in cases where hourly payment would cost them less, because they overestimate the time that it takes for employees to complete tasks. As a consequence, they end up overpaying for services. Paper 4 (Reinhardt, Bartels, Levav, and Netzer) examines the amount of time consumers spend searching for good prices before purchase. The authors find consumer search behavior is inconsistent with economic incentives, which suggests consumers should search more when prices are more disperse. Instead, consumers use an economically-irrelevant heuristic: they search more when the prices are higher.

In summary, these four papers document situations in which people fail to optimize decisions involving time, either when weighing time within the utility function during choice or estimating how much time should be allocated to a task. The papers, taken together, illustrate specific limits of consumer and firm foresight and the costs—both monetary and hedonic—associated with them.

Putting Duration in Durable Goods: Length of Ownership Neglect in Consumer Choice

EXTENDED ABSTRACT

A long running ad for Acura assured potential customers that, *“Paying for quality can be a difficult decision at first, but over time it gets a lot easier to live with.”* In line with Acura’s assurances to prospective customers, we suggest that that premium products will be regarded as more affordable if the duration of ownership is emphasized – both because price premium can be amortized over repeated uses, and because quality differences aggregate with repeated uses. We demonstrate this pattern across a variety of durable goods. Moreover, we show that reminders of repeated use do not increase preference for premium products that are consumed in few sittings (like a bottle of wine) or used infrequently (like a holiday sweater).

Whereas previous research has explored duration neglect in retrospective evaluations (Fredrickson and Kahneman 1993), how considering the cost of time influences purchase decisions (Mogilner and Aaker 2009), or the role of the future self in purchase decisions (Bartels and Urminsky 2015), our research is the first to show how buying decisions shift when consumers are prompted to consider how long they will own the product.

We test our hypothesis in six studies. Studies 1A-C demonstrate that considering future usage increases choice of the higher price, higher quality option. All participants were faced with a choice between a higher priced and lower priced option (\$105 vs. \$195 digital cameras in 1A and \$24 vs. \$44 backpacks in 1B and 1C). Participants in the control condition simply made a hypothetical purchase selection, whereas participants in the future-use condition were first asked to briefly write about how long they expected to own the camera or backpack. Writing about length of ownership increased choice share for the expensive option versus control for both the cameras in study 1A ($M_{\text{control}}=64\%$, $M_{\text{future-use}}=79\%$, $p=.013$) and the backpacks in study 1B ($M_{\text{control}}=46\%$ vs. $M_{\text{future-use}}=60\%$, $p=.018$). Moreover, in study 1B, after choosing, participants were asked to explain why they made their decision. An analysis of the thoughts listed revealed that significantly more people wrote about usage over time in the future-use

condition than the control condition ($M_{\text{control}} = 7\%$ vs. $M_{\text{future-use}} = 22\%$, $p = .001$). In study 1C, we added a third choice elaboration condition, where participants were asked to elaborate on the choice to test whether the observed pattern results from mere elaboration, or specifically from considering future use. We also specified that both backpacks were expected to last five years, to show that the effect is driven by considering additional utility during a fixed time of ownership, and not because the more expensive option is perceived as lasting longer. As expected, participants bought the expensive backpack more often in the future-use condition than control ($M_{\text{control}} = 41\%$ vs. $M_{\text{future-use}} = 56\%$, $p = .010$), but there was no effect of elaboration ($M_{\text{control}} = 41\%$ vs. $M_{\text{elaboration}} = 44\%$, $p = .618$).

According to our theory, thinking about future use cues consideration of the cumulative benefits offered by each option, which increases preference for the higher quality option. However, for goods with no recurring streams of utility, such as consumable or infrequently-used goods, we expect thinking about future use should have no effect. We test this in studies 2 and 3. In study 2, we ran a pre-test to match a durable and consumable good on median price paid, and selected a bottle of wine and a cell phone case (\$15). We used a 2 (cell phone case vs. wine) \times 2 (future-use vs. control) between subjects design, for \$10 vs. \$30 in all conditions. As expected, more participants bought the \$30 cell phone case in the future-use condition ($M_{\text{control}} = 44\%$ vs. $M_{\text{future-use}} = 64\%$, $p = .007$). For the wine, there was no difference between conditions ($M_{\text{control}} = 21\%$ vs. $M_{\text{future-use}} = 23\%$, $p = .652$). In study 3, we used a 2 (frequently-used vs. infrequently-used good) \times 2 (future-use vs. control) design. Participants in the frequently-used condition evaluated two coffee makers, and those in the infrequently-used condition evaluated two ice cream makers, for \$39 vs. \$79 in both cases. For participants who chose between the coffee makers, significantly more opted for the higher priced option in the future-use condition than in control ($M_{\text{control}} = 42\%$ vs. $M_{\text{future-use}} = 56\%$, $p = .023$). For those who chose between the ice cream makers, there was no difference between conditions ($M_{\text{control}} = 55\%$ vs. $M_{\text{future-use}} = 52\%$, $p = .636$).

Finally, in study 4, we use a more subtle manipulation to increase the salience of future use: framing the choice as an investment. Since investments are thought of long-term purchases, we posit that using the word investment would be sufficient to cue considerations of future use. We used a 2 cell design (choice vs. investment), where participants chose between the same backpacks as study 1B. At the top of the page, there was a line that read, "Make a great [choice / investment] today!" The dependent measure also asked, "Which backpack would you [choose / invest in]?" As expected, more people chose the premium option when the choice was framed as an investment than when it was framed as a choice ($M_{\text{choice}} = 46\%$, $M_{\text{investment}} = 61\%$, $p = .015$).

The current research provides preliminary evidence that consumers often do not consider how long they will own the products when deciding between higher and lower priced alternatives, so they do not sufficiently recognize that the differences in benefits cumulate with repeated use. Making time or usage salient increases purchase of the higher priced option for goods that are used over time, but not for goods that are consumed or used infrequently.

Planning to Binge: How Consumers Choose to Allocate Time to View Sequential Versus Independent Media Content

EXTENDED ABSTRACT

Firms that offer streaming services like Netflix have embraced the phenomenon of "binge-watching" by offering entire seasons of a

television-style series at once instead of releasing episodes weekly. The prevalence of binge-watching seems to conflict with prior research suggesting that when individuals can choose to allocate their time, they often prefer to savor good experiences by delaying them (Loewenstein 1987; Shah and Alter 2014) or spreading them out (Loewenstein and Prelec 1993; Nelson, Meyvis, and Galak 2009).

One factor that could explain this clash is the degree to which these elements are seen as independent events, as in the savoring research, or as sequential progress towards a completion goal (Evers, Inbar, and Zeelenberg, Barasz et al., in press). Therefore, we hypothesize that binge-watching preferences may depend on the sequential nature of the individual episodes of an experience (i.e., episodes of a TV show) because of the additional utility from completing sequential or connected experiences, which we test across 6 studies and 1 set of field data.

In Study 1, we asked participants to either categorize TV shows as independent or sequential, or by the likelihood to binge or watch episodes one-by-one ($N = 120$). We found a significant positive correlation ($r = 0.61$, $t(58) = 5.86$, $p < 0.001$) between the percentages of participants who categorized the show as sequential ("Sequential Index") and binge-watchable ("Binge-Watch Index"), which provides preliminary correlational evidence in support of our hypothesis.

In Studies 2 and 3, we directly manipulated the perceived independent or sequential nature of the programming using descriptions of fictional TV shows. In Study 2, participants ($N = 682$) indicated the number of sessions they would want to complete the series, with fewer sessions corresponding to more binge-watching. In the sequential condition, participants planned to binge-watch more by choosing fewer sessions ($M = 5.52$, $SD = 3.33$) compared to the independent condition ($M = 6.16$, $SD = 3.46$, $F(1, 676) = 6.57$, $p = 0.01$). In Study 3, we replicated the results with participants ($N = 192$) creating a 5-day calendar schedule for watching the TV shows. Participants in the sequential condition ($M = 0.45$, $SD = 0.16$) created significantly "clumpier" calendars (Zhang, Bradlow, and Small 2014) than those in the independent condition ($M = 0.35$, $SD = 0.18$, $F(1, 190) = 87.19$, $p < 0.001$).

In Study 4, we demonstrated that people were also willing to pay more for the opportunity to binge-watch more sequential content. Participants ($N = 218$) imagined they were planning to watch a fictional show on Amazon Video for \$20, with the episodes released one-by-one each week. Participants were willing to pay more ($M_{\text{diff}} = \$1.55$, $SD = 7.03$, $F(1, 108) = 5.58$, $p = 0.02$) to have all episodes be made available at once for the sequential (vs. independent) content, which would enable them to binge-watch immediately.

In Study 5, we test for evidence of completion utility for sequential TV shows by looking at how the perceived quality, as measured by the IMBD episode ratings, changed across seasons. We found a significantly positive relationship between rating change and the Sequential Indices from Study 1 ($\beta = 0.22$, $t = 2.72$, $p < 0.01$), suggesting that the audience may experience utility from completion for sequential shows over time. However, it is important to note that firms could be strategically designing more sequential shows to progress climactically.

In Study 6, we directly test for evidence of completion utility by measuring the enjoyment (7-point Likert scales) of independent vs. sequential videos at two separate time points within an incentive-compatible setting. We found that when participants ($N = 279$) watched two related sequential videos, their enjoyment significantly increased after watching the second video (and thus "completing" the video series) if they binged the content by not taking a break ($M = 5.84$, $SD = 1.38$, $t(96.71) = 2.91$, $p < 0.01$), but not if they savored by taking a break in between the first and second videos ($M = 5.52$,

SD = 1.82, $t(85.43) = 1.55$, $p = 0.12$). We found no differences in enjoyment among participants who watched the independent videos.

Finally, we tested the robustness of these findings in a set of field data. We examined the activity of 553 students enrolled in two online courses offered on Coursera: Marketing and Accounting. Marketing was taught over 4 weeks by three professors, and consisted of 34 lectures, with each week's content independent of the content of other weeks. Accounting was taught over 4 weeks by a single professor and consisted of 29 lectures. Each week, the material built on the lectures from the previous week and contributed to an overarching case study. We predicted that students would be more likely to binge-watch the sequential Accounting lectures compared to the more independent Marketing lectures.

We calculated the average time between "sessions" of lecture video consumption, defined as lecture videos watched within 15 minutes of each other. Greater inter-session times indicate more savoring and less binge-watching. On average, students waited 43.09 minutes (SD = 144.88) more between sessions for the more independent Marketing course compared to the more sequential Accounting course ($t(519) = 6.78$, $p < 0.001$). This suggests that when taking a course with independent content, students are more likely to savor and spread sessions out compared to when taking a course with more sequential content. We also found that across two weeks when the courses overlapped, session lengths increased significantly for the Accounting course ($t(514.73) = 3.01$, $p < 0.01$), but not for the Marketing course ($t(312.86) = 0.37$, $p = 0.71$), which is consistent with our hypothesis that consumers prefer binge-watching sequential content because of the utility derived from approaching completion.

In summary, we find that consumers prefer to binge-watch experiences consisting of sequential episodes compared to independent episodes. This may occur because for sequential episodes, consumers derive enjoyment from making progress and completing a sequence. Our findings have implications for how firms should advertise and release shows with sequential vs. independent content.

Don't Fear the Meter: How Time Limits Bias Employment Contract Choices

EXTENDED ABSTRACT

Prescriptive models of cost-benefit analysis assume that decision makers can either accurately estimate relevant inputs, such as managers estimating workers' time, or can at least estimate an unbiased probability distribution of the time needed (Sugden and Williams, 1978). We study how choices between flat-rate and metered compensation options may be non-optimal due to the impact of deadlines on managers' timing estimates. We contribute to a recent literature on flat-rate biases, by identifying a new misestimation-based process, distinct from prior research, which affects preferences for flat-rate contracts with implications for choices in both employment and consumer contexts. Across six studies, we find that both lay people and experienced managers, playing the role of employers in an economic game, exhibit a strong preference for flat-fee contracts, particularly when deadlines are longer.

For the first set of studies, we had a sample of 113 workers solve a digital jigsaw puzzle, under either a long time limit (15 minutes) or a short time limit (5 minutes), and the workers were paid either a flat fee, or per-minute. In Study 1, online participants (N=171) served as "managers", and made incentive compatible choices between hiring a worker, from the pool, with a flat-fee contract or a per-minute contract. Based on the worker's actual completion times, the per-minute contracts had significantly higher expected value than the flat-fee contracts ($p < .001$), particularly for the longer time-limit condition.

Nevertheless, the majority of managers (71%) chose the suboptimal flat-fee contract. In particular, managers were more likely to choose the flat-fee contract under the long-time limit (89%) than the short time-limit (51%, $p < .001$), leading to lower earnings in the long time-limit condition ($p < .001$).

This occurred because managers over-estimated workers' completion times (Goswami and Urmitsky 2016), more so in the long time-limit condition than the short ($p < .001$). In fact, most managers (87%) chose the contract that would be optimal based on their time estimates. The time estimates fully mediated the effects of time limit on contract choices. In contrast, participants' choices differed in a risk-preference task (choosing between a fixed payment and a gamble) constructed to be equivalent to the contract options ($p = .041$ overall, $p < .001$ long time-limit condition), which rules out a risk aversion explanation. In fact, the effects of deadlines on contract choice held controlling for risk preference.

Study 2 (N=146) replicated these results in a study in which online participants serving as managers made similar contract choices for hiring a set of 50 workers (rather than just one, as in Study 1). Study 3 (N=178) again replicated the results in a variation of the manager task in which the managers knew that they had been *randomly* assigned to one of the two deadlines (long or short) in order to eliminate potential information conveyed by time limits. Lastly, Study 4 replicated the findings with a sample of experienced managers (N=92).

In the second set of studies, we used a spelling proofreading task, in which, unlike the jigsaw puzzles, the quality of the completed work could potentially vary. Workers (N=429) completed either an easy or difficult proofreading task under short or long time limits and were either paid a flat-fee or per-minute. In Study 5, a set of online participants serving as managers (N=438) then made incentive-compatible choices between hiring a worker paid a flat-fee or per-minute, in which their payment was determined by both how much time their worker took and how accurate the worker's job was. Based on the actual workers, the expected value was higher for the flat fee contracts under either time limit ($ps < .001$), but more so for the long time-limit condition ($p = .04$). Managers nevertheless preferred the flat-fee contract, particularly in the long time-limit condition (83% vs. 44%, $p < .001$), regardless of task difficulty. Because the per-minute contract was in actuality even more profitable in the long time-limit conditions, the managers' choices were more suboptimal in the long-time limit conditions (easy task, difference $p = .013$; difficult task, difference $p = .022$).

These findings were due to managers' overestimation of workers' completion times, especially in the long time-limit condition. In fact, the time estimates explained the contract choices of the majority of managers (77%), and the estimates fully mediated the effect of time limits on contract choices. Participants' contract choices differed from their preferences in the equivalent risk-preference task ($p < .001$), and the results held controlling for risk preferences. The findings were also not explained by differences in beliefs about worker productivity, taking task quality into account, under the different contracts. The findings were replicated in Study 6 (N=62) with a sample of experienced managers.

Prior research has documented flat fee biases for ongoing service usage, where decision makers are shown to prefer a fixed payment schedule for unlimited usage of telephone minutes (Train et al., 1987) and gym access (DellaVigna and Malmendier, 2006). Such preferences have been attributed to risk aversion (Lambrecht and Skiera, 2006), cognitive ease (Nunes, 2000), or the motivational benefits of pre-commitment. In this paper, we document a parallel bias in a new domain, which cannot be explained by any of these

factors. Specifically, we find that decision makers prefer a fixed payment when hiring temporary workers and we provide evidence that this is due to misestimating completion time. Salient environmental cues like external time limits can systematically affect decision makers' judgments about others' task completion times, resulting in the erroneous preference for flat fee contracts, yielding significant economic losses and inefficiencies.

Our research provides a counterpoint to prior work on employment decisions, which has emphasized the role of rational factors (e.g., ease and cost of monitoring, uncertainty in the environment, workers' type) in contract choices. These findings may provide a starting point for also investigating other belief-based biases that can influence general choices between contracts under incomplete information in consumer contexts.

Variance Neglect in Consumer Search

EXTENDED ABSTRACT

Consumers often know exactly what they want, but are not sure how much they will have to pay to get it. In these situations, a consumer must search to find an acceptable price for the product or service they are seeking. Because the exact same product can vary in price greatly between retailers (Baye, Morgan, and Scholten 2004; Brynjolfsson and Smith 2000; Isard 1977; Varian 1980), a consumer can probabilistically expect to find a better price by visiting more retailers. However, there are diminishing returns to search. The more retailers a consumer has visited, the less likely the next retailer she visits will have a better price than one she has already seen. There is also a cost to extending search. This cost may simply be time (opportunity costs), but could also be monetary if, for example, searching requires travel. Essentially, the problem of search is whether to accept a known cost of search for the probabilistic prospect of a marginal gain in terms of price.

Normative models of consumer price search uniformly agree that price dispersion—the variance in prices across retailers—should be the primary determinant of search persistence (e.g., McCall 1970; Rothschild 1974; Weitzman 1979). When price dispersion is higher (i.e., greater absolute differences between prices), consumers should search more extensively because the expected marginal return from additional search is greater. We use an experimental paradigm to explore whether consumers follow this economic prescription. Across a series of studies, we find that contrary to the implications of economic models, consumers do not search more when price dispersion is higher. In fact, when price dispersion is higher, we frequently observe consumers searching less. Additionally, we find that the magnitude of prices—whether a product is cheaper or more expensive—influences search persistence even though it is unrelated to the expected marginal return from additional search.

In our studies, we use a simplified, computer-based experimental paradigm in which participants are asked to find a “good” price for a specific product (i.e., there is no variation in quality, only price). They can “visit” retailers by clicking a button and incurring a cost (a three second delay) and can stop search at any time by selecting a previously seen price without cost. We measure search persistence as the number of retailers a consumer visits before making a purchase. Prices in our studies are randomly drawn from Gaussian distributions. To measure the effects of price dispersion and price magnitude, we vary the standard deviation and mean of the price distributions, respectively.

In Studies 1 (hypothetical) and 2 (incentive compatible), we present evidence of “variance neglect”: Consumers fail to increase their search persistence in response to increased price dispersion. In

fact, they search less when price dispersion is higher—the exact opposite behavior prescribed by normative search theories. Further, in these studies, we find consumers search more when the average price of the product is higher (holding price dispersion constant). Normative models suggest that price magnitude should be an inconsequential factor in determining search persistence.

While these findings may trouble those who believe regular people can approximate the economic behavior prescribed by rational actor models, we suggest that they may be evidence for how boundedly-rational people “solve” the complex problem of search. The previously described studies orthogonally manipulate price magnitude and price dispersion. But in the marketplace, these two variables exhibit high correlation (Grewal and Marmorstein 1994; Pratt, Wise, and Zeckhauser 1979). Thus, searching more for higher priced items could be an ecologically rational heuristic, since higher price items tend to have higher price dispersion.

Our proposition is that consumers learn to use average price instead of price dispersion as a cue for search persistence. While this heuristic will not fully approximate optimal search, we believe it is more cognitively tractable for boundedly-rational consumers. This is supported by research on numerical cognition, which shows people can more accurately learn about the central tendency of an observed distribution than they can learn about the dispersion (Obrecht, Chapman, and Gelman 2007, Peterson and Beach 1967).

In Study 3, we show that consumers indeed expect higher price dispersion for higher prices, suggesting they are capable of hypothesized inference process. In fact, they are quite accurate based on previous surveys of the marketplace. Further, in Study 4 we show that the strength of this belief predicts differences in search persistence: People's beliefs about the price-magnitude/price-dispersion relationship are a significant predictor of their search persistence.

Although inferring price dispersion from price magnitude will frequently yield results consistent with normative theory, it can also lead to over-persistence (when high priced products have low price dispersion) and under-persistence (when low priced products have high price dispersion). In Study 5, we examine cases in which the hypothesized consumer inferences should be more or less accurate. We find that when the price magnitude-dispersion relationship matches consumer beliefs, search behavior looks normative. However, when the magnitude-dispersion relationship violates consumer beliefs, consumers fail to update their expectations and respond in a manner opposite to that suggested by normative models.

REFERENCES

- Barasz, Kate, Leslie John, Elizabeth A. Keenan, and Michael I. Norton (in press), “Pseudo-Set Framing,” *Journal of Experimental Psychology: General*.
- Bartels, Daniel M., and Oleg Urminsky (2015), “To Know and to Care: How Awareness and Valuation of the Future Jointly Shape Consumer Spending,” *Journal of Consumer Research*, 41 (6), 1469-1485.
- Baye, Michael R., John Morgan, and Patrick Scholten (2003), “The Value of Information in an Online Consumer Electronics Market,” *Journal of Public Policy & Marketing*, 22 (1), 17-25.
- Brynjolfsson, Erik, and Michael D. Smith (2000), “Frictionless Commerce? A Comparison of Internet and Conventional Retailers,” *Management Science*, 46 (4), 563-585.
- DellaVigna, Stefano, and Ulrike Malmendier (2006), “Paying not to go to the gym,” *The American Economic Review*, 96 (3), 694-719.

- Evers, Ellen R. K., Yoel Inbar, and Marcel Zeelenberg (2014), "Set-Fit Effects in Choice," *Journal of Experimental Psychology: General*, 14 (2), 504-509.
- Fredrickson, Barbara L., and Daniel Kahneman (1993), "Duration Neglect in Retrospective Evaluations of Affective Episodes," *Journal of Personality and Social Psychology*, 65 (1), 45-55.
- Goswami, Indranil, and Oleg Urminsky (2015), "More Time, More Work: How Time Limits Bias Estimates of Project Duration and Scope," *Working Paper*, University of Chicago.
- Grewal, Dhruv, and Howard Marmorstein (1994), "Market Price Variation, Perceived Price Variation, and Consumers' Price Search Decisions for Durable Goods," *Journal of Consumer Research*, 21 (3), 453-460.
- Isard, Peter (1977), "How Far Can We Push the 'Law of One Price'?", *The American Economic Review*, 67 (5), 942-948.
- Lambrecht, Anja, and Bernd Skiera (2006), "Paying Too Much and Being Happy About It: Existence, Causes and Consequences of Tariff-Choice Biases," *Journal of Marketing Research*, 43 (2), 212-223.
- Loewenstein, George (1987), "Anticipation and the Valuation of Delayed Consumption," *The Economic Journal*, 97(387), 666-684.
- Loewenstein, George F., and Drazen Prelec (1993), "Preferences for Sequences of Outcomes," *Psychological Review*, 100 (1), 91-108.
- Luce, Mary Frances, John W. Payne, and James R. Bettman (1999), "Emotional Trade-Off Difficulty and Choice," *Journal of Marketing Research*, 36 (2), 143-159.
- McCall, John Joseph (1970), "Economics of Information and Job Search," *The Quarterly Journal of Economics*, 84 (1), 113-126.
- Mogilner, Cassie, and Jennifer Aaker (2009), "The Time versus Money Effect: Shifting Product Attitudes and Decisions through Personal Connection," *Journal of Consumer Research*, 36 (2), 277-291.
- Nelson, Leif D., Tom Meyvis, and Jeff Galak (2009), "Enhancing the Television-Viewing Experience through Commercial Interruptions," *Journal of Consumer Research*, 36 (2), 160-172.
- Obrecht, Natalie A., Gretchen B. Chapman, and Rochel Gelman (2007), "Intuitive *t* Tests: Lay Use of Statistical Information," *Psychonomic Bulletin & Review*, 14 (6), 1147-1152.
- Peterson, Cameron R., and Lee R. Beach (1967), "Man as an Intuitive Statistician," *Psychological Bulletin*, 68 (1), 29-46.
- Pratt, John W., David A. Wise, and Richard Zeckhauser (1979), "Price Differences in Almost Competitive Markets," *The Quarterly Journal of Economics*, 93 (2), 189-211.
- Shafir, Eldar, and Richard H. Thaler (2006), "Invest Now, Drink Later, Spend Never: On the Mental Accounting of Delayed Consumption," *Journal of Economic Psychology*, 27 (5), 694-712.
- Shah, Anuj K. and Adam L. Alter (2014), "Consuming Experiential Categories," *Journal of Consumer Research*, 41(4), 965-977.
- Simonson, Itamar, and Amos Tversky (1992), "Choice in Context: Tradeoff Contrast and Extremeness Aversion," *Journal of Marketing Research*, 29 (3), 281-295.
- Sugden, Robert, and Alan Williams (1978), "The Principles of Practical Cost-Benefit Analysis" (pp. 206-07), Oxford: Oxford University Press.
- Train, Kenneth E., Daniel L. McFadden, and Moshe Ben-Akiva (1987), "The Demand for Local Telephone Service: A Fully Discrete Model of Residential Calling Patterns and Service Choices," *The RAND Journal of Economics*, 18 (1), 109-123.
- Nelson, Leif D., Tom Meyvis, and Jeff Galak (2009), "Enhancing the Television-Viewing Experience through Commercial Interruptions," *Journal of Consumer Research*, 36 (2), 160-172.
- Nunes, Joseph C. (2000), "A Cognitive Model of People's Usage Estimations," *Journal of Marketing Research*, 37 (4), 397-409.
- Rothschild, Michael (1974), "Searching for the Lowest Price when the Distribution of Prices is Unknown," *Journal of Political Economy*, 82 (4), 689-711.
- Varian, Hal R. (1980), "A Model of Sales," *The American Economic Review*, 70 (4), 651-659.
- Weitzman, Martin L. (1979), "Optimal Search for the Best Alternative," *Econometrica*, 47 (3), 641-654.
- Zauberman, Gal, and John G. Lynch Jr. (2005), "Resource Slack and Propensity to Discount Delayed Investments of Time Versus Money," *Journal of Experimental Psychology: General*, 134 (1), 23-37.
- Zhang, Yao, Eric T. Bradlow, and Dylan S. Small (2014), "Predicting Customer Value Using Clumpiness: From RFM to RFMC," *Marketing Science*, 34 (2), 195-208.

New Insights into the Psychology of Product Assortments

Chairs: Sarah Wei, University of Alberta, Canada
Tao Tao, The Chinese University of Hong Kong, Hong Kong

Paper #1: Choice vs. Search Mindsets and Consumers' Assortment Size Preference

Benedict G.C. Dellaert, Erasmus University Rotterdam, The Netherlands
Gerald Häubl, University of Alberta, Canada
Sarah Wei, University of Alberta, Canada

Paper #2: The Role of Abundance Salience in Consumers' Assortment Preference

Yangjie Gu, HEC Paris, France
Yuechen Wu, University of Maryland, USA

Paper #3: The Influences of Randomly Displaying a Set of Products on Shopping Evaluations

Tao Tao, The Chinese University of Hong Kong, Hong Kong
Leilei Gao, The Chinese University of Hong Kong, Hong Kong

Paper #4: Global Context: Extremeness Aversion in a Dual Context Setting

Ryan Hamilton, Emory University, USA
Oleg Urminsky, University of Chicago, USA
Gülen Serial-Abi, University of Bocconi, Italy

SESSION OVERVIEW

Is less always more, when it comes to assortment size? Do consumers always prefer well-organized assortments? Can contextual factors overcome extremeness aversion? Despite an abundance of literature in the area of product assortments, the answers to these questions remain contentious. As such, four papers in this session address these questions. In particular, although much is known about the consequences of assortments (e.g., Chernev, Böckenholt and Goodman 2015, Iyengar and Lepper 2000; Mogilner, Rudnick and Iyengar 2008, Simonson 1989), we know much less about what influences consumers' preferences for assortments with different features. These four papers look at situational factors (e.g., processing mindset, global context of the assortment, and shopping motivation) to show how these factors influence the way consumers evaluate assortments of different features and, ultimately, their product selection and decision quality. In doing so, this session provides crucial insight into consumers' evaluation of and reaction towards assortments.

The first two papers speak to how different factors influence the preference for assortment size. Dellaert, Häubl, and Wei demonstrate that consumers prefer smaller assortments in a choice mindset than in a search mindset. Consequently, being in a choice (vs. search) mindset increases choice deferral and reduces decision quality in a large (vs. small) assortment. Employing a different approach, Wu and Gu demonstrate that abundance salience can increase the appreciation of a small assortment by boosting the feeling of control, which offsets the disadvantage of a small set. Consequently, consumers prefer small assortments over large assortments under abundance salience.

Alongside with the discussion about evaluating assortments, Tao and Gao focus on the how an assortment is displayed. Counter to the intuition that a well-categorized assortment tends to benefit consumers, they demonstrate that when the shopping activity is not task-oriented and when it is positively perceived by consumers, a randomly displayed assortment can also lead to more favorable evaluations by eliciting arousal, which intensifies feelings of pleasure.

Moreover, the contextual information of an assortment can also influence the appreciation of it. Hamilton, Urminsky, and Serial-Abi show that a global context (e.g., the reputation of a retailer) can change the evaluation of a local choice set, making the extreme alternative (e.g., the cheapest one) seem more like a compromise option hence reducing extremeness aversion.

In summary, these four papers share a focus on investigating how various situational factors influence the preference for and evaluation of assortments with different features. This session enriches the understanding of product assortments. Consumers prefer a small assortment over a large one when they are in a choice (vs. search) mindset (Dellaert et al.) or when the concept of abundance is made salient (Wu and Gu). And consumers enjoy a consumption experience more in a randomly display assortment (Tao and Gao). Further, the global context of an assortment can reduce extremeness aversion (Hamilton et al.) The complementary findings of these four papers gain new insights into understanding the preference and evaluation of product assortments with different features and provide counter-intuitive ideas for marketers to enhance their assortment attractiveness.

Choice vs. Search Mindsets and Consumers' Assortment Size Preference

EXTENDED ABSTRACT

Normatively, large assortments should increase the likelihood that consumers can identify their ideal alternatives relative to small assortments (Baumol and Ide 1956; Chernev 2003; Kahn and Lehmann 1991) However, some detrimental consequences (such as choice overload) for consumers when choosing from large assortments are also well documented in the literature (Iyengar and Lepper 2000; Chernev, Böckenholt and Goodman 2015). Despite the substantial amount of prior work on how assortment size affects consumer choice, little is known about what size of assortment consumers would actually prefer for a given purchase decision, and the limited findings to date are mixed (Broniarczyk, Hoyer and McAlister 1998; Chernev 2006).

The present research introduces consumers' choice versus search mindset as an important driver of consumer assortment size preferences. In a *choice mindset*, consumers focus on evaluating alternatives already known to them, and on making comparisons among these alternatives. By contrast, in a *search mindset*, consumers focus on what alternatives they have yet to discover, and on assessing the attractiveness of each individual alternative as they encounter it. These two mindsets are closely connected to the typical task that a consumer faces when making a product choice among a relatively small, predetermined set of alternatives (e.g., buying a grocery product) versus when searching for a product to purchase in a large and relatively unfamiliar category (e.g., booking a hotel in a new city). We suggest that these mindsets can be activated by procedural or situational aspects of the decision process (e.g., whether alternatives in the assortment are presented simultaneously or sequentially, or whether a decision task suggests a choice versus search process to the consumer). Based on the distinct properties of these mindsets, we hypothesize that consumers prefer smaller assortments when they are in a choice mindset and larger assortments when they are in a search mindset.

In our first set of studies (Studies 1a and 1b and Study 2), we examined how a choice versus search mindset affects consumers' assortment-size preferences. In Study 1a, participants ($N=126$) indicated how many alternatives they would like to "choose from" versus "search for" (between-subjects) in five different product categories. Participants in the search mindset preferred more alternatives than participants in the choice mindset across all five different product domains ($p < .001$). In Study 1b ($N=177$), we replicated this effect ($p < .001$) by manipulating choice versus search mindset through descriptions of the decision interface. In the choice condition, participants envisioned having all alternatives presented simultaneously in one large table; and in the search condition, participants envisioned having all alternatives presented sequentially (one at a time), without the opportunity to revisit alternatives.

In Study 2 ($N=196$), we replicated the influence of choice versus search mindset on consumer preferences for assortment size in a highly naturalistic setting, across 50 different product categories. For each product category, we asked participants to indicate whether they would be more likely to employ a "choice" or "search" strategy when selecting a product. We also asked participants how many alternatives they would like to see to identify their preferred alternative. As hypothesized, a search (versus choice) mindset significantly predicted a higher preference for larger assortments ($p < .001$).

Next, in the second set of studies (Study 3 and Study 4), we examined the downstream consequences of a choice mindset versus search mindset in terms of purchase deferral and decision quality in differently sized assortments. In Study 3 ($N=453$) participants received \$0.20 as a bonus pay and could choose to keep it or to use it to buy a lottery from an assortment of 6 (small assortment condition) or 30 lotteries (large assortment condition). In the choice mindset condition all lotteries were presented simultaneously in a table, while in the search mindset condition, they were presented sequentially, one at a time, without the opportunity to revisit alternatives. Moreover, this experiment also introduced an intermediate condition in which participants were presented with alternatives sequentially, but could revisit any alternative that they had already inspected. Thus, Study 3 employed a 2 (assortment size: small vs. large) by 3 (decision strategy: choice vs. search vs. intermediate) between-subjects design. The results showed a significant interaction between decision strategy and assortment size on choice deferral rate ($p=.012$) and objective decision quality – the expected payoff of selected lotteries in cents ($p=.011$). In the choice mindset, a small assortment decreased choice deferral (22.7% vs. 33.3%; $p=.013$) and increased objective decision quality ($M_{\text{Small}}=27$, $M_{\text{Large}}=25$; $p=.033$), while in the search mindset, a small assortment increased deferral (51.4% vs. 35.9%; $p=.024$) and decreased objective decision quality ($M_{\text{Small}}=24$, $M_{\text{Large}}=26$; $p=.05$). Assortment size did not affect choice (29.7% vs. 32.5%; $p=.74$) nor objective decision quality ($M_{\text{Small}}=27$, $M_{\text{Large}}=26$; $p=.13$) in the intermediate condition.

In Study 4, participants were asked to select an apartment with the lowest rent per square foot (no choice deferral allowed). Study 4 employed the same design as Study 3, and extended the finding of an interactive influence between assortment size and mindset from objective decision quality – rent per sf of selected apartments ($p=.006$) to subjective decision quality -- decision satisfaction ($p < .001$). Increased assortment size decreased both objective ($M_{\text{large}}=1.93$ vs. $M_{\text{small}}=1.89$; $p=.020$) and subjective decision quality ($M_{\text{large}}=7.58$ vs. $M_{\text{small}}=8.72$; $p=.002$) in the choice mindset, and increased objective ($M_{\text{large}}=1.94$ vs. $M_{\text{small}}=1.97$; $p=.033$) and subjective decision quality ($M_{\text{large}}=6.40$ vs. $M_{\text{small}}=5.28$; $p=.003$) in the search mindset. Again, no effect was found in the intermediate condition (objective: $p=.33$; subjective: $p=.12$).

This research shows that consumers' assortment-size preference depends critically on whether they approach a purchase decision in a choice mindset or a search mindset. Consumers prefer smaller assortments when they are in a choice mindset than in a search mindset (Studies 1a, 1b and 2). Moreover, consumers' choice versus search mindset also affects choice deferral and decision quality in differently sized assortments (Studies 3 and 4).

The Role of Abundance Salience in Consumers' Assortment Preference

EXTENDED ABSTRACT

In the marketplace retailers often pride themselves on their large product assortments to their customers even at the expenses of increasing operational costs. However, recent research shows that although consumers generally prefer larger product assortments (e.g., Iyengar and Lepper 2000), there does not exist a positive relationship between assortment size and category sales (Broniarczyk et al. 1998; Chernev 2003b). To offset these disadvantages of having large assortments, the current research examines whether abundance generates the benefits that would substitute for the advantages offered by a larger assortment. Will consumers like the smaller assortment more when the product inventory is abundant (vs. baseline), or in general, when they are put in an abundant mindset?

Most prior research on product supply focuses on whether the scarce availability of a particular product in a given assortment impacts consumers' evaluation of the product (Gierl and Huettl 2010; Inman, Peter and Raghurir 1997). Relatively little research in marketing has examined whether and how abundant product supply impacts consumers' choices among assortments prior to selecting a particular option from one of the available assortments. Building on prior literature that consumers prefer large (vs. small) assortments because large assortments satisfy the need for control (Averill 1973; Lefcourt 1973; Zuckerman et al.1978), and a possible link between abundance and a replenishment of control (Mehta and Zhu 2015; Mittal and Griskevicius 2014; Vohs, Mead and Goode 2006), we propose that abundance boosts feelings of control, consequently increasing consumers' relative preference for smaller (vs. larger) assortments. We tested these propositions in four studies.

Study 1 employed an incentive-compatible test to examine our main proposition that abundance increases consumers' evaluations of small (vs. large) assortments. Participants ($N=290$) were provided with toothpaste catalogs from two supermarkets. To manipulate abundance, half of the participants read that both supermarkets had great quantities of each type of toothpaste and they were always able to get the toothpaste listed on the catalog ("abundant-condition"), while the other half read that the toothpastes listed on both catalogs may or may not be in stock ("baseline-condition"). Participants were then told that the two catalogs had 24 and 48 options, respectively, and were asked to select one catalog to choose a tube of toothpaste from. To make the decision consequential, participants were informed that 50% of them would win the toothpaste they chose. As predicted, more participants in the abundant (vs. baseline) condition chose the smaller assortment (39% vs. 27.8%; $p=0.04$). Participants in abundant (vs. baseline) condition also liked the smaller assortment catalog to a greater degree ($M_{\text{abundant}}=4.49$ vs. $M_{\text{baseline}}=4.96$; $p=0.026$).

Study 2 ($N=160$) tested whether the observed findings in study 1 can be generalized beyond a category-level abundance manipulation to a broader sense of abundance manipulation. We manipulated abundance by instructing half of the participants to recall situations where they felt they had plenty of resources ("abundant-condition") and the other half to recall things they did in the past week ("base-

line-condition"; Fischhoff et al. 2003). Participants were then asked to imagine purchasing a bottle of wine, and choosing between two stores with either 12 or 36 options. Replicating previous findings, participants in the abundant (vs. baseline) condition liked the smaller assortment more ($M_{\text{abundant}}=5.09$ vs. $M_{\text{baseline}}=5.68$; $p=0.025$).

Study 3 has two purposes. First, it tested whether the observed effect was driven by a decrease in liking for larger assortments or an increase in liking for smaller assortments. Second and more importantly, it examined the mediating role of control. Study 3 ($N=160$) adopted a 2 (abundance: abundant vs. baseline) X 2 (assortment: large vs. small) X 2 (selection type: fruit, gym) mixed-model design with selection type as a within-participants factor. Participants imagined purchasing a type of fruit from a selection of 8 or 24 items and buying a gym membership at a gym that offered 5 or 10 equipment (counterbalanced order). Abundance manipulation was identical to study 1. We measured participants' evaluations of the store and feelings of control regarding the purchase situations (Chen et al. 2016). Results showed that in the "baseline" condition, participants liked the larger assortment more ($M_{\text{large}}=5.77$ vs. $M_{\text{small}}=5.14$; $p=0.004$). However, the liking of large and small assortments was comparable in the "abundant" condition ($M_{\text{large}}=5.71$ vs. $M_{\text{small}}=6.00$, NS), suggesting that the effect was driven by a boost in liking for the smaller assortment. Moderated-mediation analysis showed that feelings of control mediated this effect in the small condition but not in the large condition (small: $CI=[0.14, 0.54]$; large: $CI=[-0.2, 0.21]$).

If abundance serves as another source of control, increasing consumers' liking towards the smaller assortment, this effect of abundance should be mitigated when feelings of control are experimentally threatened. To test this possibility, study 4 ($N=290$) used a 3 cell (baseline/no-control-threat vs. abundance/no-control-threat vs. baseline/control-threat) between-subjects design. Participants were first asked to do a scrambled-sentence task in which they were asked to form 20 seven-word sentences, each out of a list of eight words (Bargh et al. 1996; Wang et al. 2013). In the "no-control-threat" conditions, the target sentences were unrelated to the concept of lacking control (e.g., "Michael Jordan is a great basketball player") while in the "control-threat" condition, the target sentences were associated with control-threat concepts (e.g., "I am unable to control many outcomes"). The abundance manipulation was identical to study 1. As predicted, when control was not threatened, participants in the abundant (vs. baseline) condition liked the smaller assortment more ($M_{\text{abundant/no-control-threat}}=4.4$ vs. $M_{\text{baseline/no-control-threat}}=5.4$; $p<0.001$); however, the positive effect of abundance on the evaluation of smaller assortment was mitigated when participants' feelings of control were threatened. Specifically, participants' relative preference for smaller assortment in the "abundant/control-threat" condition was lower than that in the "abundant/no-control-threat" condition ($M_{\text{abundant/control-threat}}=4.98$ vs. $M_{\text{abundant/no-control-threat}}=4.4$; $p=.03$) and similar to that in the "baseline/no-control-threat" condition ($M_{\text{abundant/control-threat}}=4.98$ vs. $M_{\text{baseline/no-control-threat}}=5.4$; $p=.14$).

Overall, these findings showed that the abundance satisfies consumers' feelings of control and substitutes for the sense of control provided by large assortments, which manifests itself in an increase in the relative preference for smaller assortments.

The Influences of Randomly Displaying a Set of Products on Shopping Evaluations

EXTENDED ABSTRACT

Although the literature has documented the negative influences of not categorizing products (Mogilner, Rudnick, and Iyengar 2008; Kahn and Wansink 2004), consumers often report enjoyment and

satisfaction when they shop in a store in which the products are randomly displayed, such as flea markets and daily sale websites (Abrahamson and Freedman 2007; Hudson 2007). The present research aims to examine when and why a randomly displayed set can lead to more favorable shopping evaluations.

In a categorized display, products are organized into subgroups according to products' dominant features or functions. Consumers can quickly form a general impression of the set by processing category labels and several featured products in each category (Park, Milberg, and Lawson 1991; Sujan and Bettman 1989). In contrast, products in a randomized set are displayed without an a priori order and thus consumers need to process more options (Hoch et al. 1999). Hence, compared to a categorized set, a randomized set signals to consumers that a greater amount of information needs to be processed, which makes them experience greater arousal (Berlyne 1971; Mehrabian and Russell 1974). Based on the conclusion that arousal can magnify people's affective responses and evaluative judgments (Reisenzein 1983; Russell and Mehrabian 1976), we propose that greater arousal elicited by a randomized set will intensify the pleasantness associated with a shopping activity and subsequently result in greater choice satisfaction and more enjoyable shopping experiences.

The occurrence of this positive randomization effect, however, requires two prerequisites. First, the shopping activity should not be task-oriented. When consumers go shopping out of necessity to obtain needed products (Kaltcheva and Weitz 2006) and thus engage in selective processing (i.e., screening off unrelated products and processing target product's information; Janiszewski 1998), they are less likely to be aroused by a randomized set because it would not significantly increase the amount of information needs to be processed (Mehrabian 1977). In addition, since category labels facilitate product searching and enhance perceived variety when consumers engage in task-oriented shopping (Hoch et al. 1999; Mogilner et al. 2008), we should observe a positive categorization effect. Second, shopping should be considered as a pleasant activity (Bloch and Richins 1983; Holbrook and Hirschman 1982). When shopping is unpleasant, the polarizing effect of arousal (Reisenzein 1983) will intensify the negative feelings, leading to lower shopping evaluations. Many factors determine whether consumers' attitude towards a shopping activity is positive, such as consumers' initial preference for the offered products, and promotions which can spontaneously induce a positive affect among consumers (Naylor et al. 2006).

Five experiments were conducted. Experiment 1 determined whether a randomized display increases individuals' arousal level relative to a categorized display. Participants were invited to browse products sold in an online store. Sixty-four stationery products were arranged in four columns and 16 rows and were either sorted into 16 sub-categories or randomly displayed. Their feelings of arousal were measured (Havlena and Holbrook 1986) both before and after browsing the choice set. Results showed that participants reported greater arousal in the randomized condition than in the categorized condition after browsing the products (5.03 vs. 4.25; $t(95) = 2.63$, $p < .01$), but not before (3.90 vs. 3.88; $t < 1$).

Experiment 2 examined the randomization effect. To fulfill the prerequisite conditions, participants were induced to consider a leisure shopping situation by reading a short paragraph (Kaltcheva and Weitz 2006) and then browse 64 stationery products that were either categorized or randomized. Then they rated their feelings of arousal and pleasure. After that, participants saw the same product set again and indicated the products they would like to buy. Then, they rated choice satisfaction and shopping experience. Results showed that participants reported greater choice satisfaction when the set was

randomized than categorized (6.81 vs. 5.70; $t(69) = 2.61, p < .05$). Similar results were detected on shopping experience (6.53 vs. 5.66; $t(69) = 2.09, p < .05$), arousal (5.50 vs. 4.86; $t(69) = 2.06, p < .05$) and pleasure (6.61 vs. 5.86; $t(69) = 2.60, p < .05$). Mediation analyses revealed that arousal and pleasure sequentially mediated these randomization effects.

Using 54 chocolates and 64 stationery products, Experiment 3 and 4 investigated the moderating role of task orientation by manipulating a specific shopping target (Chernev 2003b) and a general task orientation (Choi and Fishbach 2011), respectively. Experiment 3 showed that compared to a categorized set, a randomized set increased choice satisfaction when participants did not indicate their chocolate preference (7.95 vs. 8.60; $F(1, 135) = 4.14, p < .05$), but decreased satisfaction when they indicated their chocolate preference and hence was expected to shop for that target (8.41 vs. 7.74; $F(1, 135) = 5.22, p < .05$). Similar results were detected in Experiment 4. Choice satisfaction was higher in the randomized condition than in the categorized condition when shopping was experience-oriented (6.94 vs. 5.97; $F(1, 132) = 4.55, p < .05$) but lower when shopping was task-oriented (6.22 vs. 7.14; $F(1, 132) = 4.64, p < .05$). Experiment 4 further demonstrated that arousal and perceived variety mediated the randomization and categorization effect, respectively.

Employing either 40 good-looking or creepy-looking endangered animals, Experiment 5 tested the moderating role of ‘shopping’ valence. Results showed that regardless of the shopping valence, participants reported a greater feeling of arousal after browsing a set of randomly displayed animals than a set of categorized animals (6.22 vs. 5.65; $F(1, 139) = 7.43, p < .01$). However, shopping valence moderates the influences of display method on choice satisfaction ($F(1, 139) = 7.77, p < .01$). Specifically, for attractive animals, participants reported greater satisfaction when the set was randomized than categorized (7.31 vs. 6.45; $F(1, 139) = 4.90, p < .05$); the effect was reversed for unattractive animals (4.16 vs. 4.84; $F(1, 139) = 2.99, p = .09$).

This research demonstrates a positive effect of product randomization. Our findings enrich the extant knowledge about the impacts of display method (Diehl et al. 2015; Kahn and Wansink 2004; Mogilner et al. 2008) and also provide useful marketing implications for store arrangements.

Global Context: Extremeness Aversion in a Dual Context Setting

EXTENDED ABSTRACT

Research on extremeness aversion has typically defined extremeness in terms of the local consideration set (Prelec, Wernerfelt, and Zettlemeyer 1997; Neumann, Bockenholt, and Sinha 2016; Simonson 1989). For example, in one demonstration of extremeness aversion, study participants tended to choose the middle of three drink options, regardless of the sizes of the three drinks offered (Sharpe, Staelin, and Huber 2008). These studies have demonstrated that consumers often avoid extreme options, where extremeness is a function of the local context.

But consumer choice rarely occurs in the completely isolated contexts used in laboratory experiments. When making real consumption decisions, consumers typically have several layers of context available to them to inform their evaluations and decisions. Consider a consumer choosing from among three brands of pasta sauce, ranging from a high priced, high quality sauce down to a low priced, low quality option. Extremeness aversion predicts that in such a situation, consumers will be attracted to the compromise or middle option.

But how would that consumer’s choices change if an additional, “global” context were introduced? What if consumers were told that this set of pasta sauces was being sold at Whole Foods, a store with a reputation for high prices? Would the preferences change if consumers evaluated exactly the same option set, with exactly the same prices, but at Walmart instead of Whole Foods?

In this research, we propose that both global and local context jointly determine consumers’ evaluations of attribute extremity, and therefore both affect how extremeness aversion influences choice. Specifically, we argue that consumers interpret the local context (e.g., the set of pasta sauces being considered) through the lens of the global context (e.g., the store in which the pasta sauces are seen). The global context can shift the “extremity” of one or more of the attributes being evaluated.

For example, if the consumer was shopping at Whole Foods, a store with a notoriously high price image, he or she might assume that all the prices in the set were high, relative to what is available on the market. This could shift the assessment of what is considered extreme. If all the options are thought to be relatively expensive based on the global context, the cheapest option in the set might seem more like a compromise option. Extremeness aversion in this context would lead to a preference for the least expensive option, rather than the middle option.

We tested this prediction in a series of studies. First, we replicated Prelec, Wernerfelt, and Zettlemeyer’s (1998) iconic poncho study, in which participants were asked to imagine it had started raining and so chose a length of poncho to buy: 38”, 40”, or 42”. As might be expected, people tended to choose a poncho length based on their height: with short people choosing the 38” and tall people choosing the 42” option. The global context in this case was manipulated by changing the location of the poncho vendor. Some participants were told that they were on vacation in the Netherlands, where “residents are among the tallest people in the world,” and others were told that they were vacationing in Indonesia, where “residents are among the shortest people in the world.” Changing the global context shifted preference in poncho length.

Converting the lengths to a 3-point scale, participants in the control condition (no additional global context), the average poncho length was 2.38. When participants were told they were shopping in the Netherlands, there was a significant shift toward the shorter poncho (2.38 vs. 2.05; $p < .01$). Likewise, there was a significant shift toward the taller poncho when participants were told they were shopping in Indonesia (2.38 vs. 2.58, $p = .05$). And the preferences in the Netherlands and Indonesia conditions were, of course, significantly different from each other (2.05 vs. 2.58; $p < .001$).

Additional experiments supported the influence of global context on how extremeness aversion manifests in choice. One study asked participants to take a virtual grocery shopping trip. They were shown 4 national-brand options from each of 4 categories: frozen pizza, pasta sauce, maple syrup, and tuna. The participants were shown the same set of options, at the same prices, but were told that the options they were considering came either from a store with a reputation for high prices (e.g., Whole Foods) or low prices (e.g., Walmart).

Across the four product categories, 29.4% of choices were for the lowest priced brands when participants were shopping in the low price image store. In the high price image store, the choice share of the lowest-priced brands increased to 41.7%—this despite the fact that the prices and products were the same in both conditions. This pattern held across all four product categories: frozen pizza (27.7% vs. 35.7%), pasta sauce (44.7% vs. 54.5%), maple syrup (30.4% vs. 50.0%), and tuna (14.9% vs. 26.8%).

In another study, we replicated the findings in the field. We conducted the study in three different restaurants in Milan, which all serve the same penne arrabbiata pasta (i.e., spicy pasta). The restaurants were Calabrese (known for spicy dishes), traditional Italian, and American. We had a total of two hundred and ninety-six participants (167 male; $M_{\text{age}} = 37.72$, $SD = 14.65$). Participants were asked to imagine they wanted to order arrabbiata pasta from the restaurant they were currently dining in, and had the option of telling the chef how spicy to make it on a 7-point scale. We predicted that those who were in the Calabrese restaurant would order the least spicy pasta because the global context was a very spicy restaurant. In contrast, those in the American restaurant would order the spiciest pasta because there the global context was a restaurant with non-spicy food. The results supported our prediction. Those in the American restaurant ordered their pasta to be spicier ($M = 4.92$, $SD = 1.39$) than those in the traditional ($M = 4.38$, $SD = 1.61$; $p < .01$) and the Calabrese ($M = 3.68$, $SD = 1.13$; $p < .001$) restaurant. Moreover, those in the Calabrese restaurant ordered their pasta to be less spicy than those in the traditional Italian restaurant ($p < .001$).

Across experiments (including others not summarized here in the interest of brevity), we found consistent support for a dual-context explanation of how extremeness aversion influences consumer choice. Our data support the idea that consumers are averse to extremes. However, we find that extremeness is not limited to the local consideration set, but is in fact jointly determined by the local context and the global setting, including the reputation of the retailer in which the consumer is shopping.

REFERENCES

- Abrahamson, Eric and David H. Freedman (2007), *A Perfect Mess: the Hidden Benefits of Disorder - How Crammed Closets, Cluttered Offices, and On-the-Fly Planning Make the World a Better Place*, New York: Little, Brown and Company.
- Averill, James R (1973), "Personal Control Over Aversive Stimuli and Its Relationship to Stress," *Psychological Bulletin*, 80 (4), 286.
- Baumol, William J. and Edward A. Ide (1956), "Variety in Retailing," *Management Science*, 3 (1): 93-101.
- Berlyne, Daniel E. (1971), *Aesthetics and Psychobiology*, New York: Appleton-Century-Crofts.
- Bloch, Peter H. and Marsha L. Richins (1983), "Shopping Without Purchase: An Investigation of Consumer Browsing Behavior," *Advances in Consumer Research*, 10(1): 389-93.
- Broniarczyk, Susan M., Wayne D. Hoyer and Leigh McAlister (1998), "Consumers' Perceptions of The Assortment Offered in A Grocery Category: The Impact of Item Reduction," *Journal of Marketing Research*, 166-176.
- Chen, Charlene Y., Leonard Lee, and Andy J. Yap (2016), "Acquiring Utilitarian Products Restores Psychological Control," Unpublished manuscript.
- Chernev, Alexander (2003a), "Product assortment and individual decision processes," *Journal of Personality and Social Psychology*, 85(1), 151-162.
- Chernev, Alexander (2003b), "When More Is Less and Less Is More: The Role of Ideal Point Availability and Assortment in Consumer Choice," *Journal of consumer Research*, 30(2): 170-83.
- Chernev, Alexander (2006), "Decision Focus and Consumer Choice among Assortments," *Journal of Consumer Research*, 33(1), 50-59.
- Chernev, Alexander, Ulf Böckenholt, and Joseph Goodman (2015), "Choice overload: A conceptual review and meta-analysis," *Journal of Consumer Psychology*, 25(2): 333-358.
- Choi, Jinhee and Ayelet Fishbach (2011), "Choice as an End versus a Means," *Journal of Marketing Research*, 48(3): 544-54.
- Diehl, Kristin, Erica Van Herpen, and Cait Lamberton (2015), "Organizing Products with Complements versus Substitutes: Effects on Store Preferences as a Function of Effort and Assortment Perceptions," *Journal of Retailing*, 91(1): 1-18.
- Fischhoff, Baruch, Roxana M. Gonzalez, Deborah A. Small, and Jennifer S. Lerner (2003), "Judged Terror Risk and Proximity to the World Trade Center," *Journal of Risk and Uncertainty*, 26 (2/3), 137-51.
- Gierl, Heribert and Verena Huettl (2010), "Are Scarce Products Always More Attractive? The Interaction of Different Types of Scarcity Signals with Products' Suitability for Conspicuous Consumption," *International Journal of Research in Marketing*, 27 (3), 225-235.
- Havlena, William J. and Morris B. Holbrook (1986), "The Varieties of Consumption Experience: Comparing Two Typologies of Emotion in Consumer Behavior," *Journal of Consumer Research*, 13(3): 394-404.
- Hoch, Stephen J., Eric T. Bradlow, and Brian Wansink (1999), "The Variety of An Assortment," *Marketing Science*, 18(4): 527-46.
- Holbrook, Morris B. and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9(2): 132-40.
- Inman, J. Jeffrey, Anil C. Peter, and Priya Raghubir (1997), "Framing the Deal: The Role of Restrictions in Accentuating Deal Value," *Journal of Consumer Research*, 24 (1), 68-79.
- Iyengar, Sheena and Mark R. Lepper (2000), "When Choice is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology*, 79 (6), 995.
- Kahn, Barbara E. and Donald R. Lehmann (1991), "Modeling Choice Among Assortments." *Journal of Retailing; Greenwich* 67 (3): 274.
- Kahn, Barbara E. and Brian Wansink (2004), "The Influence of Assortment Structure on Perceived Variety and Consumption Quantities," *Journal of Consumer Research*, 30(4): 519-33.
- Kaltcheva, Velitchka D. and Barton A. Weitz (2006), "When Should a Retailer Create An Exciting Store Environment?" *Journal of Marketing*, 70(1): 107-18.
- Lefcourt, Herbert M (1973), "The Function of The Illusions of Control and Freedom," *American Psychologist*, 28 (5), 417.
- Mehrabian, Albert (1977), "Individual Differences in Stimulus Screening and Arousalability," *Journal of Personality*, 45(2): 237-50.
- Mehrabian, Albert and James A. Russell (1974), *An Approach to Environmental Psychology*. Cambridge, MA: MIT Press.
- Mehta, Ravi and Meng Zhu (2015), "Creating When You Have Less: The Impact of Resource Scarcity on Product Use Creativity," *Journal of Consumer Research* (2015), ucv051.
- McAlister, L. and Pessemier, E. (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9(3), 311-322.
- Mittal, Chiraag and Vladas Griskevicius (2014), "Sense of Control Under Uncertainty Depends on People's Childhood Environment: A Life History Theory Approach," *Journal of Personality and Social Psychology*, 107 (4), 621.

- Mogilner, Cassie, Tamar Rudnick, and Sheena S. Iyengar (2008), "The Mere Categorization Effect: How the Presence of Categories Increases Choosers' Perceptions of Assortment Variety and Outcome Satisfaction," *Journal of Consumer Research*, 35(2): 202-15.
- Neumann, Nico, Ulf Böckenholt, and Ashish Sinha (2016), "A Meta-Analysis of Extremeness Aversion," *Journal of Consumer Psychology*, 26, 193-212
- Parker, Jeffrey R. and Donald R. Lehmann (2011), "When Shelf-based Scarcity Impacts Consumer Preferences," *Journal of Retailing*, 87 (2), 142-155.
- Park, Whan C., Sandra Milberg, and Robert Lawson (1991), "Evaluation of Brand Extensions: The Role of Product Feature Similarity and Brand Concept Consistency," *Journal of Consumer Research*, 18(2): 185-93.
- Prelec, Drazen, Birger Wernerfelt, and Florian Zettelmeyer (1997), "The Role of Inference in Context Effects: Inferring What You Want from What is Available," *Journal of Consumer Research*, 24, 118-126
- Ratner, Rebecca K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences for the Sake of Variety," *Journal of Consumer Research*, 26(1), 1-15.
- Reisenzein, Rainer (1983), "The Schachter Theory of Emotion: Two Decades Later," *Psychological Bulletin*, 94(2): 239-62.
- Russell, James A. and Albert Mehrabian (1976), "Environmental Variables in Consumer Research," *Journal of Consumer Research*, 3(1): 62-3.
- Sharpe, Kathryn M., Richard Staelin, and Joel Huber (2008), "Using Extremeness Aversion to Fight Obesity: Policy Implications of Context Dependent Demand," *Journal of Consumer Research*, 35, 406-422
- Simonson, Itamar (1989), "Choice Based on Reasons: The Case of Attraction and Compromise Effects," *Journal of Consumer Research*, 16, 158
- Sujan, Mita and James R. Bettman (1989), "The Effects of Brand Positioning Strategies on Consumers' Brand and Category Perceptions: Some Insights from Schema Research," *Journal of Marketing Research*, 26(4): 454-67.
- Whitson, Jennifer A. and Adam D. Galinsky (2008), "Lacking Control Increases Illusory Pattern Perception," *Science*, 322, 115-117.
- Vohs, Kathleen D., Nicole L. Mead, and Miranda R. Goode (2006), "The Psychological Consequences of Money," *Science*, 314, 1154-1156.
- Zuckerman, Miron, Joseph Porac, Drew Lathin, and Edward L. Deci (1978), "On the Importance of Self-Determination for Intrinsically-Motivated Behavior," *Personality and Social Psychology Bulletin*, 4 (3), 443-446.

Influences of Social Comparison on Consumer Judgment and Choice

Chairs: Chelsea Galoni, Northwestern University, USA
Aparna A. Labroo, Northwestern University, USA

Paper #1: When Consumer Rivalry Reduces Desire for Innovation

Chelsea Galoni, Northwestern University, USA
Aparna A. Labroo, Northwestern University, USA

Paper #2: News Consumption on Social Media Induces Distinctiveness Seeking

Jaeyeon Chung, Columbia University, USA
Gita V. Johar, Columbia University, USA

Paper #3: The Price of Faith: Religion's Role in the Endowment Effect

Vivian Qin, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA
Richard Staelin, Duke University, USA

Paper #4: Trickle-Round Signals: When Low Status Becomes High

Silvia Bellezza, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA

SESSION OVERVIEW

The growth of social media has increased immediate access to information about others and increased the ability to make social comparisons. As a result, recent consumer research has focused on issues pertaining to social comparisons, including how people assess their social status, and the consequences of social comparison, such as conspicuous consumption (e.g. Ordabayeva and Chandon 2011; Xu Shen and Wyer Jr. 2012). This session brings together four papers that extend existing theory in novel ways. In the first two papers, we first investigate social distance and anonymity with the comparison target as antecedents to different consumer mindsets, identity goals, and choices. In the next two papers, we then investigate how choice is impacted when consumers suppress or cope with social comparison.

In particular, while competing (vs. cooperating) is known to increase a focus on differences, in paper 1, Galoni and Labroo find that when the referent is a close other, differentiating can feel difficult, and ironically, increase focus on similarities and reduce creativity and desire for innovative products. Compatible with paper 1, but focusing on newsfeeds and anonymous others, in paper 2, Chung and Johar find that the salience of anonymous crowds on social news channels motivates consumers to seek a distinctive self-identity, unless consumers are able to express their identity by actively engaging in social media. In paper 3, Qin, Fitzsimons and Staelin present a unique consequence of suppressing social comparison – the overvaluation of one's own possessions. They find the endowment effect is enhanced among religious individuals who are taught to not engage in social comparison or covet the goods of others. In paper 4, Bellezza and Berger further consider how consumers cope with social comparison. They find that high-status consumers often adopt low-status goods in effort to further differentiate themselves from mid-status consumers.

As a set, the papers present a highly convergent, novel, and important perspective on social comparison processes and their consequences for consumer behavior. As a set, the papers offer theoretical advances and practical insight into how social comparison impacts choice and how consumers suppress or cope with it. While all papers explore social comparison, they also bridge distinct consumption do-

mains ranging from the desire for innovation, to identity signaling, to the endowment effect and religion, and conspicuous consumption. As a result, the session is likely to have a broad appeal within the ACR audience, and draw researchers interested not only in social comparison, but also in these listed domains. All of the papers are at an advanced stage of completion. Overall, they comprise 17 studies, and employ lab and online experiments, as well as archival data analysis. Given the cross-sectionality of interest in social comparison and its diverse influence on consumer behavior, we anticipate this session will spark fruitful discussion and generate opportunities for future research.

When Consumer Rivalry Reduces Desire for Innovation

EXTENDED ABSTRACT

Relentless exposure to the successes of close others on social media can increase the tendency among consumers to engage in competitive social comparison (Garcia et al. 2006; Primack et al. 2017). But might doing so impact subsequent preferences? If so, how?

A widespread view is that competing with others (vs. cooperating or merely considering them) increases a need for differentiation and a focus on differences (Ames 1981; Colpaert et al. 2015; Stapel and Koomen 2005). This increased focus on differences can increase divergent thinking by making disparate information accessible in memory (e.g. Ashton-James and Chartrand 2009; Zhong, Dijksterhuis and Galinsky 2008). It follows that divergent thinking might increase creativity and make innovative products appear more desirable. However, one important aspect of these studies is that they employed newly acquainted or hypothetical others who are socially or psychologically distant from consumers when in reality competition is more often with those who are close. Coke considers Pepsi its competitor, siblings consider each other their referents, and close, not distant, friends develop rivalries. We posit that the consequences of competing with a close other are quite different (and in fact, the reverse).

We propose that competitive differentiation with a close other feels difficult because of the high trait overlap between the self and close others. This feeling of difficulty can lead consumers to infer that they are even more similar to the close other than if they had not been looking for differences (such as when a consumer merely considers or cooperates with the other). In supporting research, metacognitive difficulty associated with generating many versus few instances of aggression is known to result in lower perceptions of that person's aggression. Thus, the difficulty of finding differences might serve to increase perceived similarity and reduce preference for innovative products. This prediction is in contrast to when a consumer competes with a distant other and differentiation is easy. We therefore predict that engaging in competitive social comparison (vs. non-competitive comparison) with a close other increases a similarity mindset and decreases a desire for innovative products.

We tested this hypothesis across three studies. Study 1 employed a 3 (action: compete, cooperate, control) \times 2 (referent: close, distant) between-subjects design. Participants first completed a writing task describing the action \times referent they were assigned to, then completed a similarity-focus measure by indicating how much overlap they perceived between themselves and the other, and then listed creative uses for two objects as indicators of divergent thinking. The

cooperation and control conditions were designed to be conceptual replications. The results were similar within these conditions and were therefore collapsed. The similarity-focus measure revealed the predicted interaction ($F(1, 212) = 4.78, p = .03$). As predicted, competing (vs. not) with a close other increased similarity ($M = 4.30$ vs. $M = 3.76, t(212) = 2.19, p = .035$). While competing with a distant other reduced similarity, consistent with past research ($M = 2.86$ vs. $M = 3.12$), this difference was non-significant ($t < 1$) perhaps because past research employed less engaging hypothetical comparisons. Analysis on the creativity measure revealed the predicted interaction, $F(1, 212) = 3.43, p = .066$. Competing (vs. not) with a close other reduced creativity ($M = .80$ vs. $M = 1.49, t(212) = 1.89, p = .06$). Competing (vs. not) with a distant other increased creativity, albeit not significantly ($M = 1.38$ vs. $M = 1.10, t < 1$).

Study 2 replicated these results using a general measure of a similarity mindset (perceived similarity of two abstract artworks), and also a different measure of divergent thinking (preference for a product when framed as innovative vs. not). Again, competing (vs. not) with a close other increased a similarity mindset ($M = 4.83$ vs. $M = 2.86, t(210) = 3.06, p < .001$), but competing with a distant other decreased it ($M = 3.48$ vs. $M = 4.39, t(210) = -2.06, p = .04$). Moreover, competing (vs. not) with a close other reduced preference for a product when its innovativeness was highlighted ($M = 3.45$ vs. $M = 4.21, t(210) = -1.92, p = .05$), but competing with a distant other had no effect ($M = 3.56$ vs. $M = 3.39, t < 1$).

Studies 1 and 2 showed that competing with a close other increases both integral and general similarity mindsets, reduces divergent thinking, and reduces preference for innovative products. While all results for distant others were in the direction of past research, they only tended toward significance, perhaps because our task is less hypothetical than that in past research and elaboration might be moderating those past effects. Our goal in study 3 was to test the underlying process that the difficulty of generating differences with a close other results in a similarity mindset.

Study 3 ($N = 276$) manipulated the difficulty of generating differences by having participants list their own traits or the traits of close-others first. We reasoned that the salience of one's own traits makes it difficult to generate different traits for others. In contrast, this difficulty will be reduced if a person first considers the traits of the other person. A 3 (action: compete, cooperate, control) \times 2 (order: own traits first, other traits first) between-subjects ANOVA on innovation preference revealed a significant interaction ($F(2, 271) = 5.25, p = .006$). Replicating prior studies, competing (vs. not) with a close other reduced innovation preference ($M = 3.52$ vs. $M = 4.58, t(274) = 2.53, p = .01$), but only when participants considered their own traits first. It instead directionally increased innovation preference when the other was considered first ($M = 4.20$ vs. $M = 3.48, t(274) = 1.71, p = .089$).

Across three studies, we found that competing with a close other evokes a similarity mindset and reduces desire for innovative products. This finding is important theoretically because ample research would suggest that competing increases divergent thinking. It also merges research on metacognitive experiences with understanding social influences. Practically, even small instances of daily consumer rivalry may shift preferences away from innovation.

News Consumption on Social Media Induces Distinctiveness Seeking

EXTENDED ABSTRACT

The decline in print media subscriptions and television viewership, and the emergence of the Internet challenge news organizations

to find more effective ways of connecting with their readers. News organizations have developed multiple online communication mechanisms in response to this crisis. For example, CNN uses both their traditional homepage (e.g., cnn.com) and social media websites (e.g., [Twitter.com/CNN](https://twitter.com/CNN)). Unlike traditional news websites that are driven by top-down dispersion of news content, news on social media platforms is consumed by an anonymous crowd that makes its presence felt via comments and likes. Based on the crowd literature (Xu, Shen and Wyer Jr. 2012) they are likely to interpret it as an indication of their affiliation motivation. Consequently, in a product choice task, they choose options that others consider desirable. When people perceive that their close proximity to others results from circumstances beyond their control, however, they feel that their personal space is violated and experience a need for to express their individuality. In this case, they are more likely to choose products that distinguish themselves from others.”DOI”:"10.1016/j.jcps.2011.06.006”,ISSN”:"1057-7408”,shortTitle”:"Does the distance between us matter?”,journalAbbreviation”:"Journal of Consumer Psychology”,author”:[{"family”:"Xu”,given”:"Jing"}, {"family”:"Shen”,given”:"Hao"}, {"family”:"Wyer Jr.”,given”:"Robert S."}],issued”:[{"date-parts”:[["2012”,7]]}],schema”:"https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} and the optimal distinctiveness theory (Brewer 1991), five experiments demonstrate that the salience of an anonymous crowd on social (vs. traditional) news media motivates consumers to seek a distinctive self-identity so that they can stand apart from the crowd. This tendency is attenuated when consumers can express their distinctive identity by actively engaging (vs. passively reading) news content on the platform through liking, sharing and commenting on the news.

Experiment 1 tests our basic hypothesis that social news media consumption elicits the distinctiveness-seeking goal. In the guise of a “News Headline study,” 143 participants either browsed CNN.com (*traditional-media*) or CNN Twitter (*social-media*). Next, all participants completed a word-flash task that measured the implicit activation level of the distinctiveness-seeking goal (Loveland et al., 2010). Upon seeing a flashed target word (e.g., *disdunt*), participants chose one word out of 4 choices (e.g., *distinct*, *district*, *distract*, *disturb*). The frequency of choosing the distinctiveness-related word in 6 target questions out of 12 questions served as a mediator. The dependent variable was the self-perception score in relation to others (Stapel & Marx, 2007). Analysis revealed that the exposure to social news channels increases the goal to be distinctive ($p = .033$), which predicts participants’ tendency to view themselves as being less similar to others ($M_{\text{social-media}} = 4.08$ vs. $M_{\text{traditional-media}} = 4.53, p = .042$) (Indirect effect: $CI = [-.1313, -.0021]$).

Building on the initial findings, Experiment 2 provides evidence on distinctiveness-goal activation by using goal-satiation as a moderator, and by comparing another social media news website - Mashable, with a traditional news website - Yahoo news. Employing a 2 (media: Yahoo vs. Mashable) \times 2 (goal satiation: no vs. yes) between-subjects design, participants ($N = 203$) first read news on one of the two news websites, followed by a “product survey” task that manipulated goal-satiation through 4 scale questions (e.g., “how many pairs of unique shoes do you have?” *distinctiveness-not-satiated*: 0-4 pairs/5-9 pairs/10-14 pairs/15-19 pairs/20 pairs or more vs. e.g., *distinctiveness-satiated*: 0 pair/1 pair/2 pairs/3 pairs/4 pairs or more). In the third marketing study, all participants rated two museum taglines: (A) “Visited by Over a Million People Each Year,” (B) “Stand out from Crowd” (Huang et al., 2014). Results revealed that when the distinctiveness-seeking goal is not satisfied, participants on social (vs. traditional) media preferred distinctive tagline more (M_{so}

cial-media? not-satisfied = 1.50 vs. $M_{\text{traditional-media, not-satisfied}} = .37, p = .038$), but not when their distinctiveness-goal was satisfied through the scale manipulation ($M_{\text{social-media, satisfied}} = -.26$ vs. $M_{\text{social-media? satisfied}} = .10, n.s.$).

If the goal to be distinctive is the mechanism underlying the effect, then the effect should be attenuated when consumers express their distinctive self-identity by actively engaging in social media. To test this idea, participants ($N = 123$) in Experiment 3A were randomly assigned to one of the three conditions (traditional-media vs. social-media vs. social-media-active) where they either browsed CNN.com (*traditional-media*) or CNN Twitter (*social-media & social-media-active*). Additionally, participants in the *social media-active* condition wrote down 4 tweets. Then, all participants responded to a marketing study where they rated two fashion taglines: (a) “Catch up the popular trend of fashion”, (b) “Stand out from the crowd by expressing who you are.” Results revealed that participants in the *social media* condition preferred the distinctive tagline more than those in the *traditional media* (preferences score = (b) – (a); $M_{\text{social-media}} = -2.28$ vs. $M_{\text{traditional-media}} = -2.91, p = .051$), and in the *social media-active* conditions ($M_{\text{social-media-active}} = -3.36, p = .002$). This finding was again replicated in Experiment 3B that employed 3 conditions, with a more subtle manipulation for the social media-active condition where participants engaged in social media by simply clicking likes/shares, by utilizing BBC news agency and a product-choice task.

Together, we posit that an active engagement satisfies consumers’ goal to reclaim their individuality, which subsequently attenuates their preferences for distinctive products.

Experiment 4 ($N = 153$) provided process-evidence of this prediction by employing the identical media manipulation as in Experiment 3A, followed by the word-flash task in Experiment 1 as a mediator, and a post-it product preferences task as a marketing DV. Specifically, participants evaluated 3 post-its, where two colors of post-its were presented as being commonly consumed, while the third was presented as more distinctive. Then participants indicated how much they liked each of the post-its. Results again showed that participants in the *social media* condition ($M_{\text{social-media}} = .75$) preferred the distinctive colored post-it more than those in the *traditional media* ($M_{\text{traditional-media}} = -.20, p = .023$) and *social media-active* conditions ($M_{\text{social-media-active}} = -.40, p = .007$). Mediation analysis on word-flash task also revealed that participants in the *social media-active* condition no longer pursued the distinctive goal after the active engagement ($M_{\text{social-media-active}} = 2.09$ vs. $M_{\text{traditional-media}} = 1.83$ vs. $M_{\text{social-media}} = 2.66$; indirect effect: $CI = [-.093, -.002]$), which led to an attenuation of their preferences for the distinctive post-it.

Overall, this research contributes to the literature exploring social media’s new role as a news channel where the crowd reveals its presence through likes, shares and comments. Further, we reveal that passive (vs. active) immersion by the anonymous crowd is the driver in consumers’ preferences for distinctiveness, and demonstrate that the active (vs. passive) engagement through commenting, liking and sharing can fulfill their distinctiveness-seeking motive. This insight provides direct managerial implications to marketers on brand positioning that can be tailored to respective social and traditional news channels.

The Price of Faith: Religion’s Role in the Endowment Effect

EXTENDED ABSTRACT

Previous studies have identified three major causes of the endowment effect: loss aversion, mere ownership and the different effects of valuation and market prices across the buyers and sellers.

We put forth a new explanation, specifically the degree to which an individual endorses religious teachings that emphasize being content with one’s belongings and not comparing oneself to others and coveting their possessions. We focus on these since coveting (the opposite of contentment) is explicitly mentioned in the Ten Commandments (i.e., “You shall not covet”), which has special importance in the Judeo-Christian Scripture. Believers of these faiths feel that these commandments were directly delivered by God, indicate personal obedience and are intended to be an enduring record of his moral demands. Also coveting, an outcome of a social comparison that leads one to desire the “missing” good from one’s own life that the other possesses is frequently mentioned in the Bible and is regarded as the root of many sins. Such beliefs about not coveting can be found in multiple religious traditions (e.g., Samaritan). The Qur’an contains a parallel verse “Do not covet the bounties that God has bestowed more abundantly on some of you than on others. The Ten Disciplines in Hinduism include similar teachings about non-violence, devotion, and contentment. The Four Noble Truths in Buddhism reveal that craving causes suffering. To overcome craving and achieve happiness, people need to be content with their belongings. All this leads us to postulate that sellers will place more value on their own possessions and the increase in valuation will increase with the degree of religiosity.

We test our theory in a number of different ways. In each case we have participants randomly assigned to the role of seller or buyer of a non-durable product and indicate the price for which they are willing to sell (seller condition) or willing to pay for (buyer condition) the product. In the first study religiosity is measured by “How important are your religious beliefs to you” on a 5-point scale from “Not important at all” to “Very important.” Model free results show no significant difference in seller and buyer prices for those who indicate their religious beliefs were not important at all ($t = .91, p > .3$). Using a linear model we find that buyers’ willingness to pay did not significantly change with religiosity, whereas sellers significantly increased their selling prices as religiosity increased ($\beta = 0.70, p < 0.01$). This lead to individuals who are in the top 66% of religiosity displaying the endowment effect. We replicated the findings with real transactions in a second study and a different measure for religiosity in a third. All three studies provide a very consistent pattern where sellers with stronger religiosity ask for higher prices compared to those with weaker religiosity while buyers’ prices are not a function of their religiosity.

We next manipulate religion by making it more or less salient. Although the endowment effect was evident in the control condition, it was significantly weaker than the religion condition. This difference was due to sellers in the religion condition asking for significantly higher prices compared to those in the control condition, while no differences were found for buyers’ willingness to pay.

We explored our proposed mechanism (contentment with one’s own possessions) by measuring participants’ agreement towards the statements, “Religion allows me to express myself” and “Religion reminds me to be content with what I have”. Results show that when participants’ beliefs about contentment were one standard deviation below average, neither buyers nor sellers’ changed their prices with the religion prime and there was no significant endowment effect. In contrast, when participants’ attitudes towards contentment were one standard deviation above average, the endowment effect was present in both the religion and the control conditions. Importantly buyers did not change their willingness to pay across conditions, while sellers significantly increased their asking prices ($\beta = 0.42, p < 0.01$). Thus the endowment effect was significantly stronger in the religion condition ($\beta = 0.67, p < 0.01$). The statement “Religion allows me to

express myself” did not interact or mediate the two-way interaction of seller and religion prime.

We also manipulated different religious teaching. In the “religion as self-expression” condition, participants described how religion provided them a sense of self-worth. In the “religion as contentment” condition, they described how religion provided “a sense of satisfaction and sufficiency.” In the control condition, they wrote about their daily routines. The results show that both the “religion as self-expression” condition ($\beta = 2.62, p < 0.05$) and the control condition ($\beta = 2.79, p < 0.05$) exhibited the endowment effect. However, the endowment effect in the “religion as contentment” condition was much stronger ($\beta = 6.08, p < 0.001$). This was because the sellers in the “religion as contentment” condition asked for significantly higher prices than those in the “religion as self-expression” condition ($\beta = 3.45, p = 0.05$) and marginally higher prices than those in the control condition ($\beta = 3.28, p < 0.10$).

We used an archival dataset to provide evidence of external validity for our results by collecting data on the religiosity ranking based on the county-level number of congregations per 10k people and the asking prices for three types of popular used cars both for individual sellers and dealers. We find dealers’ prices do not significantly change with the number of congregations, whereas individuals’ prices significantly increase as the number of congregations increases ($\beta = 75.21, p < 0.001$).

Overall, we find strong support for the role of religious beliefs playing a key in the endowment effect. This impact is driven by a social comparison that leads religious people to feel they shouldn’t covet missing goods possessed by others, and as a result leads them to overvalue their own goods.

Trickle-Round Signals: When Low Status Becomes High

EXTENDED ABSTRACT

Conspicuous consumption and trickle-down theories suggest that fashions start with high-status individuals and move their way downwards (Simmel 1957; Taylor 1974; Veblen 1899/2007). But a number of examples seem to contradict these approaches. Jeans were originally worn by miners and factory workers before celebrities adopted them and famous chefs use commercial junk food in their sophisticated dishes. When and why do high-status individuals sometimes adopt tastes associated with low-status groups?

This article proposes a trickle-round theory of fashion that explains why high-status individuals sometimes adopt items clearly associated with low-status or marginalized groups. Field and lab studies demonstrate that high-status individuals adopt “downscale” tastes, in part, to distance themselves from the middle-status. Because emulating low-types is too costly and risky for middles to copy, it provides an alternative way for high-types to distinguish themselves. Thus we propose tastes and styles may trickle-round directly from the bottom of society to the upper-class, only after diffusing to the middle.

Importantly, this strategy hinges on the presence of multiple signaling dimensions. Rather than trying to be seen as completely low-status, high-status individuals mix-and-match high and low signals (e.g., Lobster Mac ‘n Cheese or wearing a trucker hat with Gucci loafers) as a way of distinguishing themselves from middles.

Four studies consider the adoption of low-status signals and related status dynamics in a variety of identity-relevant contexts (e.g., food, clothing, and a stylized signaling game). Study 1 provides a test of our trickle-round theory in the field, demonstrating that high-status restaurants are disproportionately likely to offer low-brow dishes. We collected a random sample of 1,520 dishes offered at different price tiers of restaurants (all American cuisine, located

in New York City). Two coders rated the level of association of each dish with “lowbrow food,” that is the extent to which the dish, or part of it, included links to downscale, low-status, or working class recipes or ingredients (e.g., Fish and Chips, Mac ‘n Cheese, and Tacos). Naturally, as restaurant price increased, the number of lowbrow menu options tended to decrease. More importantly, as predicted, this pattern reversed for high-status restaurants, where the percentage of lowbrow dishes increased again ($\beta = 3.56, t(1,516) = 4.71, p < .000$). Moreover, we use textual analysis to demonstrate that, as predicted, when offering lowbrow items, high-end restaurants tend to mix-and-match them with highbrow ingredients.

Study 2 (N=382) uses a more controlled design to test whether high-status individuals are more likely to prefer downscale fashion products. Specifically, we compare the choices of fashion-savvy respondents recruited through a Luxury club (i.e., high-status group) to two control groups with analogous demographic, but lower fashion knowledge. We selected four pairs of products, three of which (i.e., two bags, hats, shoes) were pretested so that one option was seen as significantly more downscale than the other, and one pair (i.e., two glasses) perceived equivalently in terms of status. In addition to an effect of fashion knowledge ($Wald \chi^2 = 13.91, p < .001$), results revealed the predicted interaction ($Wald \chi^2 = 6.81, p = .009$). As predicted, for choice pairs where one option was more downscale, high-status respondents were more likely to pick the downscale products ($M_{high} = 55\%$ vs. $M_{low} = 34\%$, $Wald \chi^2 = 37.94, p < .001$). In categories where the two options were neutral, however, there was no effect of status on choice ($M_{high} = 42\%$ vs. $M_{low} = 38\%$, $Wald \chi^2 = .47, NS$).

Studies 3 and 4 test the proposed mechanisms using a novel signaling paradigm in the lab. In study 3, participants (N=256) imagined a society with three types of people (highs, middles, and lows) where signaling occurs exclusively along two dimensions: shape and color. Each status grouping is associated with a certain shape and color combination (high-status people are yellow-triangle, middle-status are red-square, low-status are blue-circle). All participants are assigned to high type and are told that they will play a number of rounds of a signaling game, in which they can choose one of three colors and one of three shapes as a signal to send to an observer. If the observer correctly identifies their high status, they will win extra compensation (\$1). To test our proposed mechanism, we manipulate between rounds whether high-status signals are co-opted by the middle-status group. As predicted, while almost no one selected low-status associated options in the first round, in the second round, when faced with imitation from middles, a significant percentage of people switched to low-status associated options ($Wald \chi^2 = 29.91, p < .001$).

We also asked participants to explain their thought process after the second choice and coded their open-ended comments on three dimensions (i.e., distinction, uniqueness, authenticity). As hypothesized, a logistic regression predicting whether participants picked low-status associated choices in the second round as a function of the three motives demonstrated that only “seeking distinction” was significantly related to choice ($B = .72, Wald = 56.29, p < .001$).

Finally, study 4 (N = 169) tests the role of multiple signaling dimensions in these effects. We use the paradigm from study 3 and manipulate the number of status signaling dimensions available. Half the participants receive the same society as study 3, where two dimensions (i.e., shape and color) are available, while the other half receive a simpler society, where signaling occurs exclusively along one dimension (i.e., shape). As predicted, the adoption of low-status associated guises in the second round ($M_{2-dim} = 32\%$) is significantly reduced when the ability to express status is confined to one signaling dimension ($M_{1-dim} = 11\%$; $z = 3.47, p = .001$). Finally, we again measure our hypothesized underlying process of distinction and find

that it mediates the effect the effect of condition on choice of low-status associated signals (indirect effect = .57; 95% C.I. = .07 to 1.15).

In conclusion, this research demonstrates that high-status individuals may purposely choose to adopt tastes and habits associated with low-status groups as an alternative signaling strategy to distinguish themselves. This work contributes to understanding signaling dynamics, social influence, and the diffusion of fashion.

REFERENCES

- Ames, Carole (1981), "Competitive Versus Cooperative Reward Structures: The Influence of Individual and Group Performance Factors on Achievement Attributions and Affect," *American Educational Research Journal*, 18 (3), 273–287.
- Ashton-James, Claire E., and Tanya L. Chartrand, (2009), "Social cues for creativity: The impact of behavioral mimicry on convergent and divergent thinking," *Journal of Experimental Social Psychology*, 45(4), 1036–1040.
- Brewer, Marilyn B. (1991), "The Social Self: On Being the Same and Different at the Same Time," *Personality and Social Psychology Bulletin*, 17(5), 475–482.
- Colpaert, Lucie, Dominique Muller, Marie-Pierre Fayant, and Fabrizio Butera, (2015), "A mindset of competition versus cooperation moderates the impact of social comparison on self-evaluation," *Frontiers in Psychology*, 6 (September), 1–10.
- Huang, Xun, Ping Dong, and Anirban Mukhopadhyay, (2014), "Proud to Belong or Proudly Different? Lay Theories Determine Contrasting Effects of Incidental Pride on Uniqueness Seeking," *Journal of Consumer Research*, 41(3), 697–712.
- Loveland, Katherine E., Dirk Smeesters, and Naomi Mandel, (2010), "Still Preoccupied with 1995: The Need to Belong and Preference for Nostalgic Products," *Journal of Consumer Research*, 37 (3), 393–408. <https://doi.org/10.1086/653043>
- McFarland, Cathy, Roger Buehler, and Laura MacKay, (2001), "Affective Responses To Social Comparisons With Extremely Close Others," *Social Cognition*, 19 (5), 547–586.
- Ordabayeva, Nina, and Pierre Chandon, (2011), "Getting ahead of the Joneses: When equality increases conspicuous consumption among bottom-tier consumers," *Journal of Consumer Research*, 38(1), 27–41.
- Primack, Brian A., Ariel Shensa, César G. Escobar-Viera, Erica L. Barrett, Jaime E. Sidani, Jason B. Colditz, and A. Everette James, (2017), "Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults," *Computers in Human Behavior*, 69, 1–9.
- Schwarz, Norbert, Herbert Bless, Fritz Strack, Gisela Klumpp, Helga Rittenauer-Schatka, and Annette Simons, (1991), "Ease of retrieval as information: Another look at the availability heuristic," *Journal of Personality and Social Psychology*, 61(2), 195–202.
- Simmel, George (1957), "Fashion," *American Journal of Sociology*, 62(6), 541–58.
- Stapel, Diederik A. and Willem Koomen, (2005), "Competition, cooperation, and the effects of others on me," *Journal of Personality and Social Psychology*, 88(6), 1029–1038.
- Stapel, Diederik A. and David M. Marx, (2007), "Distinctiveness is key: how different types of self-other similarity moderate social comparison effects," *Personality & Social Psychology Bulletin*, 33 (3), 439–448.
- Steers, Mai-Ly N., Robert E. Wickham, and Linka K. Acitelli, (2014), "Seeing everyone else's highlight reels: How Facebook usage is linked to depressive symptoms," *Journal of Social and Clinical Psychology*, 33(8), 701–731.
- Taylor, Rex (1974), "John Doe, Jr.: A Study of His Distribution in Space, Time, and the Social Structure," *Social Forces*, 53(1), 11–21.
- Todd, Andrew R., Karlene Hanko, Adam D. Galinsky, and Thomas Mussweiler, (2011), "When Focusing on Differences Leads to Similar Perspectives," *Psychological Science*, 22(1), 134–141.
- Veblen, Thorstein (1899/2007), *The Theory of the Leisure Class*, New York: Oxford University Press
- Xu, Jing, Hao Shen, and Robert S. Wyer Jr., (2012), "Does the distance between us matter? Influences of physical proximity to others on consumer choice," *Journal of Consumer Psychology*, 22(3), 418–423. <https://doi.org/10.1016/j.jcps.2011.06.006>
- Zhong, Chen-Bo, Ap Dijksterhuis, and Adam D. Galinsky, (2008), "The Merits of Unconscious Thought in Creativity," *Psychological Science*, 19(9), 912–918.

Givers and Recipients: When and Why They Don't See Eye-to-Eye

Chair: Julian Givi, Carnegie Mellon University, USA

Paper #1: Sentimental Value And Gift Giving: Givers' Fears of Getting it Wrong Prevents Them From Getting it Right

Julian Givi, Carnegie Mellon University, USA

Jeff Galak, Carnegie Mellon University, USA

Paper #2: Sometimes It's Okay to Give a Blender: Giver and Recipient Preferences for Hedonic and Utilitarian Gifts

Elanor F. Williams, Indiana University, USA

Emily Rosenzweig, University of Tulane, USA

Paper #3: The Quality Versus Quantity Trade-Off: A Dual-Risk Account For How Choices For The Self Versus Others Differ

Peggy Liu, University of Pittsburgh, USA

Ernest Baskin, St. Joseph's University, USA

Paper #4: When Giving Thanks Means More: The Impact of Publicly Versus Privately Sharing Gratitude in Gift-Giving

Lauren Grewal, University of Pittsburgh, USA

Mary Steffel, Northeastern University, USA

Dhruv Grewal, Babson College, USA

SESSION OVERVIEW

This past holiday season, the average U.S. adult planned to spend roughly \$1,000 on gifts (American Research Group, Inc. 2016). Though undoubtedly with great intentions in mind, it seems that many of these givers missed their marks as UPS expected to ship 1.3 million gifts back to retailers on "National Returns Day" in early January (Farber 2017). Taken together, these statistics demonstrate that a) gift giving is a custom with major economic ramifications, and b) consumers often err in their gift choices. To that end, it is for good reason, then, that in recent years consumer researchers have devoted a considerable amount of time to studying gift giving – specifically asymmetries between givers and recipients. However, the field is only just beginning to develop an understanding of this tricky practice and there is still much to learn (Galak, Givi, and Williams 2016). Thus, in an effort to do just that, the papers in this session collectively ask: When and why do givers and recipients not see eye-to-eye?

The first two papers in the session examine asymmetries in the types of gifts givers give vs. the ones recipients prefer to receive. Specifically, **Givi and Galak** study givers' and recipients' views of sentimentally valuable gifts and gifts that match the explicit preferences of recipients. They demonstrate that givers overly-give the latter, relative to what recipients prefer, and that this arises because givers feel uncertain about whether sentimental gifts will be well-liked. **Williams and Rosenzweig** examine givers' and recipients' assessments of hedonic and utilitarian gifts, and show that givers give hedonic gifts more often than recipients prefer. Further, they demonstrate that this is the result of givers focusing more on the moment of the exchange vs. long-term ownership, than recipients, and that this mismatch contributes substantially to gift returns. **Liu and Baskin** study how the more general topic of self-other decision making can inform gifting errors, and investigate how consumers make the quality vs. quantity tradeoff when deciding for the self vs. others. Their results show that people choose quality over quantity more when choosing for others than for the self, and that this is driven by asymmetries in the perceived usage and social risks associated with choosing a lower quality option. To conclude the session, **Grewal, Steffel, and Grewal** (fittingly) examine how recipients are misguided in how they express gratitude *after* receiving a gift. Specifically, they find that recipients express their gratitude publicly less often than givers

prefer, because recipients err in their perceptions of how personal public expressions are perceived.

In sum, these four papers examine novel asymmetries between givers and recipients (in both gift selection, and behavior after the gift is exchanged), identify the mechanisms driving these mismatches, and demonstrate important downstream economic consequences. Given the wide range of literature drawn on by the authors, this symposium is likely to be of great interest to a broad audience, including those interested in gift giving, self-other decision making, prosocial behavior, risk, attribute tradeoffs, and gratitude expressions.

Sentimental Value And Gift Giving: Givers' Fears of Getting it Wrong Prevents Them From Getting it Right

EXTENDED ABSTRACT

The utility a consumer extracts from a possession can come in many different forms, however in the present research we focus on two: preference-matching utility and sentimental value. Preference-matching utility is the utility a consumer derives from an object because it has features, functions, and specifications that match the consumer's hobbies and interests. Sentimental value is the value derived from an object's associations with significant others or special events or times in one's life (Yang and Galak 2015). We examine how givers and recipients weigh these two forms of utility when faced with the choice between preference-matching and sentimental gifts. We hypothesize, and empirically demonstrate, that givers do not give sentimental gifts as often as recipients would prefer.

Our logic as to why this might occur is as follows: Recipients should be able to relatively accurately predict their enjoyment from potential gifts, as they know their likes and dislikes, and uncertainty is minimal. Thus, when indicating which of potential gifts they would like to receive, recipients will simply pick the gift that maximizes their utility, whether it be a sentimental or preference-matching gift. On the other hand, there is uncertainty in givers' decisions, and they must make educated guesses as to what recipients will like. Under these circumstances, preference-matching gifts allow givers to reduce the uncertainty in their choice, as givers are aware (from past observations) that recipients like these types of items. In contrast, sentimental gifts might be construed as relatively less certain to be liked by recipients. That is, givers have limited knowledge about recipients' opinions of potential sentimental gifts, relative to their knowledge of recipients' views of potential preference-matching gifts, and as a result, will feel less certain that the former will be liked. Thus, when choosing between a preference-matching and sentimental gift, givers' choices will be biased towards the former, relative to what they would prefer as recipients.

Study 1 serves as an initial test of our predictions that givers do not give sentimental gifts as often as recipients would prefer, and that this is because givers feel uncertain that these gifts will be liked by recipients. Specifically, givers hypothetically choose between a preference-matching gift (a framed picture of the recipient's favorite band), and a sentimental gift (a framed picture of the giver and the recipient on a day they had a lot of fun together), and the occasion is manipulated to be either the recipient's birthday or going away party. Recipients indicate which of these two items they would prefer to receive from the giver. We hypothesized that in both contexts, givers will perceive the sentimental gift as being less certain to be liked by recipients, compared to the preference-matching gift, and thus will

give the latter more often than recipients will prefer to receive it; however, in the context of a going away party, the uncertainty associated with the sentimental gift should be reduced, and thus givers should be more likely to give it as a going away present, than as a birthday present. The results confirmed these predictions: At both the birthday party (63% vs. 79%; $p = .02$) and going away party (76% vs. 96%; $p < .001$), givers chose the sentimental gift less often than recipients preferred, and less givers chose the sentimental gift as a birthday gift, than as a going away gift, (63% vs. 76%; $p = .07$).

Study 2 serves to further rule in an uncertainty explanation for givers' shunning of sentimental gifts. Specifically, givers are placed into a risk (seeking / aversion) mindset by writing about a time they took a risk and it (paid off / failed), and then choose between giving (as a birthday gift) a preference-matching gift (a bicycle made by the recipient's favorite brand, and he/she has other products made by this brand), or a sentimentally valuable gift (a bicycle that looks identical to a bicycle the giver and the recipient rode as children, but is not made by the recipient's favorite brand). We hypothesized that if givers are typically uncertain about whether sentimental gifts will be liked by recipients, then when givers think (positively / negatively) about risk, they should be (more / less) likely to give a sentimental gift. As expected, givers in the former condition chose the sentimental gift more often than givers in the latter condition (48% vs. 35%; $p = .01$).

To test whether our effect holds in a real-life setting, in study 3, we had romantic couples choose between gifts, and real gifts were exchanged. To begin, the couples were first asked to go into separate rooms, and then the giver (randomly assigned) started the first half of the study. Specifically, the giver wrote down the recipient's favorite store, and then selected which of six sentimental items (e.g., a picture with their two names inside a heart) he/she thought the recipient would like the best. Next, givers were informed that after the study there would be a lottery, and that if their name was drawn, the researchers would give them one of two items so that they could give it to the recipient: a) A \$25 gift card to the recipient's favorite store; or b) The sentimental item selected earlier. After givers made their choice, recipients completed the second half of the study. Specifically, recipients imagined that the giver was choosing a gift for the recipient and narrowed his/her choice down to the two items mentioned above, and then chose which item they would prefer to receive from the giver. As expected, givers did not give the sentimental gift as often as recipients preferred to receive it (24% vs. 34%; $p = .02$).

In sum, these studies demonstrate a novel error in gift giving, and contribute theoretically to the literatures of gift giving and self-other decision making.

Sometimes It's Okay to Give a Blender: Giver And Recipient Preferences For Hedonic And Utilitarian Gifts

EXTENDED ABSTRACT

Anticipating which gift will make someone happiest can be challenging. When choosing a gift, givers often find themselves torn between gifts that are fun but frivolous and gifts that are more useful but less enjoyable, too often opting for the former, as scores of dusty knickknacks, unwatched movies, and regrettably-eaten chocolates can attest. Adding to the literature that highlights situations when and reasons why giver and receiver preferences may be misaligned (e.g., Galak, Givi, and Williams 2016; Gino and Flynn 2011; Steffel and LeBoeuf 2014; Zhang and Epley 2012), we show that givers place undue emphasis on giving hedonic gifts, underestimating recipients' preferences for more utilitarian ones.

Our first study examined people's perceptions of the best gifts they had ever exchanged with a friend. Participants described the best gift they had ever given and the best gift they had ever received, and indicated how fun and enjoyable and how useful and necessary each was. People believed the best gift they had given was more hedonic than utilitarian, but this effect is attenuated for the best gift they had received, resulting in a significant interaction ($F(1, 131) = 25.99, p < .001$). Participants felt the best gift they had received was much more utilitarian than the best gift they had given (*paired t*(132) = 18.70, $p < .001$). Further, this difference held regardless of whether the other person in the exchange was a close other or a causal acquaintance, and was not driven by how material or experiential the gift was.

Study 2 investigated consumers' prospective preferences for gifts. Participants considered a friend for whom they would buy a gift in the next few months, or who would buy them a gift. They indicated how important six dimensions (fun, enjoyable, attractive, useful, needed, practical) would be in determining what they give to their friend, or how important they would like those features to be in determining what their friend would give to them. Recipients want their friend to take utilitarian factors into account more, and hedonic factors less, than givers plan to ($F(1, 234) = 5.50, p = .02$).

Next, study 3 shows that this asymmetry determines givers' and recipients' preferences for specific items. Participants imagined exchanging small stocking stuffer gifts with five friends, and chose which five gifts from a list of fourteen possible options they would opt to give to or receive from their friends. Half of the items were hedonic, like a book of crossword puzzles or a dance music CD, and half were utilitarian, like a corkscrew or set of coasters. Participants wanted to receive a higher proportion of the utilitarian items than they would choose to give to their friends ($t(244) = -2.43, p = .02$).

Study 4 examined why givers underestimate how much recipients appreciate utilitarian gifts and gift features. Participants imagined taking part in a Secret Santa exchange, in which they were going to give or to receive a flash drive. They or their coworker were choosing between either a plain flash drive or a snowman-shaped drive with slightly less storage capacity. Givers were more likely to prefer to give the less-useful-but-more-fun snowman drive than recipients were to receive it ($t(278.72) = -2.80, p = .005$). Givers were also more likely to report focusing on the moment of exchange (rather than the gift's long-term value) when choosing the flash drive they preferred than were recipients ($t(282) = -2.27, p = .02$). This differential focus on exchanging the gift versus ownership of the gift mediated participants' choice of flash drives (95% CI: .05 to .67).

Finally, we tested whether this mismatch in preferences for utilitarian gifts might drive gift returns. Ten days after Christmas, we asked participants to think about a gift they had or were planning to return, and to indicate their reasons for doing so by choosing from a list of potential reasons. These reasons included two about the gift being insufficiently hedonic ("The gift was something useful and I wanted something more fun" and "The gift wasn't fun enough") and two about the gift being insufficiently utilitarian ("The gift was something fun and I wanted something more useful" and "The gift wasn't useful enough"). A sign test reveals that significantly more participants indicated that wanting something more utilitarian (12.9%) than wanting something more hedonic (2.3%; $Z = -3.95, p < .001$) was the reason why they returned a gift most recently. By erring on the side of hedonic gifts, givers not only mismatch their recipients' preferences, but may even be more likely to give them gifts they wish they had not received.

Overall, our work suggests that to make their recipients happier, givers might consider more what their recipients might need and less

what they might enjoy. At the very least, givers underestimate the degree to which recipients often appreciate a gift with useful features. Givers might wish to remind themselves that sometimes, it's okay to give that blender.

The Quality Versus Quantity Trade-Off: A Dual-Risk Account For How Choices For The Self Versus Others Differ

EXTENDED ABSTRACT

Imagine a consumer plans to spend \$15 on a coffee shop gift card and is choosing between a coffee shop with higher quality but more expensive coffee, such that she can buy fewer cups of coffee for the same cost (the “quality” option for short), and another coffee shop with lower quality but less expensive coffee, such that she can buy more cups of coffee for the same cost (the “quantity” option). Or, imagine a consumer planning to spend \$10 on either a smaller bottle of higher quality shampoo or a larger bottle of lower quality shampoo. Clearly, in both examples, the consumer faces a tradeoff between quality and quantity. Will her choice differ depending on whether she is choosing for herself or for another person and if so, why?

Drawing from a growing literature suggesting that choices for self and other differ in systematic ways (Choi et al. 2006; Laran 2010; Polman 2012a, 2012b), we examine the effect of choice recipient—self or other—on the quality-quantity tradeoff. We propose that consumers will be more likely to favor quality over quantity when choosing for another person versus for oneself.

We further propose that this effect will arise because of differences both in the perceived usage risk associated with choosing a lower quality option for other versus self and in the perceived social risk associated with choosing a lower quality option for other versus self. First, with regard to perceived usage risk, we propose that consumers will be fairly certain that they will like the lower quality option enough to use it, such that they can derive savings benefits from the larger quantity. In contrast, consumers will be more uncertain about whether another person will like the lower quality option enough to use it, such that the larger quantity is less important (unused product is wasted). Second, with regard to social risk, we propose that consumers feel that sacrificing quality for quantity is more embarrassing when choosing for another person, based on literature indicating that “cheap” behavior is considered embarrassing (Ashworth, Darke, and Schaller 2005) and that embarrassment is heightened when thinking about the presence of others (Dahl, Manchanda, and Argo 2001).

Study 1 (N = 330) found support for our basic effect: consumers were more likely to choose quality over quantity for others than for the self (close other vs. self: $p = .003$; distant other vs. self: $p = .005$). There was no difference between choices for a close versus distant other ($p = .864$), providing some evidence against the alternative explanation that construal level differences might drive our effects because a construal level account predicts different effects when choosing for close versus distant others (Baskin et al. 2014)).

Study 2 (N = 210) used two different product types (soap, coffee gift card) and replicated the main effect of choice recipient observed in study 1 ($p < .001$). Moreover, study 2 provided evidence for our proposed dual process account whereby the effect of choice recipient on preferences for the quality – quantity tradeoff was mediated both by perceived usage risk for the lower quality – higher quantity option (95% CI: $-.5097, -.0679$; Hayes 2013) and by social risk (95% CI: $-.8996, -.2940$; Hayes 2013), both of which were higher when choosing for other rather than self. Finally, we found further evi-

dence against the potential alternative explanation that differences in construal level was explaining our results: whereas BIF was found to mediate effects of perspective (chooser, recipient) on choice of desirable (vs. feasible) product (Baskin et al. 2014), we found that BIF did not mediate effects of choice for self (vs. other) on choice of quality (vs. quantity) (95% CI: $-.1607, .0473$; Hayes 2013).

Study 3 (N = 304) generalized these findings to a non-gift-giving context, in which a consumer makes a product choice on behalf of another person who provides the money for the purchase. We again found that consumers were more likely to choose quality over quantity for others than for the self ($p < .001$). These findings suggest that it is not something special about the gift-giving context that leads to these effects and processes but rather about choosing for others more generally.

Study 4 (N = 1205) identified a boundary condition that further supported our process account. Specifically, study 4 had a 2 (choice recipient: self, other) \times 2 (choice recipient has had prior positive experience with both options: unspecified, yes) between-subjects design. We found a significant interaction ($p = .024$), such that the effect of choice recipient on the quality-quantity tradeoff was eliminated when the chooser was aware that the choice recipient has previously had positive experience with both choice options. Presumably, this boundary condition occurs because the elevated risks associated with choosing a quantity option for another person are mitigated.

In sum, across four studies involving real and hypothetical choice, we present consumers with a quality-quantity conflict and show that consumers are more likely to favor quality over quantity when choosing for others (vs. themselves). Study 1 demonstrates the basic effect of choice recipient on choice in a gift-giving setting. Study 2 provides support for our proposed underlying process through parallel mediation. Study 3 extends our findings to a non-gift-giving context while replicating the parallel mediation findings from study 2. Study 4 identifies a boundary condition, showing that our effect is eliminated when the chooser is aware that the choice recipient has previously had positive experience with both choice options. Finally, we rule out a construal level account for our effect.

Our research offers contributions to two literatures. First, we contribute to the literature on attribute tradeoffs by identifying a new factor that affects the little-understood quality versus quantity tradeoff. Second, we contribute to the literature on choosing for others both by identifying a new difference in choice when choosing for self versus other. Moreover, we also identify two novel mechanisms that have not been identified in this literature to the best of our knowledge: usage risk (preference uncertainty) and social risk (purchase embarrassment).

When Giving Thanks Means More: The Impact of Publicly Versus Privately Sharing Gratitude in Gift-Giving

EXTENDED ABSTRACT

For anyone who has ever received a gift, one of the first responses is to properly express gratitude. Much of the research has focused on the asymmetries between gift-givers and recipients from the point of view of the gift itself (Belk 1976; Steffel and LeBoeuf 2014; Ward and Broniarczyk 2011). Our research, however, addresses the question of asymmetries that occur in the gift-giving experience from a novel angle—how gift-recipients inaccurately forecast how gift-givers will respond to gratitude expressions. As gift-givers continually spend increasingly large amounts of money on gifts, understanding how recipients can enhance the experience for not only themselves, but for the givers is important to understand. Gifts are

chosen to express some symbolic meaning to the recipient, thus the expression of “it’s the thought that counts” may extend to the response of the recipient in a gift exchange for when they contribute to the gift exchange through their reactions (Zhang and Epley 2012).

We predict that gift-recipients may fail to anticipate how givers prefer to be thanked. Recipients may believe that expressing gratitude publicly rather than privately may be seen as more impersonal as broadcasting is typically focused on self-presentation goals (Baumeister et al. 2001) while narrowcasting is focused on sharing useful information to others (Barasch and Berger 2014). Conversely, gift-givers may perceive all gratitude to be equally personal (as gratitude, regardless of audience size, seems focused and directed towards them), and thus will appreciate gratitude regardless of how it is shared. We explore this discrepancy regarding gratitude expressions in four studies.

In Study 1, participants (N=136) were asked to recall a recent gift-exchange and were randomly assigned to one of two conditions (giver, recipient). After walking through a gift-exchange, participants were asked to choose whether they would share [receive] thanks publicly on the gift giver’s Facebook wall or privately through a Facebook message. In line with our predictions, we found that gift-givers chose to be thanked publicly more often than recipients chose to express gratitude publicly ($\beta = .710$, $\chi^2(1) = 3.88$, $p < .05$). These findings imply that gift-recipients are possibly missing opportunities to express gratitude in the gift-givers preferred way. To understand why this discrepancy occurs, Study 2 tests our proposed process.

In Study 2, participants (N=395) were randomly assigned to a condition in a 2(role: giver or recipient) \times 2(expression: public or private) design. Participants imagined either expressing or receiving gratitude in a private or public Facebook message after a gift-exchange. Using 7-point Likert-scales, gift-recipients predicted how the gift-giver would feel about the recipient (i.e., closeness) and about the expression itself (i.e., liking of expression, how the expression was perceived: personal, sincere, proud, comfortable) while givers predicted how they would feel.

There was a significant interaction between role and audience on expectations of givers’ felt closeness to the recipient and liking of the expression (both $p < .001$). Gift-givers equally liked the expression and felt equally close to recipients regardless of the gratitude expression (both $p > .36$). Alternatively, gift-recipients thought that gift-givers would like the expression less and feel less close to them when gratitude was expressed publicly (both $p < .001$).

We next examined the process underlying these discrepancies by testing for moderated mediation (Model 8, Hayes 2013) of liking and closeness as DVs (two separate models), expression type as IV, role as the moderator, and feelings regarding the expression (personal, sincere, proud, and comfortable) as parallel mediators. We found that how personal the gratitude expression seemed positively predicted both liking (CI₉₀[.00, .27]) and closeness (CI₉₀[.01, .21]). This was not true for any of the other possible mediators (all 90% CI contain 0). The indirect pathways through personal-ness to gift-recipient liking and felt closeness were significant for public expressions of gratitude (CI₉₅[.07, .25] and CI₉₅[.08, .30], respectively) but not for private expressions (both 95% CI contain 0). The results of this study show that gift-recipients believe public displays of gratitude will be poorly received due to being seen as less personal (though gift-givers do not share this belief).

In Study 3 (N = 106), we explored why gift-recipients believe that public expressions of gratitude will be seen as less personal. Participants were randomly assigned to one of two conditions (giver, recipient). After walking through a gift-exchange, participants were asked, when considering a public Facebook expression of gratitude,

how much they thought about the reactions/feelings of the other person in the exchange and how much they thought about the reactions/feelings of other people who could see the gratitude expression (measured on two sliding scales where the total percentage had to equal 100% between the two options). We found that gift recipients thought more about the reactions of others compared to gift-givers ($p = .004$). This finding supports the idea that gift-recipients believe public gratitude will be seen as more impersonal due a focus on a larger audience (i.e., broadcasting) compared to gift-givers.

In Study 4 (N = 409), we explore a boundary condition to this discrepancy in gratitude expressions. As we have seen in previous studies that the discrepancy between gift-recipients and gift-givers occurs due to gift-recipients incorrectly believing public gratitude to be less personal due to a larger imagined audience, we believe this effect will be specific to gratitude shared virtually where there can be a larger audience. To test this prediction, participants were randomly assigned to a condition in a 2(role: giver or recipient) \times 2(context of expression: offline or online) design. Participants imagined a gift-exchange and were asked to choose whether they would share [receive] thanks publicly or privately online [offline through Secret Santa scenario]. In line with our predictions, we found a significant interaction between role and context ($\beta = .37$, $\chi^2(1) = 12.91$, $p < .001$). Looking at the simple effects, givers chose to be thanked publicly significantly more than recipients chose to thank publicly online ($p = .001$) while offline, there were no differences between gift-givers and gift-recipients ($p = .37$).

We are currently running studies to determine situations when recipients will be more likely to share gratitude publicly online.

REFERENCES

- American Research Group Inc. (2016), “2016 Christmas Gift Spending Plans Top \$900,” <https://americanresearchgroup.com/holiday/>.
- Ashworth, Laurence, Peter R. Darke, and Mark Schaller (2005), “No One Wants to Look Cheap: Trade-offs Between Social Disincentives and the Economic and Psychological Incentives to Redeem Coupons,” *Journal of Consumer Psychology*, 15 (4), 295-306.
- Barasch, Alixandra, and Jonah Berger (2014), “Broadcasting and Narrowcasting: How Audience Size Affects What People Share,” *Journal of Marketing Research*, 51 (3), 286-99.
- Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs (2001), “Bad Is Stronger Than Good,” *Review of General Psychology*, 5 (4), 323-70.
- Baskin, Ernest, Cheryl J. Wakslak, Yaacov Trope, and Nathan Novemsky (2014), “Why Feasibility Matters More to Gift Receivers than to Givers: A Construal-Level Approach to Gift Giving,” *Journal of Consumer Research*, 41 (1), 169-82.
- Belk, Russell W. (1976), “It’s the Thought that Counts: A Signed Digraph Analysis of Gift-Giving,” *Journal of Consumer Research*, 3 (3), 155-62.
- Choi, Jinhee B., Kyu Kim, Incheol Choi, and Youjae Yi (2006), “Variety-Seeking Tendency in Choice for Others: Interpersonal and Intrapersonal Causes,” *Journal of Consumer Research*, 32 (4), 590-95.
- Dahl, Darren W., Rajesh V. Manchanda, and Jennifer J. Argo (2001), “Embarrassment in Consumer Purchase: The Roles of Social Presence and Purchase Familiarity,” *Journal of Consumer Research*, 28 (3), 473-81.
- Farber, Madeline (2017), “More Than 1 Million Unwanted Christmas Gifts Will Be Returned Today,” <http://time.com/money/4623541/national-returns-day-ups-christmas-gifts/>.

- Galak, Jeff, Julian Givi, and Elanor F. Williams (2016), "Why Some Gifts Are Great to Give But Not to Get: A Framework for Understanding Errors in Gift Giving," *Current Directions in Psychological Science*, 25 (6), 380-85.
- Gino, Francesca, and Frank J. Flynn (2011), "Give Them What They Want: The Benefits of Explicitness in Gift Exchange," *Journal of Experimental Social Psychology*, 47 (5), 919-22.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY: Guilford Press.
- Laran, Juliano (2010), "Goal Management in Sequential Choices: Consumer Choices for Others Are More Indulgent than Personal Choices," *Journal of Consumer Research*, 37 (2), 304-14.
- Polman, Evan (2012a), "Effects of Self-Other Decision Making on Regulatory Focus and Choice Overload," *Journal of Personality and Social Psychology*, 102 (5), 980-93.
- _____ (2012b), "Self-Other Decision Making and Loss Aversion," *Organizational Behavior and Human Decision Processes*, 119 (2), 141-50.
- Steffel, Mary, and Robyn A. LeBoeuf (2014), "Over-individuation in Gift Giving: Shopping for Multiple Recipients Leads Givers to Choose Unique but Less Preferred Gifts," *Journal of Consumer Research*, 40 (6), 1167-80.
- Ward, Morgan K., and Susan M. Broniarczyk (2011), "It's Not Me, It's You: How Gift Giving Creates Giver Identity Threat as a Function of Social Closeness," *Journal of Consumer Research*, 38 (1), 164-81.
- Yang, Yang and Jeff Galak (2015), "Sentimental Value and Its Influence on Hedonic Adaptation," *Journal of Personality and Social Psychology*, 109 (5) 767-90.
- Zhang, Yan, and Nicholas Epley (2012), "Exaggerated, Mispredicted, and Misplaced: When "It's the Thought That Counts" in Gift Exchanges," *Journal of Experimental Psychology: General*, 141 (4), 667-81.

Human-Object Relationships: How Consumers Interact with Analog and Digital Things in Analog and Digital Worlds

Chair: Donna L. Hoffman, George Washington University, USA

Paper #1: Ambiguity, Ambivalence and Fragility in Human-Object Relationships

D. Matthew Godfrey, University of Arizona, USA
Linda L. Price, University of Oregon, USA
Robert F. Lusch, University of Arizona, USA

Paper #2: Being Dumb in the Age of Smart: Analogue Object Entanglements

Mariam Humayun, York University, USA
Russell Belk, York University, USA

Paper #3: Enhancing Wellness: Melding Humans and Objects with Common Purpose

Hope Jensen Schau, University of Arizona, USA
Ignacio Luri, University of Arizona, USA

Paper #4: Consumer-Object Relationship Styles in the Internet of Things

Donna L. Hoffman, George Washington University, USA
Thomas P. Novak, George Washington University, USA

SESSION OVERVIEW

What emerges when consumers and objects interact? How do these emergent relationships impact consumers' lives? This special session draws on the far-ranging, diverse apparatus of assemblage theory (Canniford 2015; Delanda 2016; Price and Epp 2015), as well as Hodder's theory of entanglements (Hodder 2011; 2012; 2014), to examine the complex relational patterns that unfold as objects and humans interact.

Prior theory and research has highlighted object performativity and the role objects play in the socio-material ordering of consumers' lives (c.f. Epp and Price 2010; Kozinets, Patterson and Ashman 2016; Latour 1996; Verbeek 2004). The four papers in this session focus on the assemblage relationships that emerge as objects, be they analog or digital, interact with humans as they go about their analog or digital consumption pursuits.

The first paper by Godfrey, Price and Lusch ("**Ambiguity, Ambivalence and Fragility in Human-Object Relationships**") examines how ambiguity emerges from material forces that integrate or disintegrate an assembled object. Through in-depth ethnographic fieldwork, online research and consumer interviews involving shoe repair, the authors find the extent of a shoe's durability or fragility is always uncertain, leading to both ambiguity and ambivalence in the relationship between shoe, consumer, and repair service provider. This triadic service relationship extends conventional dyadic models by including the focal objects that define many service exchanges. Situated in a low technology context, the object-oriented ontological perspective of this research presents important implications for considering the life trajectories of things, including high technology objects.

Next, the paper by Humayun and Belk ("**Being Dumb in the Age of Smart: Analogue Object Entanglements**") explores why consumers are drawn to analog objects, even as our lives become more Internet-connected. Drawing on consumer narratives of using film cameras and paper notebooks, they find that analog objects let consumers disengage with the digital world at the same time that they create further object-on-object entanglements.

The third paper, by Schau and Luri ("**Enhancing Wellness: Melding Humans and Objects with Common Purpose**") inves-

tigates wearable technology use by three discrete app-related fitness communities over-time. The authors' findings highlight how wearable technologies are networked into consumers' technology and human relations. Importantly, extended interaction between the wearable technology and the user evolves and codifies relational norms. The power of these objects in the production of a wellness regime is illustrated, as is the relative omnipotence of the object in this performance, and the vulnerability of the regime to object fragility.

In the concluding paper ("**Consumer-Object Relationship Styles in the Internet of Things**"), Hoffman and Novak offer a conceptualization of the range of consumer-object relationship styles that have the potential to emerge when consumers interact with Internet-connected objects with sophisticated capacities of their own. Set in the smart home domain, the paper analyzes four broad classes of consumer-object relationship styles defined by the interpersonal circumplex model (Kiesler 1983). In this model, dimensions correspond to the agentic and communal expressive roles of the consumer and the object. The model reveals important implications for the role and evolution of communion and agency in object-human relationships.

Ambiguity, Ambivalence and Fragility in Human-Object Relationships

EXTENDED ABSTRACT

A material turn in social sciences over the past three decades brought non-human objects into examinations of social life. The work of Appadurai (1986), Kopytoff (1986) and Miller (1987), in particular, fueled multiple productive streams of consumer research. In this conceptualization, objects produced and consumed by people have social lives, interdependently tied to personal, collective, and societal uses and values (Appadurai 1986). This perspective aided development of a vital body of consumer research oriented toward symbolic properties of material objects (e.g., Wallendorf and Arnould 1988; Belk, Wallendorf, and Sherry 1989; Lastovicka and Fernandez 2005) and constantly changing and contingent human-object relations that make up social life (e.g., Epp and Price 2010; Canniford and Shankar 2013; Martin and Schouten 2014).

Objects are part of every human practice, and material things shape and give meaning to consumers' lives as much as consumers shape and give meaning to things (Miller 2010). However, theory focusing on the symbolic importance of objects abstracts away from the uniquely material value and characteristics of things. While materialist assemblage theories move beyond meaning-based models of human-object interactions to emphasize the interconnected, relational nature of social and material life (Law 1992; Latour 1996; DeLanda 2006), they also too easily hide or lose sight of the material essence of the object itself within a vast network of connections and effects.

We follow Harman's (Harman 2010, 2013, 2016) object-oriented philosophy by foregrounding the material life of the object within its social relations, rather than focusing on these relations themselves. Although material life drives and is driven by these relations, foregrounding the object itself enables a more precise conceptualization of the end of object life and of interventions such as repair, which attempt to alter an object's life trajectory. These are crucial aspects of an object's social and material life that have yet to be examined

in consumer research. While prior research has touched on aspects of object disposal (Price, Arnould, and Curasi 2000; Lastovicka and Fernandez 2005; Türe 2014), few studies have fully examined the “radical act” (Marcario 2015) of consumer repair.

By examining an object’s materiality against the backdrop of its relationships with other actors, we can understand the nature of both materiality and social life more fully. Further, we use the concept of material fragility to extend Harman’s object-oriented ontology, enabling a more precise and empirically grounded conceptualization of the end of object life than his philosophy currently provides. Our research demonstrates empirically that the ambiguity inherent in an object’s integrated, dynamic essence emerges from material forces that serve to integrate or disintegrate the assembled components of the object. An object-oriented ontological perspective allows us to uncover the processes and relationships that create a desire among human beings to intervene between the material forces of fragility and durability that shape objects’ life trajectories.

Our study explores the context of consumer shoe repair, in which cobblers provide an inherently material service to consumers through their shoes and boots. We conduct in-depth research that includes ethnographic fieldwork in shoe repair shops, interviews with consumers, and analysis of online data including consumer reviews, blogs, and discussion forums. We find that shoes have a powerful yet ambiguous physical singularity that emerges from the tension between the material forces that hold the shoes together and those that threaten to disintegrate them. The extent of a shoe’s durability or fragility is always uncertain, leading to both ambiguity and ambivalence in the relationship between shoe, consumer and repair service provider. External material forces of fragility act on shoes’ internal durability, resulting in inevitable aging and decay but also personalized form and meaning. Through these ambiguous and ambivalent relationships, however uncertain, decisions about repair emerge. Repair punctuates the relatively stable essence of a shoe and irreversibly alters its life. When successful, cobblers magically bring shoes back to life; when unsuccessful, shoes may face an early death.

Adopting an object-oriented ontological perspective changes how we conceptualize service exchanges by foregrounding the central role of focal objects in defining many exchanges. We move from a traditional conceptualization of a consumer-service provider dyad to a triadic relationship between consumer, service provider and object. The inherent opacity of a focal object’s material essence exposes the vulnerability of service exchanges in the face of materiality, a tension resolved temporarily and ambiguously through a magical service provision. In this way, triadic service exchanges such as repair more closely resemble a physician-patient relationship than a conventional seller-customer transaction. Although a patient or a shoe might have a common ailment, the unique essence of each patient or shoe necessitates tailoring every service. This requires learning and adapting during the process of service provision itself, as new information about the object emerges. In this way, our research has broad applications for managing the material forces of fragility and durability that shape objects’ life trajectories in diverse realms beyond shoe repair including healthcare, technology, housing and system infrastructures.

Being Dumb in the Age of Smart: Analogue Object Entanglements

EXTENDED ABSTRACT

We are constantly entangled with the digital world (Belk 2013). And yet, even as our possessions and identity projects move online and become digitized, there is a strong movement of analogue

consumption which is on the rise. From the unplugging ethos of “#digitaldetox” to rising sales of vinyl records: the materiality of the disconnected analogue objects seems to be steady (Magaudda 2011; Sax 2016; Bartmanski and Woodward 2016). Nokia recently re-booted the original 3310 touting it as the “dumb phone” that can accompany you on your holidays and provide the very basic functionality of making a call and offer limited internet access (Bogost 2017). With concerns about data privacy, even the Kremlin has invested in analogue typewriters (Irvine 2013). Negroponte (1998) argued that the digital would be felt by its absence, not its presence. We could even be said to be living in an era that is ripe for “postdigital” consumption (Berry 2015; Cramer 2015).

In this paper, we analyze why consumers still seek out “dumb” or analogue objects in a time where everything is “smart”. In particular, what object entanglements do such analogue objects create or undo? Objects have been of interest to researchers for decades (Levy 1959; Belk 1988; Belk, Wallendorf, and Sherry 1989; Fournier 1998; Belk, Ger, and Askegaard 2003; Miller 1987; Latour 1992). In recent years there has been an emphasis on understanding the materiality of objects in and of themselves (Borgerson 2005). Objects have been studied for the connections they invoke in the lives of a family, they have been analyzed in the process of becoming fetishes, they have been explored as heirlooms being passed down and even as souvenir objects and objects of value (Epp and Price 2010; Lastovicka and Fernandez 2005; Türe and Ger 2016; Decrop and Masset 2014; Marcoux 2016; Figueiredo and Scaraboto 2016). However, thus far the role of entanglements that objects create, maintain or truncate is yet to be fully examined.

Using Hodder’s theory of entanglements, we explore the notion of how things and objects depend and co-constitute each other and are immersed in various entanglements (Hodder 2011; 2012; 2014). Entanglements represent how humans and things are bound together in interrelationships of “dependence and dependency” (Hodder 2012, 89). For example, we have a dependence on social media networks to connect us: these dependences can be co-creative. *Dependency* on the other hand might run the risk of an asymmetric relationship and be constraining or disabling. For example, not being able to consume dinner until food photos are uploaded to Instagram. Objects and humans depend on each other to extend what they can do (Belk 2014; Hodder 2012).

We explore these ideas through the context of two brands that symbolize analogue consumption, Moleskine paper notebooks and Leica film cameras. While both brands have digital alternatives, our focus is on their analogue models that are not as seamlessly digitized. Based on consumer interview narratives from eight interviews, archival data from newspapers and online news publications and blogs and a netnography lasting from 2013-2015, we analyze how humans depend on these analogue objects that in turn are entangle them with connections to nostalgic and distant others. Our findings reveal that the use of such objects provides avenues of paradoxical entanglements *and* disentanglements from the digital world. Some consumers feel that the use of an analogue object allows them to be more mindful and present in their consumption as they invoke more intense labour and engagement. The material nature of the analogue objects also adds a sense of concreteness that the digital world sweeps away. We seek out some human-on-human entanglements which are mediated via these analogue objects as they in turn are enlivened by the connections they maintain to past others, be it famous writers or artists who used such objects. These objects allow for a sense of continuity to human existence.

These disconnected objects also provide a means of disentanglement from the corporations that create them and allow for avenues of escaping controlled consumption where all our data is

curated by algorithms that stare back at us in the forms of things we want. We also found that while these analogue objects provide the chance to disengage with the digital world, they also invoke other entanglements which perhaps these consumers are complicit with. Paradoxically, the analogue nature of such objects creates further object-on-object entanglement that is difficult to undo. Our findings reveal how asymmetric dependencies between objects and humans emerge and are maintained. To summarize, we find that we seek out dumb/analogue objects that depend on us more and that entangle us more in an age where smart objects may not need us as much. Our findings also have implications for material aesthetics of analogue objects and issues of consumer privacy and creative authenticity.

Enhancing Wellness: Melding Humans and Objects with Common Purpose

EXTENDED ABSTRACT

Everyone is bio-tracking. Tracking their steps, their miles, their heartrate, their speed, their flights climbed, and their calories. Wearable technologies permeate the mainstream marketplace and are touted as the most valuable assets in healthcare innovations (Collier and Randolph 2015). Surprisingly little consumer research focuses on wearables' wellness potential, specifically their wellness, medical diagnostic and treatment compliance capacity.

Perhaps more interesting is that wearable technologies have been inspiring wellness innovations for centuries (Rubenstein et al 1992). Even those that vehemently oppose the notion of alternative healthcare options as ancient practices, cite a specific window when these treatments entered Western culture as 1800-1850, now a century and a half ago (Mosley 2010). Depending on how we define wearables, they may even have been around since the first tools were used to craft the first jewelry (Calinescu 1996, Ogden 1982). Early jewelry was often fashioned to enhance spiritual and physical wellness and ward off negative fates. This talisman functionality of body adornments is not unlike wearable technology that monitors bodily activities with a purpose of promoting wellness as well as for ornamentation. Many organized religions continue to utilize jewelry as part of a spiritual health regime and to promote physical robustness (e.g., rosaries, crosses, Stars of David). These talismanic amulets shield the wearer from negative mortal outcomes, promote virility and enhance welfare in the afterlife. Precious stones have been mined since ancient times, treated and made into jewelry primarily to grant the healing power of the gems to the wearer (Kunz 1971). Stones and metals still comprise wellness amulets as complementary care options (Rao et al 2003). In essence, wearables are not new.

Using a process theoretic approach (Giesler and Thompson 2016) and an assemblage theoretic lens (Deleuze and Guattari 1987), we investigate the current use of wearable technologies as part of a networked wellness assemblage. Specifically, we focus on wearables' wellness capacities and their agentic properties as bodily adornments over time. We identify wellness wearable users as a subset of the larger US culture, and three discrete app-related fitness communities. We selected people beginning their journey with wearables to those with an extended history of use. Further, our data are longitudinal as we track the people's wellness assemblage over one year via digital diaries and multiple interviews, augmenting this data set with online forums dedicated to the use of wellness wearables (Nike+, MyFitnessPal and FitBit). Thus, our inquiry is the examination of change within a health centered assemblage connected to communities devoted to health promoting wearables. More specifically, our sampling frame consists of people who opt to adopt a wearable for a wellness regime and even at the onset make a commitment

to an extended trial. While these consumers may not achieve extended use, that is their stated goal which accompanies other commitment markers: weight loss goal, discrete fitness level, physician recommended lifestyle change, and treatment regimes. We focus on the relational ties, agentic roles and evolving capacities within the networked health assemblage.

Our preliminary results suggest that with extended use, the human object relationships change, becoming codified into wellness centered lifestyles. The key here is extended use and there is considerable attrition from wearable trial to extended use with most consumers' use fizzling out long before the one year mark. For those whose relationships endure to the year mark and beyond the human object relationship becomes *simpatico*. Extended use is seldom if ever casual. It is characterized by a sense of dependence. Wearable consumers wear the device multiple hours a day, often accounting for all conscious hours, and rely on the wearable to track critical success measurements in their wellness goal attainment. The wearable data is archived and at times shared with friends, family, goal-oriented coaches and physicians. Consumers with extended use patterns imbue the wearables with a sense of omnipotence bordering on magical, where the wearable is the arbiter of truth with the power to evidence for reward or punishment. Not far from the roots of sacred talismans, consumers afford these wearables perfect perception and moralize these results. Loss of an extended use wearable is tantamount to loss of a sacred object. Unmoored from their omnipotent object, consumers experience loss not only of the object but of the efficacy in the regime.

Our study contributes to the examination of wearables as wellness objects. We examine compliance to the health regime via the perceived omnipotence of the wearable object as record keeper. In perfect symbiosis, the human and object can achieve the greatest success. Breaking the established bond via loss or damage causes the user to experience loss and doubt their ability to succeed at their goals through regime compliance. In summary, we contribute to our understanding of extended human object relationships.

Consumer-Object Relationship Styles in the Internet of Things

EXTENDED ABSTRACT

The consumer Internet of Things (IoT) has the potential to revolutionize consumer experience. Previous research (Hoffman and Novak 2017) has developed an assemblage theory conceptual framework that details how consumer experience and object experience emerge from interactions in the consumer IoT. In that conceptualization, consumer experience, through its emergent properties and capacities, has two broad facets: extension experience and expansion experience. Hoffman and Novak (2017) also developed a parallel conceptualization of the construct of object experience, arguing that it can be perceived by consumers through the mechanism of anthropomorphic metaphorism, an object-oriented approach to anthropomorphism perceptions.

In this paper, we build on this conceptualization to examine the consumer-object relationship styles that emerge when consumers and objects interact in the assemblage. We consider emergent expressive roles of assemblage components in terms of distinctions along the agency and communion orientations in relationships with others (Kurt and Frimer 2015). Habitual interactions between consumers and smart objects are likely to reflect these orientations, with agentic interactions characterizing effectance and independence, and communal interactions emphasizing integrating with close others (Guisinger and Blatt 1994).

We propose that consumer-object relationship styles can be represented on a circumplex model by dimensions corresponding to the agentic and communal expressive roles of the consumer and the object (Horowitz, et. al. 2006; Kiesler 1983; Wiggins 1991). We believe this is the first application of Kiesler's (1983) circumplex model of interpersonal complementarity in the consumer behavior literature.

The interpersonal circumplex (Pincus and Ansell 2003; Wiggins, Trapnell and Phillips 1988) identifies four broad classes of relationship styles (Kiesler 1983). The styles are dynamic and evolving over time. The horizontal axis of the circumplex displays the degree of communal orientation, from indifferent on the far left (Horowitz, et.al. 2006) to warm and agreeable on the far right. The vertical axis represents agentic orientation, with dominant at the top and submissive at the bottom. The four styles specify interpersonal patterns between two entities according to their degree of complementarity on the dimensions of agentic and communal orientation (Kiesler 1983): a) complementarity, b) isomorphic complementary, c) semimorphic complementary, and d) anticomplementary.

Complementarity patterns involve reciprocity (i.e. opposite values) on agency and correspondence (i.e. similar values) on communion, representing balance in the regulatory system defining the relationship (Pincus and Gurtman 2006) and promoting interaction stability. Complementarity patterns (panel a) reflect master-servant relationship styles that are either trusting (high communal) or indifferent (low communal). In general, the object servant-consumer master relationship style occurs when the consumer agentic role is high and the object agentic role is low. If communal expression is high for both consumer and object, the object is a trusting servant of its consumer master, but if communal expression is low for both, then the object is an indifferent servant. Consumer servant-object master relationship styles are also possible when the consumer agentic role is low and the object agentic role is high.

Isomorphic complementary relationship styles are defined by nonreciprocity of agency and correspondence of communion, and involve identical agentic and communal expressions by consumer and object (panel b), are less stable than complementary styles, and motivate behaviors that increase separation of agentic roles (Horowitz, et.al. 2006). For example, consumers and objects are active partners in the relationship when agentic and communal expression is high for both (upper right of circumplex in panel b), but detached interactors when expression is low across the board (lower left of circumplex in panel b).

Semimorphic complementary relationship styles are reciprocal for agentic expression but do not correspond in communal expression (panel c). These styles are also less stable and motivate behaviors that encourage convergence of communal expressions. The final set of relationship styles are anti-complementary, involving non-reciprocal agentic expressions and non-corresponding communal expressions (panel d). These are the most unstable styles; they are minimally rewarding and present few opportunities for sustained interaction.

We address four research directions, including 1) measurement and validation of the relationship styles; 2) how the assemblage processes of territorialization and coding impact the emergence of different relationship styles; 3) the impact of relationship styles on consumer behavior outcomes such as task performance, and 4) the dynamics underlying the "relationship journey" (Ring and Van de Ven 1994) of consumers and objects.

REFERENCES

- Appadurai, Arjun (1986), "Introduction: Commodities and the Politics of Value," in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai, Cambridge, UK: Cambridge University Press, 3–63.
- Bartmanski, Dominik, and Ian Woodward. 2016. "Vinyl Record: A Cultural Icon." *Consumption Markets & Culture*:1-7. doi: 10.1080/10253866.2016.1212709.<http://dx.doi.org/10.1080/10253866.2016.1212709>
- Belk, Russell. 1988. "Possessions and the Extended Self." *Journal of Consumer Research* no. 15 (2):139-168. doi: 10.2307/2489522.<http://www.jstor.org/stable/2489522>
- Belk, Russell. 2013. "Extended Self in a Digital World." *Journal of Consumer Research* no. 40 (3):477-500. doi: 10.1086/671052. <http://ezproxy.library.yorku.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=90169610&site=ehost-live>
- Belk, Russell. 2014. "Digital Consumption and the Extended Self." *Journal of Marketing Management* no. 30 (11-12):1101-1118. doi: 10.1080/0267257X.2014.939217.<http://dx.doi.org/10.1080/0267257X.2014.939217>
- Belk, Russell, Güliz Ger, and Soren Askegaard. 2003. "The Fire of Desire: A Multisited Inquiry into Consumer Passion." *Journal of Consumer Research* no. 30 (3):326-351. doi: 10.1086/378613.<http://www.jstor.org/stable/10.1086/378613>
- Belk, Russell W., Melanie Wallendorf, and John F. Sherry (1989), "The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey," *Journal of Consumer Research*, 16(1), 1–38
- Berry, David M. 2015. "Postdigital Constellation." In *Postdigital Aesthetics: Art, Computation and Design*, edited by David Berry and M. Dieter, 44-57. London: Palgrave Macmillan.
- Bogost, Ian. 2017. "The Wisdom of Nokia's Dumbphone." *The Atlantic*, February 28, 2017.<https://www.theatlantic.com/technology/archive/2017/02/the-wisdom-of-the-dumbphone/518055/>
- Borgerson, Janet L. 2005. "Materiality, Agency, and the Constitution of Consuming Subjects: Insights for Consumer Research." *Advances in Consumer Research* no. 32:439-443.
- Calinescu, Adriana, (1996) ed. *Ancient Jewelry and Archaeology*. Indiana University Press,
- Canniford, Robin and Avi Shankar (2013), "Purifying Practices: How Consumers Assemble Romantic Experiences of Nature," *Journal of Consumer Research*, 39(February), 1051–69.
- Collier, Raymond, and Adriane B. Randolph (2015), "Wearable Technologies for Healthcare Innovation," *Southern Association for Information Systems Proceedings*.
- Cramer, Florian. 2015. "What Is 'Post-digital'?" In *Postdigital Aesthetics: Art, Computation & Design*, edited by David Berry and Michael Dieter, 12-26. London: Palgrave Macmillan.
- Decrop, Alain, and Julie Masset. 2014. "'This is a piece of coral received from captain Bob': meanings and functions of tourist souvenirs." *International Journal of Culture, Tourism and Hospitality Research* no. 8 (1):22-34. doi: 10.1108/IJCTHR-08-2013-0051.<http://www.emeraldinsight.com/doi/abs/10.1108/IJCTHR-08-2013-0051>
- DeLanda, Manuel (2006), *A New Philosophy of Society: Assemblage Theory and Social Complexity*, London: Continuum.
- Deleuze, Gilles and Félix Guattari (1987), *A Thousand Plateaus, trans. Brian Massumi*. Minneapolis: University of Minnesota Press.

- Epp, Amber M., and Linda L. Price. 2010. "The Storied Life of Singularized Objects: Forces of Agency and Network Transformation." *Journal of Consumer Research* no. 36 (5):820-837. doi: 10.1086/603547.<http://jcr.oxfordjournals.org/jcr/36/5/820.full.pdf>
- Figueiredo, Bernardo, and Daiane Scaraboto. 2016. "The Systemic Creation of Value Through Circulation in Collaborative Consumer Networks." *Journal of Consumer Research*. doi: 10.1093/jcr/ucw038
- Fournier, Susan. 1998. "Consumers and Their Brands: Developing Relationship Theory in Consumer Research." *Journal of Consumer Research* no. 24 (4):343-353. doi: 10.1086/209515. <http://www.jstor.org/stable/10.1086/209515>
- Giesler, Markus and Craig J. Thompson (2016), "A Tutorial in Consumer Research: Process Theorization in Cultural Consumer Research," *Journal of Consumer Research* 43(4).
- Guisinger, S and S Blatt (1994) Individuality and Relatedness, *American Psychologist*, 49, 104-111.
- Harman, Graham (2013), "An Outline of Object-Oriented Philosophy," *Science Progress*, 96(2), 187-99.
- Harman, Graham (2016), *Immaterialism*, Cambridge, UK: Polity Press.
- Hodder, Ian. 2011. "Human-Thing Entanglement: Towards an Integrated Archaeological Perspective." *Journal of the Royal Anthropological Institute* no. 17 (1):154-177. doi: 10.1111/j.1467-9655.2010.01674.x.<http://dx.doi.org/10.1111/j.1467-9655.2010.01674.x>
- Harman, Graham (2010), "Time, Space, Essence, and Eidos: A New Theory of Causation," *Cosmos and History: The Journal of Natural and Social Philosophy*, 6(1), 1-17.
- Hodder, Ian. 2011. "Human-Thing Entanglement: Towards an Integrated Archaeological Perspective." *Journal of the Royal Anthropological Institute* no. 17 (1):154-177. doi: 10.1111/j.1467-9655.2010.01674.x.<http://dx.doi.org/10.1111/j.1467-9655.2010.01674.x>
- Hodder, Ian. 2012. *Entangled: An Archaeology of the Relationships Between Humans and Things*. Oxford: John Wiley & Sons.
- Hodder, Ian. 2014. "The Entanglements of Humans and Things: A Long-Term View." *New Literary History* no. 45 (1):19-36. doi: 10.1353/nlh.2014.0005
- Hoffman, Donna L. and Thomas P. Novak (2017), "Consumer and Object Experience in the Internet of Things: An Assemblage Theory Approach," conditionally accepted, *Journal of Consumer Research*.
- Irvine, Chris. 2013. "Kremlin Returns to Typewriters to Avoid Computer Leaks." *The Telegraph*, July 11, 2013.<http://www.telegraph.co.uk/news/worldnews/europe/russia/10173645/Kremlin-returns-to-typewriters-to-avoid-computer-leaks.html>
- Kiesler, Donald J. (1983), "The 1982 Interpersonal Circle: A Taxonomy for Complementarity in Human Transactions," *Psychological Review*, 90 (3), 185-214.
- Kopytoff, Igor (1986), "The Cultural Biography of Things: Commoditization as Process," in *The Social Life of Things*, ed. Arjun Appadurai, Cambridge, UK: Cambridge University Press, 64-94.
- Kunz, George Frederick (1971), *The Curious Lore of Precious Stones: Being a Description of Their Sentiments and Folk Lore, Superstitions, Symbolism, Mysticism, Use in Medicine, Protection, Prevention, Religion, and Divination, Crystal Gazing, Birthstones, Lucky Stones and Talismans, Astral, Zodiacal, and Planetary*. Courier Corporation.
- Kurt, Didem and Jeremy Frimer (2015), "Agency and Communion as a Framework to Understand Consumer Behavior," in M. Norton, D. Rucker and C. Lamberton (Eds.), *The Cambridge Handbook of Consumer Psychology*. Cambridge, MA: Cambridge University Press, 446-475.
- Lastovicka, John L. , and Karen V. Fernandez. 2005. "Three Paths to Disposition: The Movement of Meaningful Possessions to Strangers." *Journal of Consumer Research* no. 31 (4):813-823. doi: 10.1086/426616.<http://www.jstor.org/stable/10.1086/426616>
- Latour, Bruno. 1992. "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts." In *Shaping Technology/Building Society: Studies in Sociotechnical Change*, edited by Wiebe Bijker and John Law, 225-258. Cambridge: MIT Press.
- Latour, B (1996), "On Actor-Network Theory," *Soziale Welt*, 47(4), 369-81.
- Law, John (1992), "Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity," *Systems Practice*, 5(4), 379-93.
- Levy, Sidney J. 1959. Symbols For Sale. *Harvard Business Review*, 117-124.
- Liu, Yuanli, Keqin Rao, and William C. Hsiao (2003), "Medical expenditure and rural impoverishment in China." *Journal of Health, Population and Nutrition* 216-222.
- Magaudda, Paolo. 2011. "When materiality 'bites back': Digital music consumption practices in the age of dematerialization." *Journal of Consumer Culture* no. 11 (1):15-36. doi: 10.1177/1469540510390499.<http://joc.sagepub.com/content/11/1/15.abstract>
- Marcario, Rose (2015), "Repair Is a Radical Act," *Patagonia*.
- Marcoux, Jean-Sébastien. 2016. "Souvenirs to Forget." *Journal of Consumer Research*. doi: 10.1093/jcr/ucw069
- Martin, Diane M. and John W. Schouten (2014), "Consumption-Driven Market Emergence," *Journal of Consumer Research*, 40(5), 855-70.
- Miller, Daniel. 1987. *Material Culture and Mass Consumption*. Oxford, UK: Basil Blackwell.
- Moseley, Christopher (2010), ed. *Atlas of the World's Languages in Danger*. Unesco.
- Negroponte, Nicholas. 1998. "Beyond Digital." *Wired*, December 1, 1998.<http://www.wired.com/1998/12/negroponte-55/>
- Ogden, Jack (1982), *Jewelry of the Ancient World*. New York: Rizzoli.
- Pincus, Aaron L. and Emily B. Ansell (2003), "Interpersonal Theory of Personality," in T. Millon and M. Lerner (Eds), *Handbook of Psychology: Personality and Social Psychology*, Vol 5, 209-229. Hoboken, NJ: Wiley.
- Pincus Aaron L. and Michael B. Gurtman (2006), "Interpersonal Theory and the Interpersonal Circumplex: Evolving Perspectives on Normal and Abnormal Personality," in S. Strack (Ed.), *Differentiating Normal and Abnormal Personality, 2nd Edition*, 83-111. New York, NY: Springer.
- Price, Linda L., Eric J. Arnould, and Carolyn Folkman Curasi (2000), "Older Consumers' Disposition of Special Possessions," *Journal of Consumer Research*, 27(2), 179-201.
- Ring, Peter S. and Andrew H. Van de Ven (1994), "Developmental Processes of Cooperative Interorganizational Relationships," *Academy of Management Review*, 19 (1), 90-118.

- Rubenstein, Harriet L., Bonnie B. O'Connor, Linda Z. Nieman, and Edward J. Gracely (1992), "Introducing Students to the Role of Folk and Popular Health Belief-Systems in Patient Care." *Academic Medicine* 67(9): 566-8.
- Sax, David. 2016. *The Revenge of the Analog: Real Things and Why They Matter*. New York: Public Affairs.
- Türe, Meltem (2014), "Value-in-Disposition: Exploring How Consumers Derive Value from Disposition of Possessions," *Marketing Theory*, 14(1), 53–72.
- Türe, Meltem, and Güliz Ger. 2016. "Continuity Through Change: Navigating Temporalities Through Heirloom Rejuvenation." *Journal of Consumer Research* no. 43 (1):1-25. doi: 10.1093/jcr/ucw011.<http://jcr.oxfordjournals.org/content/jcr/43/1/1.full.pdf>
- Wallendorf, Melanie and Eric J. Arnould (1988), "'My Favorite Things': A Cross-Cultural Inquiry into Object Attachment, Possessiveness, and Social Linkage," *Journal of Consumer Research*, 14(4), 531–47.
- Wiggins, Jerry S. (1991), "Agency and Communion as Conceptual Coordinates for the Understanding and Measurement of Interpersonal Behavior," In W.M. Grove and D. Cicchetti (Eds.), *Thinking Clearly About Psychology: Personality and Psychopathology*, Vol 2 (pp 89-113), Minneapolis: University of Minneapolis Press.
- Wiggins, Jerry S., Paul Trapnell, and Norman Phillips (1988), "Psychometric and Geometric Characteristics of the Revised Interpersonal Adjective Scales (IAS—R)," *Multivariate Behavioral Research*, 23(4), 517-530.

The Time of Our Lives: Examining Utility from Experiential Consumption Over Time

Chairs: Alixandra Barasch, New York University, USA
Gabriela Tonietto, Washington University, USA

Paper #1: The Material-Experiential Asymmetry in Discounting: When Experiential Purchases Lead to More Impatience

Joseph K. Goodman, The Ohio State University, USA
Selin A. Malkoc, The Ohio State University, USA
Mosi Rosenboim, Ben-Gurion University of the Negev, Israel

Paper #2: Underappreciating the Thrill of the Familiar

Ed O'Brien, University of Chicago, USA
Michael Kardas, University of Chicago, USA

Paper #3: The Influence of Creating Event Markers on Experienced Time and Enjoyment

Gabriela Tonietto, Washington University in St. Louis, USA
Alixandra Barasch, New York University, USA

Paper #4: Compromised Experiences, Compromised Relationships

Ximena Garcia-Rada, Harvard University, USA
Michael I. Norton, Harvard University, USA
Rebecca Ratner, University of Maryland, USA

SESSION OVERVIEW

Time may be the most precious resource consumers have at their disposal, and a growing literature suggests that consumers' decisions about how to spend their limited time are crucial determinants of their overall well-being (Aaker, Rudd, and Mogilner 2011; Mogilner, Chance, and Norton 2012; Van Boven and Gilovich 2003). While ample research highlights the importance of prioritizing experiences, there is limited research to guide people's choices of which experiences to consume (Bhattacharjee and Mogilner 2014) or how to consume them (Tonietto and Malkoc 2016).

Given the importance of considering the multiple sources of utility we derive from experiences across time (Elster and Loewenstein 1992; Kahneman 1994), this session contributes to our understanding of experiential consumption at multiple stages: *during* the actual experiences, *beforehand* while anticipating those experiences, and *afterwards* from the memories and symbolic meanings of those experiences. Each paper focuses on a different piece of utility from these stages: discounting of utility in anticipation (Goodman, Malkoc, and Rosenboim), predicted utility (O'Brien and Kardas), experienced utility (Tonietto and Barasch), and expected future utility (Garcia-Rada, Norton, and Ratner).

The first paper focuses on the discounting of utility in anticipation of future experiences. **Goodman, Malkoc, and Rosenboim** find that consumers are more impatient toward experiential compared to material consumption, discounting the future utility of experiences to a greater degree. This arises from the singular consumption episode characterizing most experiences, and declines when experiences are consumed over multiple episodes.

The second paper bridges between anticipated and experienced utility. **O'Brien and Kardas** show that people underestimate how much they will enjoy repeating an experience. Though repetition may seem to offer little utility in anticipation, people enjoy the thrill of the familiar more than they expect.

The third paper focuses on consumption utility. **Tonietto and Barasch** find that generating content that marks the passage of time (i.e., event markers) during experiences enhances utility. In particular, creating event markers increases engagement with the experience, leading time to feel as though it is passing more quickly, and ultimately increasing enjoyment.

Finally, the fourth paper examines trade-offs between experienced and future utility. **Garcia-Rada, Norton, and Ratner** find that consumers may choose a less desirable experience in order to share that experience with a co-consumer. Sacrificing utility during the experience can signal commitment to a shared future, and is associated with higher future utility from relationship satisfaction.

Understanding how different sources of utility shift and interact over time is essential to leading happier and more fulfilling lives. This session sheds new light on how consumers evaluate multiple sources of utility over time, as experiences approach, unfold, and impart enduring meaning. All four projects are working papers with at least three studies completed. Given the widespread applicability of the issues discussed, we expect this session to attract researchers interested in utility and experience, experiential versus material consumption, happiness and well-being, the psychology of time, affective forecasting, and satiation. We hope that these diverse approaches to studying experiential consumption will generate a lively and fruitful discussion.

The Material-Experiential Asymmetry in Discounting: When Experiential Purchases Lead to More Impatience

EXTENDED ABSTRACT

Consumers routinely decide whether and when to spend money on doing things (experiential purchases) or having things (material purchases), either in the present or future. When delaying consumption, consumers are impatient and show high rates of discounting (for a review see Berns, Laibson, and Loewenstein 2007; Urminsky and Zauberman 2014). Yet, most of the literature examining consumer impatience has predominantly considered monetary outcomes (i.e., delaying dollars), assuming (perhaps implicitly) that how the money will be spent is irrelevant to how consumers delay outcomes. We study systematic differences in impatience towards material and experiential purchases and propose a key distinction between the two—the duration under which a purchase is consumed.

Studies 1A and 1B initially tested our prediction using common manipulations of material and experiential purchases from the literature. In Study 1A participants first generated that they would likely make around \$100 that is either a material or experiential. Next, they completed a standard delay discounting task (e.g., Malkoc and Zauberman 2006), indicating the least amount of money they would be willing to accept to delay the purchase by one week, one month, or three months. To rule out alternative explanations, we also measured excitement and anticipated regret (neither had an effect and are thus not discussed further). Consistent with our prediction, we found a significant main effect for purchase type, where participants in the experiential condition ($M=756.28$) required higher premiums to delay than those in the material condition ($M=310.70$; $F(1,344)=29.75$, $p < .001$). We also found a significant time by purchase type interaction ($F(2,344)=12.92$, $p < .001$). The decline in discounting was steeper for experiences ($M_{1\text{week}}=1,444.79$, $M_{1\text{month}}=496.23$, $M_{3\text{months}}=327.83$; $F(1,189)=24.95$, $p < .001$) compared to material goods ($M_{1\text{week}}=409.07$, $M_{1\text{month}}=352.91$, $M_{3\text{months}}=170.13$; $F(1,196)=5.43$, $p < .01$), demonstrating an attenuation (accentuation) of present bias in material (experience) conditions.

In Study 1B participants considered delaying either a \$950 couch (material) or \$950 vacation (experiential) by 1 week, 1 month, and

3 months (within). We again found a main effect for purchase type, indicating that participants in the experiential condition ($M=618.60$) required higher premiums to delay, and thus were more impatient, than those in the material condition ($M=263.78$; $F(1,160)=30.90$, $p < .001$). As before, the time by purchase type interaction was also significant ($F(1,160)=31.55$, $p < .001$), showing a relatively weaker present bias in the material condition.

We designed the next three studies to rule out two alternative explanations: social nature (Study 2), re-scheduling difficulty (Study 3), and the hedonic nature (Study 4) of experiential purchases. We designed Study 2 similar to Study 1B, except the following additions: (1) a new third condition, asking participants to imagine going to a vacation alone, (2) a repeated choice method to elicit impatience and (3) several variables that help better understand the process (e.g., scheduling, time sensitivity, memory, positive emotions). We found a significant effect of product type on impatience ($F(2,303)=6.71$, $p < .01$): Consumers made fewer impatient choices when delaying a material purchase ($M=2.68$) compared to delaying a social experience ($M=3.69$; $t(303)=3.44$, $p < .001$) or a solitary experience ($M=3.53$; $t(303)=2.80$, $p < .01$). The solitary and social experience conditions did not differ ($t(303) < 1$). Testing our alternative processes, we found that while a concern for scheduling did lead to impatient choices ($F(2,292)=17.59$, $p < .001$), it did not mediate the effect of purchase type on impatience (nor did any of the other measures).

In Study 3, we used an incentive-compatible design, and controlled for rescheduling by asking participants to schedule a massage appointment (experience) or massager pick up (material) time prior to indicating their intertemporal preferences. They also scheduled their delay appointment/pick up the following week. They then made a series of ten choices, indicating preference between receiving their massage [massager] this week or next week for an additional compensation (from \$0 to \$45, with \$5 intervals). Consistent with our previous studies, participants who considered delaying the experience made significantly more impatient choices ($M=2.17$) than those who considered delaying a material item ($M=1.64$; $t(196)=2.14$, $p < .05$).

Study 4 manipulated the consumption goal (hedonic/utilitarian) and material/experiential nature. We found that experiences lead to more impatience ($M_{\text{experiential}}=4.34$, $M_{\text{material}}=3.50$, $F(1,351)=9.11$, $p < .01$, regardless of the consumption goal. Consumption goal did not moderate the material-experiential effect ($F(1,351) < 1$, $p > .6$).

Finally, Study 5 directly tested whether differences in the number of consumption episodes drives the effect. We pre-tested different purchases that matched on attractiveness, but differed in terms of being more or less material-experiential. We generated four items for each of the four replicates: (1) material purchase consumed over a long time, (2) material purchase consumed over a short time, (3) experiential purchase consumed over a long time, and (4) experiential purchase consumed over a short time. As expected, participants made significantly more impatience choices when delaying purchases consumed over a single episode ($M=4.02$) compared to multiple episodes ($M=3.47$; $F(1,187)=4.59$; $p < .05$). Since our material-experiential manipulation no longer varied in terms of consumption duration, we did not find a main effect of purchase type ($M_{\text{experiential}}=4.33$ vs. $M_{\text{material}}=3.51$; $F(1,187) < 1$; $p > .5$). That is, the material-experiential asymmetry on impatience was eliminated once consumption duration was controlled.

Our findings demonstrate that the type of purchase (i.e., material vs. experiential) systematically alters the extent of consumer discounting and impatience, indicating that a different consumption pattern over time can have significant effects on the compensation consumers require to delay a purchase. This result helps explain why

some research has found vastly differently discount rates across experimental stimuli, particularly in quantitative modeling and product adoption that has focused on durable (i.e., material) goods (Dube, Hitsch, and Jindal 2015). Further, our results highlight an instance where material purchases, that are ordinarily have negative associations (e.g., materialism, overspending), lead to a desirable outcome (i.e., less impatience).

Underappreciating the Thrill of the Familiar

EXTENDED ABSTRACT

People prefer novelty and variety when seeking to maximize their enjoyment for foods, vacations, social events, consumer goods, and many other everyday experiences (McAlister and Pessemier 1982; Kahneman and Snell 1992; Ratner, Kahn, and Kahneman 1999; Read and Loewenstein 1995; Simonson 1990)—consuming or doing something “new” rather than something that one has consumed or done in the past. Rather than choosing to re-experience the same things over and over again, people tend to quickly abandon familiar entities for newer, frequently more expensive, alternatives.

Why? Almost all previous research on novelty and variety has focused on the allure of the newer alternatives by which people are tempted (e.g., in advertising efforts that highlight desirable updates: Fennis and Stroebe 2010). From this perspective, an aversion to repetition reflects people’s imagination of the future novel experience, often an exaggeration of its value if actually acquired (Wilson and Gilbert 2003). However, people might also misconstrue the *familiar* experience, by underappreciating the richness that could be reaped if actually repeated. Hedonic states, like a pleasurable taste while eating food or feeling excited while watching a movie, are considerably more intense, more absorbing, and more dynamic in the moment of consumption compared to their simplified, stripped-down, and static mental representations (Ariely and Loewenstein 2006; Hsee and Zhang 2004; Morewedge et al. 2010; Robinson and Clore 2002). Doing the same thing over and over again may therefore provide unique immersive thrills in the actual moment (e.g., sustained affective/visceral sensations; discovering missed details and nuances; developing new interpretations) but in one’s mind seem like a tedious overdose of the same simplified thing. An aversion to repetition could reflect a mistaken intuition about the remaining value hidden in the familiar.

To address this question, participants were exposed to an enjoyable activity and reported their reactions. Some were asked to repeat the activity a number of times in a row and rated each exposure. Others simply imagined repeating the activity and predicted their reactions. Five studies followed this procedure, across a variety of experiential domains. This affords a conservative test because immediate repetition (versus after some delay) may promote *actual* dullness, working against the hypothesis.

Study 1 was conducted in naturalistic settings with visitors at a science museum. All participants went through the Genetics exhibit, among the most popular at the museum. Afterwards, they rated their enjoyment for the experience. Then, some were asked to go through Genetics again, and afterwards rated their enjoyment for this second visit. Others simply imagined repeating the exhibit and predicted their enjoyment.

Do people underappreciate the fun of repetition? Yes. Predictors assumed a decline: while the original experience was quite enjoyable, they believed that going through the exhibit again would be significantly less enjoyable ($B = .63$, $p < .001$). In reality, this was not the case: actual experiencers enjoyed the return visit just as much as the first time around ($B = .09$, $p = .55$).

In study 2, all participants played a video game for a set playing period, then were asked to actually play or to simply imagine playing the same game, from the same starting point, for six subsequent periods back-to-back. While the reactions of predictors and experiencers did not differ at first or second exposure ($Bs \leq .36$, $ps \geq .11$), predictors significantly underestimated their excitement for replaying the game a third, fourth, fifth, and sixth time in a row ($Bs \geq .78$, $ps \leq .001$).

In study 3, all participants watched a video of a motorcycle ride, three times in a row. Again, while predictors accurately reported their excitement for the initial viewing ($B = .02$, $p = .94$), they significantly underestimated their excitement for re-watching a second and third time in a row ($Bs \geq .49$, $ps \leq .04$).

In study 4, all participants viewed a collage of evocative photographs (e.g., an image of a cliff diver) for set viewing period, for a total of five consecutive periods. Yet again, predictors accurately reported their excitement for their initial exposure to the collage ($B = .24$, $p = .24$), but significantly underestimated their excitement for re-viewing the collage a second, third, fourth, and fifth time in a row ($Bs \geq .60$, $ps \leq .009$).

Study 5 ruled out general repetition effects (e.g., mere exposure), highlighting the role of simplification. Some participants completed the task from study 4: they saw the rich evocative collage and either experienced or imagined repeat viewings. Others saw a simplified collage that stripped away all richness and evocative imagery, holding its theme constant (e.g., a cartoon danger symbol rather than an actual cliff diver). For the rich collage, the misprediction replicated: although predictors and experiencers did not differ in their excitement at the initial exposure ($B = .20$, $p = .29$), predictors significantly underestimated their excitement for viewing a second, third, fourth, and fifth time in a row ($Bs \geq .54$, $ps \leq .04$). Repetition was, again, surprisingly thrilling. But for the simplified collage, this effect disappeared: participants *accurately* predicted their reactions to each viewing ($Bs \leq .28$, $ps \geq .17$). Unexpected thrills from repeated exposure may not derive from the act of repetition but from the simplified nature of how people mentally represent rich hedonic states. When repeating experiences that are already “simplified,” people’s dulled intuitions about repetition can serve them well.

Unfortunately for the rational decision maker, most enjoyable activities are hedonically rich, not dull. An aversion to repetition may generally pose a problem. Because people may avoid repeating these experiences in daily life, they rarely discover the hidden benefits of actually doing so. Instead, people pay a novelty premium. Previous research has touted many benefits of novelty and variety for individual wellbeing (Lyubomirsky, Sheldon, and Schkade 2005), but a growing societal emphasis on the “new” may also explain growing consumption waste (OECD 2014). Before intuitively seeking something new, knowing to consume the same thing a few more times might help reduce costs while also maximizing the value of the thing itself. Repetition too could add a (surprising) spice to life.

The Influence of Creating Event Markers on Experienced Time and Enjoyment

EXTENDED ABSTRACT

Consumers commonly create content about aspects of an experience as it unfolds. For example, during an experience, consumers often write posts for real-time social media updates and frequently send messages to others (Ahonen 2013) about their experience.

Importantly, when consumers generate information during an experience, they punctuate the intervening events within the experience, creating event markers. Prior research suggests that such mark-

ers can alter retrospective time perception and make events feel more distant (Zauberman et al. 2009), while related work suggests that reminders of past events can enhance utility from memory (Zauberman, Ratner, and Kim 2009). However, no past research investigates how creating markers during experiences might affect current time perception and enjoyment.

We propose that because activities which capture the unfolding experience increase engagement with the task (Diehl, Zauberman, and Barasch 2016), creating event markers will lead time to feel as though it is passing more quickly, resulting in the experience feeling perceptually contracted. That is, when consumers are more engaged, they tend to pay less attention to the passing of time, which can lead time to feel as though it is passing more quickly (Conti 2001). Finally, because consumers tend to infer greater enjoyment when time is perceived as passing more quickly (Gable and Poole 2012; Sackett et al. 2010), we further predict that creating markers within an experience will increase enjoyment.

Four studies examine how creating markers can alter experienced time and enjoyment. All of the studies follow a similar set-up: participants took a virtual tour by watching a first-person video of someone touring a particular city. Following the tour, we measured time perception using two items: how quickly did time seem to pass and how long did this tour experience seem to last (reverse-scored). Study 1 also measured how engaged participants felt and Studies 1-2 measured how much they enjoyed the experience.

In Study 1 ($N=165$), all participants imagined that they were experiencing a tour with a friend. Those in the *marker* condition were provided with five text boxes to write messages related to the ongoing experience to their friend at any point during the video. Those in the *control* condition simply watched the video and were not instructed to write any messages. We found the predicted effect, whereby those in the *marker* condition ($M=40.33$) perceived the experience as passing more quickly than those in the *control* condition ($M=27.50$, $p<.01$), and also felt more engaged ($M_{\text{Marker}}=56.62$, $M_{\text{Control}}=45.36$, $p=.016$) and enjoyed their experience more ($M_{\text{Marker}}=43.53$, $M_{\text{Control}}=35.78$, $p=.08$). Moreover, we found evidence for our proposed serial mediation (markers→engagement→time perception→enjoyment; 95% [CI]=0.418, 3.960).

In Study 2 ($N=210$), we sought to replicate the results of Study 1 while also including an additional control group, where participants receive messages from a friend rather than creating content. Demonstrating that the effect is a unique outcome of *creating* markers, rather than the result of mere distraction from any marker during the experience, we found that creating markers ($M=32.09$) led time to feel as though it had passed more quickly compared to both the control ($M=18.54$) and friend-generated content conditions ($M=23.09$, $ps<.02$), which did not differ from each other ($p=.25$). Further, self-generated markers ($M=30.66$) led the experience to be more enjoyable compared to both the control ($M=20.60$) and other-generated conditions ($M=18.61$, $ps<.01$), which did not differ ($p=.58$). Replicating Study 1, we found evidence for our proposed mediation (self-generated markers→time perception→enjoyment; 95% [CI]=0.731, 3.644).

In Studies 1 and 2, we operationalized marker-creation using sharing. While sharing behavior may be one particularly common way that markers are created in everyday life, any content that consumers create during an experience should serve as a marker and therefore show our effect. As such, in Study 3 ($N=202$), rather than sharing, participants in the marker creation conditions wrote self-notes about their experience. Further, we included an additional marker-creation condition in which participants wrote the notes whenever they were prompted to do so rather than at any time they

chose. We found that creating markers led participants to perceive the experience as passing more quickly whether participants controlled the timing of the markers ($M=53.10$) or not ($M=60.53$), compared to control ($M=46.07$, $ps<.05$). Study 3 demonstrates that the effect of marker-creation is robust to removing both the sharing aspect and the control that participants have over the timing of the markers.

Importantly, prior research defines markers as intervening events that directly relate to a past experience (Zauberman et al. 2009). As such, in order to test whether our observed effect is driven by relevant marker-creation (rather than from creating any content), in Study 4 ($N=107$) we manipulated the relevance of the content to the ongoing experience in a 2 (relevance; within-subjects) \times 2 (self vs. other-creation, between-subjects) design. Participants in this study went on two separate tours. Those in the self-generated markers condition were once again instructed to write messages to a friend during their tour experience, but to only write content that was directly relevant to the ongoing experience in one tour and only content that was irrelevant in the other tour (counter-balanced). Those in the other-generated conditions instead *received* messages from a friend that were relevant for one tour and irrelevant for the other (counterbalanced). We found the predicted interaction on time perception ($p=.014$) such that, for relevant content, self-generated markers ($M=42.81$) led time to pass more quickly compared to other-generated content ($M=32.62$, $p<.01$), but no such difference emerged for the irrelevant content ($M_{\text{Self}}=32.76$, $M_{\text{Other}}=33.18$, $p=.92$). Further, in the self-generated markers conditions, relevant content led time to pass more quickly compared to irrelevant content ($p<.01$), but no such difference emerged for the other-generated conditions ($p=.86$). This study therefore demonstrates that temporal markers must be self-generated and directly related to the ongoing experience in order to influence the experience of time.

We find that creating event markers during an experience can positively impact enjoyment by increasing engagement and leading to the sense that time is passing more quickly. This research contributes to the literature examining the effects of event markers while providing implications for marketers to improve consumer experiences by encouraging content-creation.

Compromised Experiences, Compromised Relationships

EXTENDED ABSTRACT

When taking a flight, faced with the choice of two uncomfortable adjacent seats in the last row of the plane, or two seats in the economy comfort section that are not next to each other, what do consumers in relationships choose? We explore decisions about such shared experiences and examine the consequences of these choices for satisfaction with both the experience itself and the relationship. We suggest that some interaction partners compromise the objective quality of an experience to share that experience with a co-consumer (such as a romantic partner) – and that such choices are associated with higher relationship satisfaction.

Previous work has shown that shared experiences can be more pleasurable and preferred over both solo experiences and material possessions (Capriello and Reis 2013). Sharing an activity with another person amplifies the experience (Boothby, Clark and Bargh 2014) and leads to more coherent evaluations (Ramanathan and McGill 2007). Moreover, consumers often feel inhibited from engaging in hedonic public activities alone as they anticipate negative inferences from others about their social connectedness (Ratner and Hilton 2015). We build on this work and suggest that consumers not only prefer sharing an experience with someone else over enjoying alone but that they will sacrifice objective quality of the experience

to enjoy the experience right next to a close other (H1). Additionally, we build on work on interpersonal closeness to demonstrate that the type and quality of a relationship can explain how consumers make choices for shared experiences. We argue that because consumers in close relationships perceive themselves as interdependent and focus on sharing their resources and perspectives with close others (Aron & Aron, 1986; Berscheid, Snyder, & Omoto, 1989) they will be more likely to choose shared worse experiences (H2A). Specifically, in the context of romantic relationships, we hypothesize that such sacrifices are associated with higher relationship quality (H2B).

In Studies 1A and 1B, we document this ubiquitous phenomenon. First, we analyzed Trip Advisor reviews of the interactive play “Sleep No More.” This is an experience that has been designed to be enjoyed solo: the company encourages visitors to have a unique solo experience and then exchange stories with other group members at the end. We obtained 675 reviews submitted by consumers who visited this show. Two coders read the reviews and identified how the person went through the play (1=alone, 2=with other people, 0=unclear). We find that 26.7% of the visitors decided to stay with their co-consumer(s) and that these people reported enjoying the experience significantly less ($M_{\text{review rating}}=3.23$, $SD=1.54$; $n=40$) than those who went through the experience alone ($M_{\text{review rating}}=4.39$, $SD=1.05$, $n=110$, $t(52.69)=4.42$, $p<.001$). In Study 1B, we document these sacrifices using a broader set of experiences ($N=200$). We asked participants to indicate whether they could recall a time when they had to choose between enjoying an experience with someone or taking a better experience but enjoying it separately or alone. Seventy-one percent said they could recall facing this decision, and 60% of these decisions were made over the last year. Taken together, Studies 1A and 1B suggest that choices between better experiences or shared experiences are common.

Studies 2A and 2B explored whether such seemingly suboptimal choices – worse experiences – may come with benefits: better relationships. We recruited participants in romantic relationships (Study 2A; $N=200$) and romantic dyads (Study 2B; $N=216$) and asked them to make choices for several experiences they could share with their romantic partner. We created multiple vignettes describing experiences that involved a decision between a “good apart” option and a “bad together” one. We manipulated the quality of the experiences by varying the level of comfort (e.g. seats for a flight), duration (e.g. time of a videogame), location (e.g. front row vs. last row seats for lecture), and perceived quality (e.g. basic vs. premium spa session). In these two studies, we observe that consumers generally prefer a “bad together” experience to a “good apart” one (proportion of people who chose “bad together” for each activity ranges from 50-96%) and that quality sacrifices are greater when there is more opportunity for interaction during the experience. Interestingly, we find that giving up quality of experience (i.e., choosing “bad together” experiences over “good apart” ones) positively correlates with relationship quality measures such as satisfaction, commitment, gratitude, and interpersonal closeness (these effects hold in our two samples, all $ps<.05$).

In the final two studies, we manipulate the type of experience (Study 3) and the type of relationship (Study 4) and examine how these two dimensions impact choices. In Study 3, we framed the same experience (a cooking class) either as utilitarian or hedonic and asked participants to choose seats ($N=200$). We observe that 77% of participants chose two adjacent seats in the last row of the class where they couldn’t see the instructor properly (over two non-adjacent first row seats) when they had a hedonic goal compared to 60% when they had a utilitarian goal ($\chi^2(1)=6.70$, $p=.010$). In Study 4, participants were asked to choose seats for a flight they were tak-

ing with their romantic partner, a close friend, or a distant coworker ($N=303$). We find that participants in the partner condition displayed the highest level of sacrifice (56.4% chose the two adjacent seats in the last row of the plane over two comfortable non-adjacent seats), followed by close friends (38.0%) and distant coworkers (11.8%; $\chi^2(2)=40.80, p<.001$).

Our results contribute to research on shared experiences, examining when and why consumers make quality tradeoffs for shared experiences with close others. Our archival data suggests that being alone can enhance the quality of the experience, but our relationships data suggest that being together leads to happier couples. Thus it appears that, in some cases, people must choose either to enjoy the experience or solidify their relationships: compromising an experience can help to keep relationships from being compromised.

REFERENCES

- Aaker, Jennifer, Melanie Rudd, and Cassie Mogilner (2011), "If money doesn't make you happy, consider time," *Journal of Consumer Psychology*, 21, 126-130.
- Ahonen, Tomi (2013), "Around the World with Mobile Global Insights and Regional Relevance of Mobile Marketing," <http://www.slideshare.net/vivastream/around-the-world-with-mobile-global-insights-and-regional-relevance-of-mobile-marketing-20847876>
- Ariely, Dan and George Loewenstein (2006), "The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making," *Journal of Behavioral Decision Making*, 19(April), 87-98.
- Berns, Gregory S., David Laibson, and George Loewenstein (2007), Intertemporal Choice—Toward an Integrative Framework, *Trends in Cognitive Science*, 11, 482–8.
- Bhattacharjee, Amit, and Cassie Mogilner (2014), "Happiness from ordinary and extraordinary experiences." *Journal of Consumer Research*, 41(1), 1-17.
- Boothby, Erica J., Margaret S. Clark, and John A. Bargh (2014), "Shared Experiences Are Amplified," *Psychological Science*, 25(12), 2209-2216.
- Caprariello, Peter A. and Harry T. Reis (2013), "To Do, To Have, or To Share? Valuing Experiences Over Material Possessions Depends on the Involvement of Others," *Journal of Personality and Social Psychology*, 104(2), 199–215.
- Conti, Regina (2000), "Competing Demands and Complimentary Motives: Procrastination on Intrinsically and Extrinsically Motivated Summer Projects," *Journal of Social Behavior & Personality*, 4, 189-211.
- Diehl, Kristin, Gal Zauberman, and Alixandra Barasch (2016). "How taking photos increases enjoyment of experiences." *Attitudes and Social Cognition*. 111 (August) 119-140.
- Dube, Jean-Pierre H., Günter Hitsch, and Pranav Jindal (2014), "The Joint Identification of Utility and Discount Functions From Stated Choice Data: An Application to Durable Goods Adoption," NBER Working Paper 18393.
- Elster, J., & Loewenstein, G. (1992). Utility from memory and anticipation. In G. Loewenstein & J. Elster (Eds.), *Choice over time* (pp. 213-234). New York: Russell Sage Foundation.
- Fennis, Bob M. and Wolfgang Stroebe (2010), *The Psychology of Advertising*, Hove: Psychology Press.
- Gable, Phillip A., and Bryan D. Poole (2012), "Time Flies When You're Having Approach-Motivated Fun: Effects of Motivational Intensity on Time Perception," *Psychological Science*, 14 (July).
- Hsee, Christopher K. and Jiao Zhang (2004), "Distinction Bias: Misprediction and Mischoice Due to Joint Evaluation," *Journal of Personality and Social Psychology*, 86(May), 680-695.
- Kahneman, Daniel (1994), "New Challenges to the Rationality Assumption," *Journal of Institutional and Theoretical Economics*, 150 (March), 18–36.
- Kahneman, Daniel and Jackie Snell (1992), "Predicting a Changing Taste: Do People Know What They Will Like?," *Journal of Behavioral Decision Making*, 5(July), 187-200.
- Lyubomirsky, Sonja, Kennon M. Sheldon and David Schkade (2005), "Pursuing Happiness: The Architecture of Sustainable Change," *Review of General Psychology*, 9(June), 111-131.
- Malkoc, Selin A. and Gal Zauberman (2006), "Deferring versus Expediting Consumption: The Effect of Outcome Concreteness on Sensitivity to Time Horizon," *Journal of Marketing Research*, 43 (4), 618–27.
- McAlister, Leigh and Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9(December), 311-322.
- Mogilner, Cassie, Zoë Chance, and Michael I. Norton (2012), "Giving time gives you time." *Psychological Science*, 23(10), 1233-1238.
- Morewedge, Carey K., Daniel T. Gilbert, Kristian Ove R. Myrseth, Karim S. Kassam and Timothy D. Wilson (2010), "Consuming Experience: Why Affective Forecasters Overestimate Comparative Value," *Journal of Experimental Social Psychology*, 46(November), 986-992.
- OECD (2014), "Society at a Glance 2014: OECD Social Indicators," http://dx.doi.org/10.1787/soc_glance-2014-en
- Raghunathan, Rajagopal, and Kim Corfman (2006), "Is happiness shared doubled and sadness shared halved? Social influence on enjoyment of hedonic experiences", *Journal of Marketing Research*, 43(3), 386-394.
- Ramanathan, Suresh and Ann L. McGill (2007), "Consuming with Others: Social Influences on Moment-to-Moment and Retrospective Evaluations of an Experience," *Journal of Consumer Research*, 34(4), 506–524.
- Ratner, Rebecca K. and Rebecca W. Hamilton (2015), "Inhibited from Bowling Alone," *Journal of Consumer Research*, 42(2), 266-283, doi: 10.1093/jcr/ucv012
- Ratner, Rebecca K., Barbara E. Kahn and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences for the Sake of Variety," *Journal of Consumer Research*, 26(June), 1-15.
- Read, Daniel and George Loewenstein (1995), "Diversification Bias: Explaining the Discrepancy in Variety Seeking Between Combined and Separated Choices," *Journal of Experimental Psychology: Applied*, 1(March), 34-49.
- Robinson, Michael D. and Gerald L. Clore (2002), "Belief and Feeling: Evidence for an Accessibility Model of Emotional Self-Report," *Psychological Bulletin*, 128(November), 934-960.
- Sackett, Aaron M., Tom Meyvis, Leif D. Nelson, Benjamin A. Converse, and Anna L. Sackett (2010), "You're Having Fun when Time Flies the Hedonic Consequences of Subjective Time Progression." *Psychological Science*, 21 (January), 111-117.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27(May), 150-162.

- Tonietto, Gabriela N., and Selin A. Malkoc (2016), "The Calendar Mindset: Scheduling Takes the Fun Out and Puts the Work In." *Journal of Marketing Research*, 53(6), 922-936.
- Urminsky, Oleg and Gal Zauberman (2016) "The Psychology of Intertemporal Preferences," *Blackwell Handbook of Judgment and Decision Making*, George Wu and Gideon Keren (eds), Wiley-Blackwell.
- Van Boven, Leaf, and Thomas Gilovich (2003), "To do or to have? That is the question." *Journal of personality and social psychology*, 85(6), 1193.
- Wilson, Timothy D. and Daniel T. Gilbert (2003), "Affective Forecasting," in *Advances in Experimental Social Psychology*, Vol. 35, ed. Mark P. Zanna, San Diego, CA: Academic Press, 345-411.
- Zauberman, Gal, Jonathan Levav, Kristin Diehl, and Rajesh Bhargava (2009). "1995 Feels So Close Yet So Far The Effect of Event Markers on Subjective Feelings of Elapsed Time." *Psychological Science*. 21 (December) 133-139.
- Zauberman, Gal, Rebecca K. Ratner, and B. Kyu Kim (2009). "Memories as assets: Strategic memory protection in choice over time." *Journal of Consumer Research*, 35(5), 715-728.

Eyes on the Prize: When Rewards Hurt vs. Help Motivation

Chairs: Kaitlin Woolley, Cornell University, USA

Ayelet Fishbach, University of Chicago, USA

Paper #1: How “Effort Balancing” Explains Dynamic Effects of Incentives on Motivation

Indranil Goswami, University of Buffalo, USA

Oleg Urminsky, University of Chicago, USA

Paper #2: Donate to Be a Hero: Social Power Moderates the Effect of Incentives on Donation

Zheshuai Yang, National University of Singapore, Singapore

Yan Zhang, National University of Singapore, Singapore

Yih Hwai Lee, National University of Singapore, Singapore

Paper #3: Immediate Rewards Render Activities More Intrinsically Motivating

Kaitlin Woolley, Cornell University, USA

Ayelet Fishbach, University of Chicago, USA

Paper #4: Journey Takes You Beyond the Destination: The Use of Linguistic Metaphor in Sustaining Post Goal-Attainment Motivation

Szu-chi Huang, Stanford University, USA

Jennifer Aaker, Stanford University, USA

SESSION OVERVIEW

Consumers use rewards to increase motivation, and rewards appear to work. Financial incentives successfully help consumers lose weight (John et al. 2011; Volpp et al. 2008a), stop smoking (Volpp et al. 2009), exercise more (Acland and Levy 2015; Charness and Gneezy 2009), and adhere to medication (Volpp et al. 2008b). Indeed, rewards can engender lasting behaviors, such as creating a habit to exercise even after their removal (Charness and Gneezy 2009).

Yet the effect of rewards on motivation is often unclear, as rewards can also hurt goal pursuit by crowding out intrinsic motivation (Deci and Ryan 1985; Lepper and Greene 1978). For example, providing thank-you gifts reduced the amount of money donors gave to charity (Newman and Shen 2012). The body of research presented in this session accordingly explores the nuanced ways in which rewards influence motivation. Across four papers, we investigate when rewards increase versus decrease motivation and, in particular, test effects of rewards on intrinsic motivation and post-reward engagement.

Specifically, the first two papers explore positive effects of rewards on motivation. In the first paper, Goswami and Urminsky show that the effect of rewards on reducing motivation (the crowding out effect) is temporary. Across four studies, they find that a short-term reduction in task engagement following a temporary reward is caused by a desire to balance effortful goal pursuit with the enjoyment of benefits. In the second paper, Yang, Zhang and Lee, in the context of donating, identify power as a moderator of the effect of rewards on motivation. In three studies, they find that whereas rewards reduce powerful individuals' desire to donate, rewards actually increase powerless individuals' donation tendency.

The last two papers explore the effect of reward timing on motivation. In the third paper, across five studies, Woolley and Fishbach find that immediate rewards increase intrinsic motivation (e.g., for exercising, visiting museums, and reading) more than delayed rewards. This effect is specific to intrinsic motivation, and does not generalize to an increase in extrinsic motivation. In the fourth paper, Huang and Aaker identify a novel factor, the use of metaphor, to frame the reward of goal attainment as part of the process, prevent-

ing disengagement from goal-congruent behaviors after goal attainment. Four experiments demonstrate that using a journey metaphor associates the rewards from goal attainment with the process of goal pursuit (vs. the outcome), thereby increasing motivation.

These papers explore a classic problem in goal pursuit, how to motivate behavior, and examine underlying processes that shed light on when rewards will increase versus undermine motivation. Further, they explore post reward and post goal attainment motivation, providing practical insights for increasing motivation and goal-congruent behaviors. This session will have broad appeal to scholars interested in incentives, donation behavior, motivation in general, and post goal attainment motivation in particular, as well as connections between these topics.

How “Effort Balancing” Explains Dynamic Effects of Incentives on Motivation

EXTENDED ABSTRACT

Incentives are fundamental to marketing, yet the widespread use of incentives raises potential concerns about the effects on intrinsic motivation. This concern originates with a large and influential literature which argues that conditional incentives can undermine or crowd-out intrinsic task interest, by changing either task perception or beliefs about own preferences (Deci and Ryan 1985; Lepper and Greene 1978). As a result, the change in belief or task perception is predicted to result in a persistent disengagement after incentives end (Deci, Koestner, and Ryan 1999).

Recent research has challenged this long-standing view, finding that the post-incentive reduction in engagement is brief when it occurs and is less likely to occur in highly rewarding situations (e.g., high payment or fun tasks; Goswami and Urminsky 2017). We test an “effort balancing” account, which reconciles previous findings and generates new predictions. In this view, post-incentive changes in task engagement are driven by a psychological desire to balance effortful goal pursuit with enjoyment of benefits. After exerting additional beneficial effort in response to modest external incentives, decision makers will temporarily prefer extra leisure to restore their perceived sense of balance.

In this paper, we test empirically predictions of the Effort-Balancing account that shed light on our understanding of intrinsic motivation. According to this account, to the extent that post-reward behavior is driven by a psychological desire, we expect that this desire can be either heightened or suppressed by situational factors. In a series of controlled experiments, we vary the desire to restore balance by manipulating aspects of the decision environment.

In our experiments, we track trial-by-trial engagement in an incentivized task before and even after rewards have ended. Participants make a series of choices between 30-second tasks, either a beneficial work task (a math problem) or a leisure task (watching a video). Repeated choices were grouped into three rounds – pre-incentive, during incentive, and post-incentive. Participants in the incentive condition were informed of the amount and duration of the incentive (e.g., 5 cents per correct answer for the next 10 tasks) at the beginning of the incentive round.

In Study 1 (N=437), we exogenously varied the effort exerted when rewards were available by having the computer assign the tasks in each round using a 2(reward, no-reward) x 2(effort-level in round

2: low, high) design. We hypothesized that the reward group required to exert more effort would have a heightened desire to restore balance compared to the reward group required to exert low effort, and this would manifest as a greater reduction in engagement after the rewards end, but would last only momentarily. Online participants chose the math task 63% of the time in the pre-incentive period. Immediately after the incentive ended, 51% of the online participants in the low-effort reward group chose to do the math task, compared to 41% in the high-effort reward group ($p=.009$ hierarchical regression, controlling for individual choices in round 1). However, the overall engagement with the math task recovered quickly, and overall round 3 there was no difference between the two groups (low-effort: 58% vs. high-effort: 54%), and both were similar to the no-reward controls, replicating the momentary nature of post-reward task disengagement.

In Study 2 ($N=702$), we used a 2(reward, no-reward) \times 2(pre-incentive experience vs. no pre-incentive experience) design to test the self-perception alternative account directly. If participants make inferences about their preferences from their own past behavior, they would be more sensitive to incentives when they have not already had a non-incentivized experience of choosing the task. However, we found no effect of prior experience. In the first choice after the incentive ended, a similar proportion of participants in the reward groups chose to do the math task in the two-round (no pre-incentive experience) and three-round conditions (63% and 56% respectively; difference $p=.12$). Overall, there was no difference in the average choices of the incentivized task during the entire post-incentive round (no pre-incentive experience: 65% vs. pre-incentive experience: 61%), consistent with the effort-balancing account, rather than self-perception.

Based on the motivational role of pride on perseverance (Williams and DeSteno 2008), we hypothesized that reflecting on task performance could reduce the psychological desire for leisure. In Study 3 ($N=217$), we added a second incentive condition in which we prompted participants to reflect upon and take pride in their effort, before they began their post-incentive round. After the incentive ended, the pride-reflection group chose to do the math task 75% of the time, similar to the non-incentive control group (74%) and marginally more than the no-intervention reward group (56%; $p=.065$).

In Study 4 ($N=134$), we distinguish between effort-balancing and depletion. We tested whether the reduction in post-incentive engagement is mitigated when choosing between leisure and a novel effort task. After the incentivized math-tasks ended, participants chose between videos and a similarly effortful verbal-spelling task. Compared to the control (65%), there was no reduction in engagement immediately after the rewards ended (63%; $p=.38$), or in the entire post-reward period (reward 41% vs. control 46%, *n.s.*). This demonstrates that incentivizing a specific beneficial effort does not reduce engagement with other types of beneficial effort, contained in a different mental account. From a practical standpoint, this suggests that marketers promoting healthy purchase using discounts are unlikely to see even a temporary reduction in consumers' motivation to buy other products from that brand after the promotion ends.

Taken together, our research replicates the temporary post-incentive reduction in task-engagement, due to a temporary desire for a break to balance effort and leisure after exerting extra effort for the incentive. We rule out depletion and self-perception as alternative accounts. The temporary reduction in engagement is mitigated when people exert less effort, take pride in their accomplishment, or make choices involving novel tasks.

Donate to Be a Hero: Social Power Moderates the Effect of Incentives on Donation

EXTENDED ABSTRACT

Early in the 1970's, Titmuss (1970) pointed out that providing incentives to blood donors might create an unintended effect of reducing blood supply. Later research confirms his projection, showing that the provision of extrinsic rewards could, in fact, undermine the intrinsic motive to help, thus leading to a reduction of altruistic behaviors (Deci, Koestner, and Ryan 1999; Deci and Ryan 1975; Gneezy and Rustichini 2000). Offering incentives also dilutes the signaling value of a donation behavior and makes it difficult to judge whether the donor is really trying to do good to others (Ariely, Bracha, and Meier 2009).

However, there is also research showing the opposite. For example, research finds that the introduction of monetary incentives in the market for live and cadaveric organ donations increases the supply of organs for transplant sufficiently to eliminate the very large queues in organ markets (Becker and Elias 2007). Thus, there is an unresolved inconsistency in the findings on the effect of incentives on donation behavior. Although we know much about why incentives reduce donation, we know very little about when and who are more likely to be affected by the unintended consequence of incentives. In this research, we study one important moderator of the effect of providing incentives, namely, perceived social power.

Social power is typically defined as asymmetric control over valued resources in a social relationship (Galinsky, Rucker, and Magee 2015). In this research, we suggest that perceived social power increases one's donation tendency when the donation is framed as a pure pro-social action. Emotional satisfaction, the enjoyment of enhancement of self-esteem and demonstration of competence, is recognized as one of the major self-based motives behind donations (Andreoni 1990; Batson and Powell 2003). We suggest that powerful individuals are interested in creating a heroic and noble self-image and anticipate a stronger emotional satisfaction when thinking about the act of donation. The feelings of self-satisfaction largely come from the fact that the act of donation demonstrates one's competence, one of powerful individuals' biggest advantage, in positively affecting the recipient's life. This implies that the positive effect of power on donation behavior will disappear, and sometimes even backfire, when incentives are offered. The effect of incentives on powerless individuals, however, can be very different. Donation generates less emotional satisfaction among powerless individuals who are still struggling with getting control over their life and environment. Thus, they are predicted to be less interested in making positive impacts on others and experiencing the emotional satisfaction derived from such prosocial actions. This also implies that self-benefiting incentives would have a positive effect on the powerless individuals.

We tested these predictions in three experiments. In Experiment 1, we manipulated whether monetary incentives were provided for a hair donation decision. Participants first were asked to recall an experience that they felt powerful or powerless. Next, the experimenter introduced to participants a charitable organization "Wigs for Kids" and presented himself as a volunteer from this organization. The experimenter then explained that the organization makes wigs with donors' hair for kids suffering from hair loss due to cancer. Then participants were randomly asked to read one of two advertisements. The two advertisements were identical except that one offered a monetary incentive. The headline for the no-payment conditions read "Donate Your Hair", whereas the one for the with-payment conditions read, "Donate Your Hair, Get \$20 Compensation". Afterwards, participants were asked to leave their names, emails and

cellphone numbers if they were willing to donate. Because such incentives would make one's donation behavior seem selfish and consequently stop people from deriving emotional satisfaction about themselves, we reasoned that incentives would reduce powerful individual's donation tendency. We also expect that incentives would increase powerless individual's donation tendency because it provides a tangible benefit for donation. As expected, offering \$20 reduced powerful participants' donation percentage from (48.7%) to (17.1%), $\chi^2(1) = 9.12, p = .003$, whereas offering \$20 significantly increased powerless participants' donation percentage from 17.5% to 48.7%, $\chi^2(1) = 8.72, p = .003$.

Self-benefiting incentives can also be non-monetary. For example, some organ-donation organizations try to persuade people to donate by arguing that donors enjoy the benefit of being able to continue living after death in another way. Experiment 2 adopted a non-monetary incentive in the design. To manipulate power, we had participants imagine that they were a boss or an employee. Participants then moved onto an ostensibly unrelated study which asked for their opinions about a cornea donation advertisement. They were randomly assigned to read one of two advertisements. One advertisement used a tagline of "donate your cornea", and the other "donate your cornea to continue to see the world". A pretest shows that the second advertisement highlighted more benefits to donors. Afterwards, participants indicated the extent to which they were willing to donate and how likely they would donate cornea after they passed away on 0 (very unwilling/unlikely) to 10 (very willing/likely) scales. A 2 (Power) \times 2 (Incentive) ANOVA on donation intention returned a significant interaction between power and advertisement type, $F(1, 194) = 4.35, p = .038, \eta_p^2 = .022$. Again, powerful participants showed a greater donation intention for the without-incentive advertisement ($M = 5.68, SD = 2.50$) than for the with-incentive advertisement ($M = 4.84, SD = 3.23$), $F(1, 194) = 2.10, p = .149$, but it caused an opposite effect among powerless participants ($M = 4.69, SD = 3.14$) for the without-incentive advertisement and ($M = 5.52, SD = 2.34$) for the with-incentive advertisement), $F(1, 194) = 2.25, p = .135$.

In experiment 3, we measured, instead of manipulated, power, and replicated our findings. This suggests that the interactive effect of power and incentives on donation does not hinges on the activation of the power concept.

Taken together, three experiments provide corroborative evidence that offering self-benefiting incentives reduces powerful individuals' donation intention but increases powerless individuals' donation intention. Thus, the research sheds light on when and who tend to be negatively affected by self-benefiting incentives in prosocial decisions.

Immediate Rewards Render Activities More Intrinsically Motivating

EXTENDED ABSTRACT

Can an immediate, extrinsic reward make exercising feel more like playing? Whereas prior research documented that extrinsic rewards crowd out intrinsic motivation (Deci and Ryan 1985; Lepper, Greene, and Nisbett 1973), we hypothesize that receiving an immediate (vs. delayed) reward can increase intrinsic motivation for activities consumers care about pursuing (e.g., exercising; visiting museums; reading). We predict that immediate rewards foster intrinsic motivation by strengthening the temporal association between an activity and its outcome, such that the activity becomes "an end in itself" (Kruglanski et al. 2013).

Most activities that consumers pursue offer both intrinsic and extrinsic rewards to some degree. At the gym, for example, intrinsic rewards include "having an enjoyable workout" and extrinsic rewards are external to a task, such as "losing weight" or "improving one's health" (Woolley and Fishbach 2016). An activity is intrinsically motivated to the extent that it is experienced as internally derived and the activity serves as an end in itself rather than as a means to another end (Fishbach and Choi 2012; Heath 1999).

Across five studies ($N=1125$), we explore whether immediate rewards, which increase the temporal activity-outcome association, render the experience of pursuing an activity as more intrinsically motivated—an end in itself. We explore this basic effect, as well as the possibility that immediate rewards increase intrinsic—but not extrinsic—motivation, that they do so by strengthening the association between the ends (outcome) and means (activity), and that only the timing of reward delivery matters for intrinsic motivation, whereas the size of the reward does not.

In Study 1, participants read rewards people receive from exercising and visiting a museum and indicated whether each activity was more similar to playing (intrinsic) or working (extrinsic). We framed rewards as arriving during the activity (immediate) or after the activity (delayed). For example, "Exercise that feels enjoyable [while/after] I do it." As predicted, participants perceived exercising as more intrinsically motivated in the immediate (vs. delayed) condition, $t(87) = 2.51, p = .014$. Similarly, participants perceived a museum visit as more intrinsically motivated (i.e., more similar to playing) in the immediate (vs. delayed) condition, $t(98) = 2.19, p = .031$. Thus, immediate (vs. delayed) rewards lead people to perceive exercising and visiting a museum as more intrinsically motivating.

In Study 2 participants completed an experimental task in exchange for chocolate. Participants received chocolate and the task simultaneously (immediate-condition) or learned they would receive chocolate after completing the task. We measured intrinsic motivation to pursue the experimental task using a four-item scale (enjoyable; interesting; more like fun; future interest; see Ryan 1982). As predicted, an immediate reward rendered an experimental task as more intrinsically motivated compared with a delayed reward, $t(99) = 2.57, p = .012$.

Study 3 tested whether an immediate delivery of an extrinsic financial incentive increases intrinsic motivation, and also added a no reward control group. Participants read a book excerpt in return for payment. In addition, they expected to receive an immediate bonus (\$1.00 now) a delayed bonus (\$1.00 in a month) or no bonus. As in Study 2, we measured the intrinsic experience of reading, and included a behavioral measure, examining participants' task selection during a free choice period absent a reward (Etkin 2016). As predicted, an immediate bonus increased the intrinsic experience of reading compared with control conditions (delayed and no bonus), $t(181) = 2.84, p = .005$. Participants in the immediate condition were also more likely to continue reading absent a reward (63.3%) compared with those in the delayed (44.4%) and no bonus conditions (50.8%), $\chi^2(1, 184) = .403, p = .045$, with no difference between the control conditions, $\chi^2(1, 124) = .51, p = .477$. In a follow up study, we examined temporal discounting as an alternative explanation, and find that the effect is driven by differences in reward timing, rather than reward magnitude.

Study 4 examined the specificity of the effect of immediate rewards on motivation to better understand the underlying process. Participants viewed a product advertisement that described an immediate arrival of rewards from using moisturizer (immediate-reward condition) or did not mention timing of rewards (delayed-reward condition). We measured intrinsic motivation to use the moisturizer

(enjoyable, positive experience) and extrinsic motivation (important, useful). As predicted, moisturizer use was more intrinsically motivated in the immediate versus delayed reward condition, $t(198) = 2.45, p = .015$, with no effect of timing on extrinsic motivation, $t(198) = .25, p = .800$.

To examine the process, Study 5 tested whether immediate rewards increase intrinsic motivation by strengthening the activity-outcome association. As in Study 4, participants viewed an advertisement for a moisturizer (immediate vs. delayed reward) and completed intrinsic and extrinsic measures. To capture the degree of overlap between the activity (using moisturizer) and the outcome (smooth skin), we created seven pairs of circles that overlapped to different degrees, from completely separate to very overlapped (Aron et al. 1992). Replicating Study 4, using moisturizer was more intrinsically motivated in the immediate (vs. delayed) condition, $t(199) = 3.63, p < .001$, with no effect for extrinsic motivation, $t(199) = .69, p = .493$. Further, participants reported greater overlap between moisturizer and smooth skin in the immediate (vs. delayed) condition, $t(199) = 3.69, p < .001$. The increased association between moisturizer and smooth skin mediated the effect of immediacy on intrinsic motivation ($\beta_{\text{indirect}} = .15, SE = .06; 95\% CI [.05, .30]$).

Overall, we provide evidence that immediate rewards increase the intrinsic experience of activity pursuit. Our research suggests marketers can harness immediate rewards to increase the intrinsic experience of activity engagement, with implications for increased persistence. For example, airlines can offer promotions to customers immediately after a flight, potentially increasing customers' intrinsic experience of using their airline.

Journey Takes You Beyond the Destination: The Use of Linguistic Metaphor in Sustaining Post Goal-Attainment Motivation

EXTENDED ABSTRACT

People pursue goals throughout their lives. Students attend study groups to excel in school, and dieters count calories and monitor portion sizes to lose weight. While some of these pursuits may end with failure, many end with success—the goal is attained. However, despite the frequent occurrence of goal attainment experiences, prior literature remains relatively silent on what happens after a goal has been attained. Attaining a goal implies that one can now disengage from actions directed at achieving this goal (Ferguson and Bargh 2004; Forster, Liberman, and Higgins 2005). This post-attainment disengagement could be detrimental, however, as goal-congruent behaviors could be beneficial by themselves. Consider, for instance, those who achieved a weight-loss goal but begin eating poorly again, or students who completed their education but stop acquiring knowledge.

In this research, we propose that one variable that sustains goal-congruent actions post goal attainment is how meaningful the goal acquisition process is (Baumeister, Vohs, Aaker, and Garbinsky 2013). To do so, we explore the use of metaphor, a cognitive tool that shapes people's perception of an experience without changing the experience itself (Kövecses 2010; Landau, Meier, and Keefer 2010). We show that adopting a journey metaphor (compared to no metaphor or a destination metaphor) helps people derive greater meaning from the attained goal and thus become more motivated to continue goal-congruent behaviors.

We began with two pilot studies that compared the journey metaphor against a control and a destination metaphor. All participants first listed a learning or fitness goal they recently attained, and indicated on a 100-point slider where they were right now on this

goal as a check. The text then invited those in the journey [destination] condition to take a moment to: "...see yourself actually working [actually attaining this goal], taking the necessary steps *during this journey* [reaching this final destination], and have this picture in your mind." In Pilot Study A, participants received additional text prompts to enhance the effectiveness of linguistic metaphor, e.g., to think about the steps they took during the journey [vs. what reaching this destination is like for them]. In Study B, participants received additional visual aid instead of text prompt; they saw a picture of a black-and-white country road with the word Journey [Destination] highlighted at the beginning [ending] part of the road. Following procedures in metaphor literature, participants in the control condition did not do any metaphor practice. The results of both studies showed that the journey metaphor stimuli successfully enhanced perceived continuity from the original goal-initiation state (i.e., who they were when they first started pursuing this goal) to the goal-attainment state; that is, the stimuli we designed indeed guided participants to adopt a journey (vs. no or destination) metaphor as intended (Landau, Meier, and Keefer 2010; Landau, Sullivan, and Greenberg 2009). We also ruled out alternative accounts such as perceived difficulty, effort, goal value, visualization vividness, and mood effects.

Next, Study 1 used linguistic metaphor to test its effect on executives who have successfully achieved a learning goal (applying business education to improve their corporate practices) in an executive program in Africa. Three on-site interviewees executed a 30-minute individually-guided thought practice (journey vs. destination metaphor) during the graduation ceremony. The content of the thought practice was transcribed and emailed to the participants. A cohort was excluded from this practice to serve as a control group. Six months after graduation, executives received the follow-up survey from the program and reported their goal-congruent behaviors in the past six months, e.g., "I have made changes to my supply chain that will help my company scale." Executives who described their goal attainment experience as a journey were more likely to continue goal-congruent behaviors after completing the program, comparing to not having metaphor or using a destination metaphor (the latter two groups did not differ).

Study 2 replicated the findings in Study 1 with a different group of goal achievers—dieters who have recently attained a fitness goal. In addition, we included a future-journey condition to rule out construal level as an alternative account. Three hundred dieters wrote about the fitness goal they recently attained, went through the same manipulation check, and then proceeded with the linguistic metaphor thought practice (journey vs. destination vs. future-journey). Those in the future-journey condition were asked to visualize themselves continue working for this fitness goal in the future, "to see yourself actually working, taking the necessary steps *to continue this journey*, and have this picture in your mind." The results revealed that participants in the journey condition were more motivated to continue goal-congruent actions than those in the destination and future-journey conditions (the latter two groups did not differ). Further, follow-up survey on actual behaviors after two weeks revealed the same pattern.

Next, Study 3 examined the driving role of meaning among students who recently completed an academic goal. College students were assigned to either a journey or destination metaphor condition to describe their goal attainment experience and the actions they took. They then reported their desire to continue these goal-congruent behaviors, as well as the meaning they derived from the completed pursuit. As predicted, the students who used the journey (vs. destination) metaphor derived greater meaning, which led to greater

willingness to continue taking goal-congruent actions (mediational path index = .0801, 95% CI = .0115 to .1994).

Lastly, Study 4 employed a Metaphor (journey vs. destination) × Goal Initiation (autonomous vs. imposed) design among college students who recently completed an academic goal. We obtained our hypothesized effect of journey (vs. destination) metaphor among students who achieved the academic goals they autonomously adopted for themselves, but not for those who achieved the academic goals others imposed on them. This finding provided further support that the impact of metaphor on goal-congruent behavior occurred by providing meaning; when the achieved goals were imposed by others, the meaning one could derive is limited, rendering the journey metaphor less effective. The results are discussed in light of extant research on goal pursuit, metaphor, and meaning.

REFERENCES

- Acland, Dan, and Matthew R. Levy (2015), "Naiveté, Projection Bias, and Habit Formation in Gym Attendance," *Management Science*, 61 (1), 146-60.
- Andreoni, James (1990), "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving," *The Economic Journal*, 100 (401), 464-77.
- Ariely, Dan, Anat Bracha, and Stephan Meier (2009), "Doing Good or Doing Well? Image Motivation and Monetary Incentive in Behaving Prosocially," *The American Economic Review*, 99 (1), 544-55.
- Aron, Arthur, Elaine N. Aron, and Danny Smollan (1992), "Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness," *Journal of Personality and Social Psychology*, 63 (4), 596-612.
- Batson, C. Daniel, and Adam A. Powell (2003), "Altruism and Prosocial Behavior," in *Handbook of Psychology: Personality and Social Psychology*, Vol 5., Theodore Millon and Melvin J. Lerner, eds. Hoboken, NJ: John Wiley, 463-84.
- Baumeister, Roy F., Kathleen D. Vohs, Jennifer Aaker, and Emily N. Garbinsky (2013), "Some Key Differences Between a Happy Life and a Meaningful Life," *Journal of Positive Psychology*, 8 (6), 505-16.
- Becker, Gary S., and Julio Jorge Elias (2007), "Introducing Incentives in the Market for Live and Cadaveric Organ Donations," *The Journal of Economic Perspectives*, 21 (3), 3-24.
- Charness, Gary, and Uri Gneezy (2009), "Incentives to Exercise," *Econometrica*, 77 (3), 909-31. Deci, Edward L., and Richard M. Ryan (1975), *Intrinsic Motivation*. New York: Plenum Press.
- , and ——— (1985), *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.
- , Richard Koestner, and Richard M. Ryan (1999), "A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation," *Psychological Bulletin*, 125 (6), 627-68.
- Etkin, Jordan (2016), "The hidden Cost of Personal Quantification," *Journal of Consumer Research*, 42 (6), 967-84.
- Ferguson, Melissa J., and John A. Bargh (2004), "Liking Is for Doing: The Effects of Goal Pursuit on Automatic Evaluation," *Journal of Personality and Social Psychology*, 87 (5), 557-72.
- Fishbach, Ayelet, and Jinhee Choi (2012), "When Thinking about Goals Undermines Goal Pursuit," *Organizational Behavior and Human Decision Processes*, 118 (2), 99-107.
- Förster, Jens, Nira Liberman, and E. Tory Higgins (2005), "Accessibility from Active and Fulfilled Goals," *Journal of Experimental Social Psychology*, 41 (3), 220-39.
- Galinsky, Adam D., Derek D. Rucker, and Joe C. Magee (2015), "Power: Past Findings, Present Considerations, and Future Directions," *APA Handbook of Personality and Social Psychology*, 1, 421-60. Washington: DC: American Psychological Association.
- Gneezy, Uri, and Aldo Rustichini (2000), "Pay Enough or Don't Pay at All," *Quarterly Journal of Economics*, 115 (3), 791-810.
- Goswami, Indranil, and Oleg Urminsky (2017), "The Dynamic Effect of Incentives on Postreward Task Engagement," *Journal of Experimental Psychology: General*, 146 (1), 1-19.
- Heath, Chip (1999), "On the Social Psychology of Agency Relationships: Lay Theories of Motivation Overemphasize Extrinsic Incentives," *Organizational Behavior and Human Decision Processes*, 78 (1), 25-62.
- John, Leslie K., George Loewenstein, Andrea B. Troxel, Laurie Norton, Jennifer E. Fassbender, and Kevin G. Volpp (2011), "Financial Incentives for Extended Weight Loss: A Randomized, Controlled Trial," *Journal of General Internal Medicine*, 26 (6), 621-26.
- Kövecses, Zoltan (2010), *Metaphor: A Practical Introduction (2nd Edition)*. New York: Oxford University Press.
- Kruglanski, Arie W., Catalina Köpetz, Jocelyn J. Bélanger, Woo Young Chun, Edward Orehek, and Ayelet Fishbach (2013), "Features of Multifinality," *Personality and Social Psychology Review*, 17 (1), 22-39.
- Landau, Mark J., Brian P. Meier, and Lucas A. Keefer (2010), "A Metaphor-Enriched Social Cognition," *Psychological Bulletin*, 136 (6), 1045-67.
- , Daniel Sullivan, and Jeff Greenberg (2009), "Evidence That Self-Relevant Motives and Metaphoric Framing Interact to Influence Political and Social Attitudes," *Psychological Science*, 20 (11), 1421-27.
- Lepper, Mark R., and David Greene (1978), *Overjustification Research and Beyond. The Hidden Costs of Reward*. Hillsdale, NJ: Erlbaum.
- , ———, and Richard E. Nisbett (1973), "Undermining Children's Intrinsic Interest with Extrinsic Reward: A Test of the 'Overjustification' Hypothesis," *Journal of Personality and Social Psychology*, 28 (1), 129-37.
- Newman, George E., and Y. Jeremy Shen (2012), "The Counterintuitive Effects of Thank-You Gifts on Charitable Giving," *Journal of Economic Psychology*, 33 (5), 973-83.
- Ryan, Richard M. (1982), "Control and Information in the Intrapersonal Sphere: An Extension of Cognitive Evaluation Theory," *Journal of Personality and Social Psychology*, 43 (3), 450-61.
- Titmuss, Richard M. (1970), *The Gift Relationship (Volume 19)*. London: Allen and Unwin.
- Volpp, Kevin G., Leslie K. John, Andrea B. Troxel, Laurie Norton, Jennifer Fassbender, and George Loewenstein, (2008a), "Financial Incentive-Based Approaches for Weight Loss: A Randomized Trial," *JAMA*, 300 (22), 2631-7.
- , George Loewenstein, Andrea B. Troxel, Jalpa Doshi, Maureen Price, Mitchell Laskin, and Stephan E. Kimmel (2008b), "A test of Financial Incentives to Improve Warfarin Adherence," *BMC Health Services Research*, 8 (1), 272.

———, Andrea B. Troxel, Mark V. Pauly, Henry A. Glick, Andrea Puig, David A. Asch, ... and Elizabeth Corbett (2009), "A Randomized, Controlled Trial of Financial Incentives for Smoking Cessation," *New England Journal of Medicine*, 360 (7), 699-709.

Williams, Lisa A., and David DeSteno (2008), "Pride and Perseverance: The Motivational Role of Pride," *Journal of Personality and Social Psychology*, 94 (6), 1007-17.

Woolley, Kaitlin, and Ayelet Fishbach (2016), "For the Fun of It: Harnessing Immediate Rewards to Increase Persistence in Long-Term Goals," *Journal of Consumer Research*, 42 (6), 952-66.

Space and Consumption: Using Lefebvre to Examine an Interplay of Multi-Level Forces in the Consumptive Process of Space

Chair: Annetta Grant, Queen's University, Canada

Paper #1: Home is Where the Tension Is? Examining the Cultural Complexity of Creating the Space of Home

Annetta Grant, Queen's University, Canada

Jay M. Handelman, Queen's University, Canada

Paper #2: Home, Contested Home à la Home Sweet Home: Understanding Legitimacy in a Midcentury Modern Taste Regime

Ankita Kumar, University of Wisconsin, USA

Craig J. Thompson, University of Wisconsin, USA

Paper #3: How Multiple Stakeholders Produce Branded Urban Spaces

Rodrigo B. Castilhos, Unisinos Business School, Brazil

Paper #4: Representations of Space: Methodological Tensions in Spatial Consumer Research

D. Matthew Godfrey, University of Arizona, USA

Melanie Wallendorf, University of Arizona, USA

SESSION OVERVIEW

Consumer researchers have a growing interest in spatiality. Early spatial research in consumer literature considers the ways marketers engineer space to convey brand ideologies that enable certain consumption activities and prescribed values (Borghini et al. 2004). This stream of retail research, known as “servicescape” research, also focuses on understanding how consumers co-create meanings in marketer-structured spaces (Borghini et al. 2009; Kozinets et al. 2004; Sherry 1998). More contemporary research considers how consumers engage in resisting dominant ideas of what space is and how people should use it (Bradford and Sherry 2015; Visconti et al. 2010). Responding to a recent move to consider the “more phenomenological and social-relational dimensions” of space (Chatzidakis, McEachern and Warnaby 2015), in this session, we ask what is the interplay of multi-level forces by which space shapes, and is shaped by, consumption? We organize the session around Henri Lefebvre's (1991) theory of the production of space.

Lefebvre's theory is premised on a cultural understanding of space. This perspective departs from a view of space as a concrete, material object, to a view of space as socially created which, in turn, creates and organizes society. In this perspective, the creation of space entails an interplay between material and social forces, and the actions of people. This model focuses on the micro and macro-level forces that contribute to shaping space and its meanings, and how consumers negotiate these forces in the material enactment and cultural understanding of space. It also emphasizes the various contradictions that exist within space, and the historical evolution from which these contradictions derive.

Each paper in this session highlights one or two elements in Lefebvre's model to collectively arrive at an examination of the forces and processes that shape, and are shaped by space. Paper 1 examines the consumption surrounding home renovations to provide an understanding of the confluence of media, marketers and consumers that create meanings of the home, and how these meanings shape the material enactment of homes. Paper 2 examines the different expressions of taste and ensuing contestations over legitimacy of the dominant midcentury modern aesthetic between contemporary neighborhood residents with different cultural capital endowments.

Paper 3 distinguishes the key elements in the production of branded urban spaces, analyzing how they concur to constitute the material, imagined, and lived dimensions of space. Paper 4 explores the methodological tensions between consumers' lived spatial experiences and researchers' representations of these experiences to consider ways that researchers can better align theoretical and methodological perspectives on space.

This session informs a rising interest in spatiality research. We extend the role of resistance (Paper 2) and introduce the role of harmony (Paper 1) as components in the process of shaping space. We enrich understanding the strategic use of space in reproducing dominance (Paper 3). We also contribute to methodologies relevant to spatiality research (Paper 4). This session is relevant for researchers interested in spatiality as it expands a theoretical perspective of the multi-level societal forces and processes in the recursive shaping of space and consumption.

Home is Where the Tension Is? Examining the Cultural Complexity of Creating the Space of Home

EXTENDED ABSTRACT

The home is “the epicenter of...citizens' emotional bonds, leisure practices, and financial portfolios” (Rosenberg 2012). It shapes and defines one's place in the world. Consumer literature implies that people constantly create and recreate home through consumption practices. Consumer research draws attention to the home as a space laden with meaning and of ubiquitous importance in consumers' daily lives: it is central to a person's identity (Belk 1988; Tian and Belk 2005), the enactment of family (Epp and Price 2008; Epp and Price 2010; Wallendorf and Arnould 1991), and the enactment of taste, aesthetics, and refinement (Arsel and Bean 2013; Dion, Sabri and Guillard 2014; Üstüner and Holt 2010). This literature reveals inherent paradoxes in the way consumer researchers understand home. The home is a site for self-expression (Belk 1988), but it is also a site of conformity, to taste for example (Arsel and Bean 2010). The home is a site for family practices of doing crafts together at the kitchen table (Epp and Price 2010), which may conflict with social norms of tidiness that manifest in the home (Dion, Sabri and Guillard 2014). Thus, the home as the epicenter of consumers' lives is also a contentious site. The consumer literature tends to examine the formation of home through specific facets of what happens in the home (e.g., as a place for the individual, family, or taste). However, we also know that macro historical forces have a hand in shaping the meaning of home. Governments have historically encouraged home ownership through affordable mortgage policies. The home has come to occupy cultural importance, at the macro-level, to the prosperity of a country (Cohen 2004; Rudolph 2015). Therefore, the home is a space of incredible complexity and cultural importance, however, the ubiquity of the home masks its cultural complexity. The purpose of this work is to examine how consumers navigate the cultural paradoxes, multi-level forces, and overall work of creating and recreating the space we call home.

We employ Lefebvre's (1991) model of the production of space as a theoretical lens to understand how consumers negotiate and create home as a space. This model attunes us to the many macro and micro-level dynamics within which one is immersed when constructing the space called home. Using the context of home renovations, Lefebvre's

model focuses our attention to the creation of space as a negotiation between an historical understanding of the home (*spatial practice*), the representation of home by media and designers (*representations of space*), and the home as a site for the enactment of self (*lived space*). This context of home renovations is relevant as it captures consumers' experience of transforming a space. Consumer literature that examines public spaces demonstrates that underlying meanings of space become most salient when people physically transform the space (Bradford and Sherry 2015; Visconti et al. 2010). Our data provides a comprehensive view of the market surrounding home renovations. It includes an observation of the market and media surrounding home renovations, in addition to 21 depth interviews with consumers engaging in home renovations and four interviews with industry providers.

Our analysis leads to three major findings. First, the consumer experience of home renovations is characterized by stress and anxiety. We find that these feelings emerge from a misalignment between Lefebvre's notions of *representations of space*, or the space as represented by designers, magazines, and television shows, the *spatial practice*, or an understanding of space as the result of the historical understanding of space, and *lived space*, where images and symbols of what space should be are made material. We find that homeowners' experience of stress manifests from maintaining alignment between these nodes of space. Homeowners hold an ideal image for enacting their ideal life in the home, but struggle with understanding how to materially enact it in a way that aligns with the historical-cultural ideals of home.

In a second finding, consumers' stress stems from a perceived anonymous gaze in the home criticizing and judging their home. Based on informants' reports, this anonymous gaze is representative of a marketplace actor who is "more fashionable, more modern, and more with it" than our informant consumers. We propose the consumer is subject to a panopticon-like gaze that they appease by way of a market intermediary.

Thus, as a last finding, this work introduces the concept of the Market Visionary. The market visionary is adept at understanding both the consumer and the market, and, thus, it is well-positioned to guide homeowners in aligning the nodes of space that Lefebvre identifies in his model. In their role, market visionaries aid consumers to imbue renovation materials with meanings that are aligned with the consumer's identity. In so doing, the market visionary translates the representations of the ideal home into the homeowners' personal space and aligns the enactment of the consumer's ideal home in ways that both the market and consumer deem acceptable. In so doing, the Market Visionary helps to appease the anonymous gaze.

Our findings contribute to a strategic understanding of how the creation of space leads consumers to engage with the market. We introduce a new type of market intermediary who is deeply embedded in understanding both the market and the consumer, and the consumer's quest to bring space into cultural alignment between an historical understanding of the home, marketers' representations of home, and the home as a site for self-enactment. Lastly, the creation of space is commonly thought to occur through resistance (c.f. Visconti et al. 2010). Our findings show that balance and harmony are equally important aspects in the creation of space.

Home, Contested Home à la Home Sweet Home: Understanding Legitimacy in a Midcentury Modern Taste Regime

EXTENDED ABSTRACT

Taste has lately become a central domain of research in CCT (Arnould and Thompson 2005). While the most influential perspec-

tive employs a Bourdieuan lens to examine how consumers employ taste in the performance of identity and social distinction (Arsel and Thompson 2011; Bourdieu 1984; Holt 1998; McQuarrie et al. 2013; Üstüner and Holt 2010; Üstüner and Thompson 2012), more recently researchers have used experiential-practice theory accounts to direct attention toward the aesthetic pursuits of consumers and the market orchestration of taste (Arsel and Bean 2013; Hennion 2007; Maciel and Wallendorf 2017; Warde 2014). However, such trickle-down interpretations do not illuminate how consumers with different levels of cultural capital understand, interpret and challenge, from their particular socially situated subject positions, the normative aesthetic ideals perpetuated by cultural authorities (Holt and Thompson 2004; Üstüner and Holt 2010).

We address these issues in this paper, through an investigation of the ways in which contemporary homeowners in a postwar neighborhood in the Midwestern US, variously interpret the meanings and ideals of the midcentury modern (MCM) design aesthetic. We investigate how tastes are 'actually' practiced and what conflicts ensue from interactions between consumers possessing high and low levels of cultural capital (HCC and LCC respectively). This research is based on in-depth interviews with homeowners and visual analysis of the 13 homes. As a theoretical lens, we draw on Bourdieuan insights on taste (Bourdieu 1984; Holt 1998).

Participants' understandings and realizations of the MCM design aesthetic are determined by their field dependent cultural capital, but not generalized cultural capital. In practice, displays of cultural capital operate through the processes of singularization (Kopytoff 1986) and emulation. In this "legitimizing theatricalization" (Bourdieu 1990, p. 139), reproduction of the MCM home décor and taking a curatorial and informed attitude to the unique history and aesthetics of the homes by preserving the original wallpaper or "Cherokee Red" concrete floor become conspicuous markers of taste and qualify these HCC homeowners to participate in architectural tours, which grant them considerable symbolic capital. Interestingly, in an effort to achieve aesthetic purity or uniformity, heirloom furniture and articles of home décor are desacralized and either discarded or banished to the more private spaces of the home. In addition to valuing this aesthetic, the residents tend to idealize the midcentury practice of community (Boym 2001). Even maintaining tranquility in the neighborhood by helping older residents and being responsible dog owners and parents, are normative expectations in the recreation of the imagined midcentury ambience. On the other hand, the LCC articulation encompasses invocations of autonomy and private property rights. Thus, we have "two antagonistic world views" (Bourdieu 1984, p. 199), forced to reside closely, which inevitably leads to conflicts over what may be deemed legitimate taste.

Midcentury homes with small galley kitchens, dearth of storage space and carports are often incompatible with contemporary lifestyle practices. The architectural control committee from the 1950s has expired so residents are no longer legally bound to follow the original stringent design guidelines. Since many of the newer residents are paying premium prices and implicitly selecting into the neighborhood, their plans for modifications to the inside or more concerningly, to the exterior of the home are met with consternation when they disregard the original design aesthetic. We trace the unfolding of the dynamic of conflict and negotiation of compromise owing to collective pressure that leads to tenuous balances between communal and individual identity projects.

Bourdieu has argued that individuals perceive each other through a "symbolic veil of honor" attached to their practices and "misperceive the real basis of these practices: the economic and cultural capital that both underlies the different habitus and enables their

realization” (Weininger 2002, p. 145). In this upper middle-class research context, we find that the HCC group (which includes individuals with varying levels of economic capital) inflicts symbolic violence on the LCC groups that serves to impress upon the LCCs their lack of taste. They counter this affront with appeals to personal autonomy, private property rights and the plea that the MCM aesthetic is outmoded and impractical. However, through collectively exercised power, which recognizes the legitimacy of the MCM taste culture, the aberrant LCC individuals are forced to make reparations, which while not eliminating the offending architectural features, serve to make them less salient. Thus, the HCC and LCC groups have the different identity outcomes of aesthetic self-expression and aesthetic subordination.

The identification of these tensions adds to Arsel and Bean’s (2013) conceptualization of taste regimes. The experiential-practice theory perspectives tend to downplay (though not completely ignore) such struggles over taste in favor of analyzing how tastes are linked to practices. An interesting question that is posed by this research is what about the MCM aesthetic lends itself to this kind of conflict which appeared to be more or less managed by the Apartment Therapy discourses.

We investigate the undertheorized area of tensions between individuals with different levels of cultural capital forced to exist in close proximity to each other. In this analysis of the ‘politics of space’ we look at the taste practices through which individuals build symbolic capital within a field as well as the operations of symbolic violence and contestations over legitimacy of tastes. Finally, this study reveals the ideologies and subjective consumer experiences at play in consumption surrounding homes in an upper middle-class context (Holt 1998; Lung-Amam 2013; Miller 2010; Sherry 2000).

How Multiple Stakeholders Produce Branded Urban Spaces

EXTENDED ABSTRACT

Inspired by the spatial turn in social sciences (Soja 1980), recent developments in consumer research have started to discuss how market actors concur to produce different types of spaces and how space recursively shapes markets (Castilhos, Dolbec, and Veresiu 2017). These studies advanced pioneer accounts of the relations between the managed materiality of servicescapes and consumer experiences (Sherry 1998), shedding light on the many forms through which consumers and producers negotiate meanings and ideologies and appropriate commercial and public spaces through consumption and market practices (Bradford and Sherry 2015; Chatzidakis, Maclaran, and Bradshaw 2012; Maclaran and Brown 2005; Visconti et al. 2010). Although conflict and compromise between multiple market actors are more or less explicit in such an emerging stream, we still lack more systematic empirical analyses of how different stakeholders dynamically concur to produce different dimensions of space.

To address this theoretical blind spot, I deploy Lefebvre’s (1991) spatial triad to analyse the development of a branded urban space — a complex spatial entity that emerges in post-industrial cities, which includes private (shops, residences, and offices) and public (parks, streets, and natural resources) spaces and is bounded by a strong brand narrative. To Lefebvre (1991), the production of space unfolds in three intertwined and overlapping moments (or levels) of space: first, the spatial practice (material space) refers to the material geographies and concrete spatial forms; second, representations of space (imagined space) refer to the conceptualized space of urban planners, architects, policy makers, and artists among others; third,

representational spaces (lived space) refers to space as experienced by consumers, who can comply or resist to material and symbolic determinations. So how do market actors concur to produce material, imagined, and lived dimensions of space in branded urban spaces?

To answer my research question, I conducted an extended case study of the implementation of Jardim Europa neighbourhood (JE) in Porto Alegre, south of Brazil. Developed by a single firm, JE is a complex of upscale condominiums surrounding a large public park, which is located on the frontier between upscale and lower-class neighbourhoods, including squatter areas. Bounded by a brand narrative that caters to the aspirations of local upper-middle-classes and at the same time that excludes lower-class consumers, JE development unfolds through a complex set of negotiations between consumers, producers, and regulators. To account for these complex relations, I have collected three types of data from January of 2012 to December of 2016: first, I conducted interviews with residents from the condominiums and squatter areas as well as interviews with the developer’s employees, municipality representatives, and park users; second, I conducted participant observation in the neighborhood, especially at the park; third, I also collected archival data, specifically from the municipality, the local media, and the developer. My dataset is composed of 37 hours of audio recording, totaling 518 single-spaced pages of transcription, 46 pages of field notes, 577 pictures, 40 minutes of video footage, and more than 500 pages of archival data.

I distinguish three key elements in the production of branded urban spaces that recursively concur to constitute the three dimensions of space (Lefebvre 1991): first, architecture and urbanism relate to the material dimension of space by assembling and linking private spaces of family exclusivity with communal and public spaces of leisure, consumption, and contemplation that enable a self-rewarding daily life for condo residents. It also relates to the imagined dimension of space as its materiality constantly and carefully evokes sophistication, cosmopolitanism, and privilege; second, brand narrative relates to the imagined and lived dimension of space by as-signing meanings and ideals to the neighborhood’s materiality and by providing a discursive system that links material reality to daily consumption practices, offering prescriptions and normative cues that orient consumers’ spatialized experiences; third, spatial governance establish a link between material and lived space by normalizing behaviors and amenity uses, providing patrimonial maintenance, and reassuring isolation from the outside via integration between security systems and residents’ conduct inside the condominiums. Moreover, at the public level, spatial governance seeks to manage potential threats to JE’s value proposition that could arise due to the proximity with the popular surroundings through a systematic vigilance over lower-class groups in their uses of public spaces.

Taken together, these elements contribute to successfully legitimize JE as an upper-middle-class neighborhood in the city while recursively creating a shared identity among upper-class residents and reproducing objective and subjective forms of exclusion of lower-class consumers. This detailed analysis of the production of branded urban spaces sheds light to intensified forms of exclusion in the city. While traditional segregating spaces (e.g., gated communities) create a sharp division between insiders and outsiders (Caldeira 1996), branded urban spaces gradually colonize public space, controlling the spatial narrative and imposing a set of acceptable behaviors according to the dispositions and aspirations of targeted consumers. Lefebvre’s (1991) spatial triad provided a unique lens that allowed to unveil the complexity of the production of branded urban spaces, providing a more political and systemic perspective to the emerging body of spatial studies in consumer research.

Representations of Space: Methodological Tensions in Spatial Consumer Research

EXTENDED ABSTRACT

Attention to the importance of space and place has increased across the social sciences in recent decades. Consumer research has followed suit, examining a myriad of ways in which space influences culture and behavior, and vice versa (Castilhos, Dolbec, and Veresiu 2017). We extend this productive discussion through the methodological development of geographic ethnography, a novel combination of ethnographic and Geographic Systems (GIS) data and analyses.

Prior spatial consumer research tended to focus either on the macro-level forces shape that space and place, or on ways that consumers use or understand space and place as symbolically meaningful. These perspectives correspond with what Lefebvre (1991) terms spatial practice, or the reproduction of spatial orders, and representational space, or the contested and embodied meanings of space. Largely missing, however, are discussions of a third node of Lefebvre's spatial triad: representations of space, which are ways that order is imposed upon space through scientific codification of space and place. Researchers, like city planners, may fall prey to problems of representation through translating consumers' lived spatial experiences into data for analysis and publication.

Research based largely on qualitative interviews (e.g., MacLaran and Brown 2005) or longitudinal text analysis (e.g., Giesler and Veresiu 2014; Humphreys 2010) provide a rich understanding of the symbolic meaning and long-term social changes. However, these methods may run the risk of flattening out either space or time in ways that obscure their important dynamics. Ethnographic methods have the potential to bridge these gaps by capturing both spatial and temporal dynamics. However, we argue that consumer research has yet to fully realize this full potential. Studies such as those by Visconti et al. (2010), who employ participant observation to uncover contestations of the meaning and use of public space, and Bradford and Sherry (2015), who use ethnographic fieldwork to examine the domestication of public spaces, gather rich spatial data but still remain grounded primarily at the level of consumer meaning. In translating dynamic experiential observations into field notes, memos, photographs, and interview transcripts, much of the original spatial and temporal richness can be lost in translation.

We propose geographic ethnography as a methodological remedy that retains, as far as possible, the dynamics of time and space as observed and experienced in the study context. The method begins with spatially-oriented ethnographic fieldwork. In our research, we focus on a "public market" recently constructed as part of a wider urban redevelopment initiative. We observe, participate in, and talk with consumers, vendors, and management about the space as it changes and unfolds through two years of fieldwork. In addition to conventional field notes, we capture data in explicitly spatial formats. These include visual data such as video and photographs, maps drawn in field notes, and geocoded data captured from interviews and participant observation. Next, we situate these data temporally through the analysis of archival newspaper articles and planning documents that chronicle the history of public markets in the region from the early 1900s to the present. We also record temporal changes in the spatial data collected within and between visits to the field site. Finally, we utilize GIS software to map consumer movement across the city to understand the ways people move between the public market and other related consumption sites.

Through our geographic ethnography we find that public markets occupy a strikingly similar position in the contemporary United

States as they did at the beginning of the twentieth century. First, public markets offer a means for consumers, vendors, and developers to stake territorial claims in space. Consumers and vendors exert ownership over tables, chairs, and areas in the market. But public markets also act as vehicles for urban renewal and the territorialization and displacement that occur through these processes. Non-Anglo ethnic groups are either explicitly or implicitly excluded from full participation in these redeveloped urban spaces. Spatially, the public market spaces we studied play a less central role in these marginalized consumers' daily consumption practices.

Second, territorial claims are legitimized through social negotiations over ownership rights. These owners—whether social or legal—receive and maintain social legitimation by taking responsibility for spaces and objects through maintenance and care, benevolent interactions, and respect of the ownership rights of others. For example, café patrons in the market are welcome to work at communal tables for extended periods of time, but according to baristas, "people are supposed to bring their own dishes back." Over time, the spatial layout and roles permitted in public market spaces shift to accommodate these new "owners" and their practices—such as a new coffee shop bar and additional wifi-enabled seating.

Finally, people who are perceived as not taking adequate spatial responsibility compared to the rights they claim are not allowed to claim maintain their rights to public market spaces. Rights are typically lost through redevelopment and redistribution of space by actors with more power and socially legitimate claims to ownership of the space. For example, for several years families were permitted to picnic with outside food in a market courtyard, but when playful kids started throwing rocks management paved over their favourite gravel play area. Additionally, in the metropolitan region of our study, nearly all of the historical farmers' markets that survived more than a decade were located (or relocated) in predominantly white, affluent areas.

This research provides important points of discussion regarding the state of space, place, and "representations of space" (Lefebvre 1991) in consumer research. We show that by making research methods more spatially and temporally sensitive and explicit, scholars can push theory about space and place beyond current conceptualizations and toward a more holistic understanding.

REFERENCES

- Arnould, Eric J., and Craig J. Thompson (2005), "Consumer Culture Theory (CCT): Twenty Years of Research," *Journal of Consumer Research*, 31 (4), 868–82.
- Arsel, Zeynep, and Jonathan Bean (2013), "Taste Regimes and Market-Mediated Practice," *Journal of Consumer Research*, 39(5), 899-917.
- Arsel, Zeynep and Craig J. Thompson (2011), "Demythologizing Consumption Practices: How Consumers Protect Their Field-Dependent Identity Investments from Devaluing Marketplace Myths," *Journal of Consumer Research*, 37 (5), 791–806.
- Belk, Russell W (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15(2), 139-168.
- Borghini, Stefania, Nina Diamond, Robert V. Kozinets, Mary Ann McGrath, Albert M. Muñoz, and John F. Sherry. "Why are themed brandstores so powerful? Retail brand ideology at American Girl Place," (2009), *Journal of Retailing*, 85(3), 363-375.
- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*, Cambridge, MA: Harvard University Press.

- Boym, Svetlana (2001), *The Future of Nostalgia*, New York (NY): Basic Books.
- Bradford, Tonya, and John F. Sherry (2015), "Domesticating Public Space through Ritual: Tailgating as Vestival," *Journal of Consumer Research*, 42(1), 130-151.
- Caldeira, Teresa Pires do Rio (1996) "Fortified Enclaves: The New Urban Segregation," *Public Culture*, 8, 303-28.
- Castilhos, R. B., P.-Y. Dolbec, and E. Veresiu (2017) "Introducing a Spatial Perspective to Analyze Market Dynamics," *Marketing Theory*, 17(1), 1-21.
- Chatzidakis, Andreas, Morven McEachern and Gary Warnaby (2015), "Call for Papers: Proposed Special Issue on Consumption in and of Space and Place," *Marketing Theory*.
- Chatzidakis, Andreas, Pauline Maclaran, and Alan Bradshaw (2012), "Heterotopian Space and the Utopics of Ethical and Green Consumption," *Journal of Marketing Management*, 28(3-4), 494-515.
- Cohen, Lizabeth (2004), "A Consumers' Republic: The Politics of Mass Consumption in Postwar America," *Journal of Consumer Research*, 31(1), 236-239.
- Dion, Delphine, Ouidade Sabri, and Valérie Guillard (2014), "Home sweet messy home: Managing symbolic pollution," *Journal of Consumer Research*, 41(3), 565-589.
- Epp, Amber M., and Linda L. Price (2008), "Family Identity: A Framework of Identity Interplay in Consumption Practices," *Journal of Consumer Research*, 35(1), 50-70.
- Epp, Amber M., and Linda L. Price (2010), "The Storied Life Of Singularized Objects: Forces of Agency and Network Transformation," *Journal of Consumer Research*, 36(5), 820-837.
- _____ (2008), *The Birth of Biopolitics: Lectures at the College de France*, ed. Michael Senellart, trans. Graham Burchell, New York: Palgrave.
- Giesler, Markus and Ela Veresiu (2014), "Creating the Responsible Consumer: Moralistic Governance Regimes and Consumer Subjectivity," *Journal of Consumer Research*, 41(3), 840-57.
- Hennion, Antoine (2007), "Those Things That Hold Us Together: Taste and Sociology," *Cultural Sociology*, 1 (1), 97-114.
- Holt, Douglas B. (1998), "Does Cultural Capital Structure American Consumption?" *Journal of Consumer Research*, 25 (1), 1-25.
- Holt, Douglas B., and Craig J. Thompson (2004), "Man of Action Heroes: The Pursuit of Heroic Masculinity in Everyday Consumption," *Journal of Consumer Research*, 31 (2), 425-40.
- Humphreys, Ashlee (2010), "Semiotic Structure and the Legitimation of Consumption Practices: The Case of Casino Gambling," *Journal of Consumer Research*, 37(3), 490-510.
- Kopytoff, Igor (1986), "The Cultural Biography of Things: Commoditization as Process," in *The Social Life of Things*, ed. A. Appadurai, Cambridge: Cambridge University Press, 64-94.
- Kozinets, Robert V., John F. Sherry, Diana Storm, Adam Duhachek, Krittinee Nuttavuthisit, and Benet DeBerry-Spence (2004), "Ludic Agency and Retail Spectacle," *Journal of Consumer Research*, 31 (3), 658-672.
- Lefebvre, Henri (1991) *The Production of Space*, Blackwell: Oxford.
- Lung-Amam, Willow (2013), "That "Monster House" is My Home: The Social and Cultural Politics of Design Reviews and Regulations," *Journal of Urban Design*, 18, (2), 220-241.
- Maciel, Andre F., and Melanie Wallendorf (2017), "Taste Engineering: An Extended Consumer Model of Cultural Competence Constitution," *Journal of Consumer Research*, 43, 726-746.
- Maclaran, Pauline, and Stephen W Brown (2005), "The Center Cannot Hold: Consuming the Utopian Marketplace," *Journal of Consumer Research*, 32(2), 311-23.
- Miller, Daniel (2010), *Stuff*, Cambridge: Polity.
- McQuarrie, Edward F., Jessica Miller, and Barbara J. Phillips (2013), "The Megaphone Effect: Taste and Audience in Fashion Blogging," *Journal of Consumer Research*, 40 (1), 136-58.
- Rosenberg, Buck Clifford (2012), "Dangerous Houses: Scientific Lifestyle Television and Risk Management," *Home Cultures*, 9(2), 173-194.
- Rudolph, Nicole C. (2015) *At Home in Postwar France: Modern Mass Housing and the Right to Comfort*, Berghahn Books.
- Sherry, John F., ed. (1998) *Servicescapes: The Concept of Place in Contemporary Markets*, Lincolnwood, IL: NTC Business Books.
- _____ (2000), "Place, Technology, and Representation," *Journal of Consumer Research*, 27 (2), 273-78.
- Soja, Edward W. (1980), "The Socio-Spatial Dialectic," *Annals of the Association of American Geographers*, 70(2), 207-25.
- Tian, Kelly, and Russell W. Belk (2005), "Extended Self and Possessions in the Workplace," *Journal of Consumer Research*, 297-310.
- Üstüner, Tuba, and Douglas B. Holt (2010), "Toward a Theory of Status Consumption in Less Industrialized Countries," *Journal of Consumer Research*, 37(1), 37-56.
- Üstüner, Tuba and Craig J. Thompson (2012), "How Marketplace Performances Produce Interdependent Status Games and Contested Forms of Symbolic Capital," *Journal of Consumer Research*, 38 (5), 796-814.
- Visconti, Luca, John F. Sherry, Stefania Borghini, and Laurel Anderson (2010), "Street Art, Sweet Art? Reclaiming the "Public" in Public Place," *Journal of Consumer Research*, 37(3), 511-529.
- Wallendorf, Melanie, and Eric J. Arnould (1991), "'We Gather Together': Consumption Rituals of Thanksgiving Day," *Journal of Consumer Research*, 13-31.
- Warde, Alan (2014), "After Taste: Culture, Consumption and Theories of Practice," *Journal of Consumer Culture*, 14 (3), 279-303.
- Weininger, Elliot B. (2002), "Pierre Bourdieu on Social class and Symbolic Violence," *Alternative Foundations of Class Analysis*, ed. Erik Olin Wright, 119-180. [<http://www.ssc.wisc.edu/~wright/Found-all.pdf>]

What Makes for Impactful Reviews? New Perspectives on Factors Driving the Influence of Online Reviews

Chairs: Hristina Nikolova, Boston College, USA

Alexander Bleier, Boston College, USA

Paper #1: In Mobile We Trust: How Mobile Reviews Influence Consumers' Purchase Intentions

Lauren Grewal, University of Pittsburgh, USA

Andrew T. Stephen, University of Oxford, UK

Paper #2: Telling Both Sides of the Story: The Role of Risk in the Perceived Helpfulness of Online Reviews

Ann Schlosser, University of Washington, USA

Abhishek Borah, University of Washington, USA

Paper #3: How the Interplay of Consumption Mode and Time Delay Influences the Persuasiveness of Online Reviews

Hristina Nikolova, Boston College, USA

Alexander Bleier, Boston College, USA

Rebecca W. Hamilton, Georgetown University, USA

Paper #4: Relationship Norms in Response to Online Reviews in P2P Exchanges

Raji Srinivasan, University of Texas at Austin, USA

Nailya Ordabayeva, Boston College, USA

Wayne Hoyer, University of Texas at Austin, USA

SESSION OVERVIEW

When was the last time you booked a hotel without checking what others have to say about it online? More than 80% of consumers indicate that reviews from peers are an important determining factor for their purchase decisions (eMarketer 2016). Consumers also trust reviews to a much higher degree than marketer-initiated communications (eMarketer 2010). Yet, not all reviews are equally persuasive or useful to consumers. The goal of this session is to illuminate the factors that determine the impact of online reviews. Specifically, the four papers identify novel ways in which the device from which a review is posted (mobile vs. desktop, Grewal and Stephen), its content (one-sided vs. two-sided reviews, Schlosser and Borah; mentions of utilitarian or hedonic attributes, Nikolova, Bleier, and Hamilton), as well as product/service (purchase risk, Schlosser and Borah), consumer (relationship orientation, Srinivasan, Ordabayeva, and Hoyer; consumption mode (solo vs. joint), Nikolova et al.), and provider type and characteristics (P2P vs. commercial, professional vs. amateur, warm vs. competent, Srinivasan et al.) impact the usefulness and persuasiveness of online reviews.

First, Grewal and Stephen examine how the device from which an online review is posted influences its persuasiveness. Their findings show that mobile reviews are persuasive to consumers and lead to higher purchase intentions because such reviews are perceived as more effortful to write. Next, Schlosser and Borah study how the interplay of content (one-sided vs. two-sided reviews) and product characteristics (amount of purchase risk) impacts the helpfulness of reviews. They show that in contexts with low purchase risk (social, monetary, performance), consumers perceive two-sided reviews as more helpful than one-sided reviews; however when the purchase risk is high, two-sided reviews become less helpful to consumers than one-sided reviews. The third paper by Nikolova et al. continues the exploration of review content, examining how consumption mode (solo, joint) and time lag between consumption and review writing influence review persuasiveness. Their findings show that when there is no time lag between consumption and review writing, reviews

about joint consumption are more persuasive than those about solo experiences; however, as the time lag increases, solo reviews become more persuasive due to the greater number of statements about utilitarian attributes included in them. Finally, Srinivasan et al. examine how consumer and provider characteristics interact to influence the persuasiveness of online reviews in the context of peer-to-peer (P2P) exchanges. They demonstrate that consumers with communal (exchange) relationship orientation are more responsive to reviews of P2P (commercial) providers, amateur (professional) and warm (competent) P2P providers.

Altogether, this session provides important theoretical and practical insights into the factors (e.g., device, content, product, consumer and provider characteristics) that drive the persuasiveness and helpfulness of online reviews. Due to the wide-ranging insights offered by the researchers who approach the question of “what makes reviews persuasive and helpful” from unique and novel angles in contexts of increasing practical importance (e.g., increased use of mobile devices, social consumption, and the new sharing economy), we anticipate that this session will be of substantial interest to a broad audience at ACR.

In Mobile We Trust: How Mobile Reviews Influence Consumers' Purchase Intentions

EXTENDED ABSTRACT

The use of mobile devices has become ubiquitous in modern life. Over half the world's population now uses mobile devices; rightly making mobile the “defining technology of the age” (The Economist 2015). A common consumer-related use of mobile devices is the sharing of information with other consumers by creating user-generated content (UGC) and disseminating it through online platforms and social media. This includes posts on networks such as Twitter and reviewing on platforms such as TripAdvisor. This latter type of UGC—online ratings and reviews—is the focus of this research. In practice, some UGC sites differentiate between reviews posted from mobile versus non-mobile devices. For example, TripAdvisor uses a “via mobile” label to denote reviews from mobile devices. However, the extent to which such information impacts consumers is unknown.

While the device from which a consumer posts online reviews may seem inconsequential, we find this not to be the case. In fact, how consumers process and are influenced by online reviews can be affected by knowing if the information was generated on a mobile device (e.g., iPhone) or a non-mobile device (e.g., desktop computer). We find that knowing a review was written on a mobile device can make that review more persuasive due to the perceived effort to write the review (i.e., increased physical and cognitive requirements; Chae and Kim 2004; Sweeney and Crestani 2006). Building from previous literature (e.g., Kruger et al. 2004), we believe that when consumers perceive UGC has been more effortful to craft, there are conditions when consumers' purchase intentions will increase. Thus far, we've tested these “device-effort-purchase” lay-belief predictions using real data and four experiments.

Study 1 looks at real-world online review data from TripAdvisor covering 1,547,219 reviews for 2,379 hotels in the US between February 2012 and September 2015. TripAdvisor, in February 2012 began publicly labeling mobile reviews with a “via mobile” badge.

In testing the effect of this badge, controlling for many other factors, we find that reviews with this mobile indicator are voted by users as significantly more helpful ($b = .022$, $c^2 = 28.40$, $p < .001$). This finding suggests that the mobile reviews are deemed more useful, influential, and worth reading—which should lead to higher purchase intentions.

Study 2 ($N = 369$) uses an experimental design to examine the impact of knowing an online review was written on a mobile device on purchase consideration. In this study (and all subsequent studies) participants in all conditions viewed the same hotel review. All that varies is the device label on the review; “via mobile” in the mobile condition, “via desktop” in the desktop condition, and no device label in the control condition (this replicates all non-mobile reviews online).

We found a significant positive effect of mobile ($b = .17$, $p = .001$) such that participants who saw “via mobile” on the review were more likely to consider staying at the hotel compared to those who saw the desktop or control conditions. There was no significant difference in purchase intentions for those who saw the desktop condition and control condition ($b = -.01$, $p = .915$).

Study 3 ($N = 182$) uses a 2(mobile, non-mobile) \times 2(effort attribution, control) design to test whether consumers have a lay-belief that more effort goes into the review-writing process for a mobile compared to a non-mobile device (i.e., process by moderation). We found a significant interaction on purchase consideration ($b = -.158$, $p = .006$) such that the effect of mobile on purchase intent was positive and significant in the control condition when there was no effort attribution to interfere with the “device-effort” lay theory ($b = .20$, $p = .019$). The simple effect of mobile was not significant when participants believed there was equal effort put into the review regardless of device, i.e., when the effort lay theory was interfered with.

Study 4 ($N = 205$) examines how the “fit” between UGC and the device it was written on influence perceived effort. We predict that it is not always a case of mobile-written content being seen as more effortful; but rather, when there’s an incongruence between the device and the online platform, perceived effort increases. To test this, participants considered a device (mobile or desktop) and for different platforms rated the perceived effort (six items; $\alpha = .87$) and perceived fit between that device and the content. Mobile was perceived as more effortful for online reviews ($b = .18$, $p = .05$) and seen as a significantly worse fit for the content ($b = -.63$, $p < .001$). Importantly, in a different platform (Twitter), this effect was reversed. Desktop-written content was perceived as more effortful than mobile content ($b = -.48$, $p < .001$) and seen as a significantly worse fit ($b = .67$, $p < .001$).

Study 5 ($N = 414$) examines when the “device-effort” lay-belief does not influence purchase considerations in a 2(mobile, non-mobile) \times 2(positive, negative) design. The interaction effect of device type and review valence on purchase consideration was significant ($b = .22$, $p < .001$). The simple effect of mobile on purchase intent was positive and significant when the review was positive ($b = .52$, $p < .001$) but not when it was negative ($b = .09$, $p = .162$). Despite this difference in purchase intention across review valence, we found a main effect of device on perceived effort ($b = .40$, $p < .001$), such that mobile-written reviews were always seen as more effortful. Lastly, we ran a mediated moderation model (Model 15; Hayes 2013) to further test this relationship. We observed a significant index of moderated mediation ($b = .08$, $se = .03$, $CI_{95} [.02, .16]$), which specifies that the path from effort to purchase intentions is moderated by the valence of the review, while the path from device to effort is left untouched.

This research looks at how the context in which an online review is written—mobile or non-mobile—affects consumers’ attitudes and purchase intentions. Future research will examine this process in greater detail.

Telling Both Sides of the Story: The Role of Risk in the Perceived Helpfulness of Online Reviews

EXTENDED ABSTRACT

Websites often encourage reviewers to identify both a product’s pros and cons in their review (two-sided reviews) rather than present only the pros or cons (one-sided reviews). For example, among Google’s tips for writing great travel reviews is to “include both the positive and negative aspects of your visit.”¹ Similarly, others such as the Better Business Bureau encourage reviewers to consider “the other side of the story.”² Such guidelines may seem justified given that presenting multiple sides (vs. one side) on a topic increases the chances of appealing to everyone, especially when an audience’s views are unknown (Tetlock, Skitka, and Boettger, 1989) or varied (Schlosser 2005), as is often the case with online reviews. Furthermore, a common consumer warning is that overly positive online reviews may be “fake” reviews posted by a firm.³ Thus, reviewers might believe that presenting multiple sides will boost their credibility. Indeed, two-sided ad claims often increase advertiser credibility (Crowley and Hoyer 1994). Yet, unlike advertisers, peer reviewers do not have a clear incentive to sell. As such, the credibility gains from two-sided ads may not generalize to peer reviews (Schlosser 2011). In fact, we propose that in higher-risk product contexts, encouraging reviewers to present multiple sides can backfire.

Both one-sided and two-sided messages have advantages and disadvantages. For instance, because one-sided messages provide only one view, there are no conflicting views to resolve (Sorrentino et al. 1988). Yet, a potential consequence of one-sided messages is that it can suggest that the author either did not consider alternative viewpoints or withheld one side (Sorrentino et al. 1988). Applied to online reviews, the audience might question one-sided reviewers’ credibility.

As mentioned earlier, two-sided ads often increase an advertiser’s credibility (Crowley and Hoyer, 1994). Furthermore, in a non-advertising context, two-sided messages suggest that the author considered alternative viewpoints (Sorrentino et al. 1988). Thus, based on these literatures, encouraging reviewers to write two-sided (vs. one-sided) reviews might increase reviewer credibility, and thus perceptions of review helpfulness. However, because two-sided messages introduce conflicting information, there is inconsistency and ambiguity. As such, they can cause consumers to feel more ambivalent than providing them with consistent information (Wang, Batra and Chen 2016; Zemborain and Johar 2007). Thus, an alternative expectation is that two-sided (vs. one-sided) reviews will be deemed less helpful.

We propose that the perceived credibility and helpfulness of two-sided versus one-sided reviews will depend on the product context: whether risk is high or low. According to prospect theory (Kahneman and Tversky 1979), when risk is low, people are risk seeking, and prefer uncertain over certain outcomes when uncertainty has advantages (e.g., a higher payoff). However, when risk is high, people are risk averse, and prefer certainty over uncertainty (Kahneman and Tversky 1979; March 1996). Thus, we expect that

1 <https://support.google.com/maps/answer/2519605?hl=en>

2 <http://bbbpnw.org/2014/02/28/7-tips-for-writing-good-online-reviews/>

3 <https://www.consumer.ftc.gov/articles/0027-comparing-products-online#read-reviews-and-be-skeptical>

in high risk contexts, two-sided reviews will no longer be perceived favorably. Indeed, risk aversion is related to discomfort with uncertainty (Johanson 2000). As a result, people who are risk averse respond more positively to procedures that reduce uncertainty than do those who are risk seeking (Colquit et al 2006; Desai, Sondak and Dickmann 2011).

Based on this, we expect that in low-risk contexts, two-sided (vs. one-sided) reviews will be more congruent with individuals' preferences for uncertain (but also, more balanced, complete) information. In contrast, in high-risk contexts, two-sided (vs. one-sided) reviews will be less congruent with individuals' preferences for certain, unambiguous information. Indeed, messages are more effective when they match individuals' orientations (Cesario et al. 2004; Lee and Aaker 2004), because this match, or fit, increases truth judgements (e.g., "it rings true" or "feels right"; Cesario, Higgins and Scholer 2008; Schwarz 1990; Schwarz & Clore 1988). Thus, if two-sided (vs. one-sided) reviews are more congruent with individuals' preferences in low-risk contexts, then we predict that individuals will perceive the two-sided reviewer to be more truthful, and thus, the two-sided review to be more helpful when risk is low. In contrast, if two-sided (vs. one-sided) reviews are less congruent with individuals' preferences in high-risk contexts, then we predict that individuals will perceive the two-sided reviewer to be less truthful, and thus, the two-sided review to be less helpful when risk is high. Because fit should increase truth judgments, we expect only judgments of reviewer trustworthiness (and not expertise) to mediate our predicted effects.

Five studies test these hypotheses in both the lab and the field across a variety of products and types of risk: social risk (studies 1-2), monetary risk (studies 3-4), and performance risk (study 5). Across lab studies, the content of the one-sided review contained only favorable information, whereas the two-sided review was largely positive with a mild negative claim. As predicted, the risk \times review interaction was significant across lab studies, with the two-sided review being rated as more helpful than a one-sided review when risk was low, but not when risk was high. In studies 2-3, we also find that reviewer trustworthiness (and not expertise) is the mediator. In studies 4-5, we test the robustness of our helpfulness findings in the field by using data from amazon.com. The dependent variable in both studies was the proportion of helpfulness votes (number of helpful votes/ total number of votes), while the independent variables were risk and two-sided intensity. We identified the extent to which each review used two-sided versus one-sided claims (i.e., two-sided intensity) by using the Linguistic Inquiry and Word Count program. Across both field studies, we show that with greater risk, two-sided reviews have a negative effect on helpfulness votes.

This research makes several important contributions. First, our research contributes to the message sidedness literature by introducing risk as an important moderator of receptivity to two-sided messages. We also contribute to the credibility literature by finding that two-sided (vs. one-sided) messages increase source trustworthiness (but not expertise) perceptions, but only in low-risk contexts. Third, our research provides important managerial insights by suggesting that the current practice of encouraging reviewers to identify both pros and cons in their reviews can be suboptimal.

How the Interplay of Consumption Mode and Time Delay Influences the Persuasiveness of Online Reviews

EXTENDED ABSTRACT

Online reviews are among the most important pieces of content on the Web. For consumers, they play a key role in decision-

making, as studies show that 88% of shoppers read online reviews to determine the quality of local business and trust online reviews as much as they trust personal recommendations (Anderson 2014). Businesses also pay particular attention to online reviews due to their direct impact on revenues (e.g., Zhu and Zhang 2010). As a result, academic research is becoming more and more interested in the effects and relevance of online reviews (e.g., Chevalier and Mayzlin 2006; King and Bush 2014; Zhu and Zhang 2010).

While reviews have been investigated from various angles (e.g., Ludwig et al. 2013; Purnawirawan, De Pelsmacker, and Dens 2012; Schlosser 2011), two aspects that remain unexplored are the consumption mode (i.e., whether the reviewed product/service is consumed by a solo individual or jointly with another person) and the time lag between the consumption experience and the writing of the review. Our research focuses precisely on this gap— and examines how the interplay of consumption mode (individual vs. dyadic consumption) and time delay between consumption and review writing influences (1) review content and (2) review persuasiveness. We anticipate consumption mode and time delay to jointly impact review content and persuasiveness either by influencing the information encoded during consumption and recalled later at the time of writing the review or by influencing consumers' beliefs about which dimensions of the experience are most appropriate to report (Ratner and Hamilton 2015).

In Study 1 we used 3,723 reviews from TripAdvisor where reviews are identified as based on an individual experience ("solo") vs. based on an experience with another person ("couple"). We collected reviews for three types of services: hotels ($n=1,487$, 50% solo), museums ($n=1,313$, 48% solo), and restaurants ($n=923$, 37% solo). For each review, we obtained the star rating (1-5 points), the text of the review, the consumption mode of the experience (i.e., identified as "solo" and "couple" reviews on TripAdvisor), the date when the service was consumed, and the date when the review was written. Average time lag between the consumption date and the review date was 43.46 days and did not vary across consumption modes. We used the Linguistic Inquiry and Word Count (LIWC) program to obtain an objective measure of the persuasiveness of each review (Pennebaker, Booth, and Francis 2007), that is, the variable "clout," which indicates the extent to which the reviewer's language is influential and conveys expertise and confidence. A regression analysis where review persuasiveness was predicted by the interaction of consumption mode and time lag as well as a set of covariates (e.g., whether the review was written on a mobile device, review length, service type) revealed that when written immediately after the service consumption, couple reviews contain more persuasive language than solo reviews ($b=20.97$, $p<.0001$). However, as the time lag increases, solo reviews become more persuasive ($b=.02$, $p=.02$) while the persuasiveness of couple reviews remains unchanged ($p>.1$) such that the difference in persuasiveness between couple and solo reviews diminishes ($b=-.02$, $p=.03$).

The objective of Study 2 was to examine the potential content differences that might explain the joint impact of consumption mode and time lag on review persuasiveness. We collected the same information as in Study 1 for 240 reviews of solo and joint experiences from TripAdvisor for two types of classes: cooking ($n=152$, 36% solo) and yoga ($n=88$, 86% solo). Average time lag was 1.13 months and did not vary across consumption modes. To analyze the content of the reviews, we divided them into 3,426 snippets (pieces of text that communicate only one idea). Three independent coders content-coded these snippets for claims about utilitarian service attributes (e.g., class content quality, class process, staff competence) and hedonic service attributes (e.g., class enjoyment, studio atmosphere

and design, staff warmth). Inter-rater reliability was 97% or higher with disagreements resolved by discussion.

We find that the consumption mode determines how review content, specifically the number of claims about utilitarian and hedonic service attributes, changes as a function of time between the experience and review writing. Two separate regressions of utilitarian/hedonic claims on the interaction of consumption mode and time lag as well as review length as a covariate reveal no difference in the number of utilitarian and hedonic claims between solo and joint reviews when they are written immediately after the service experience (both p 's > .54). However, with increasing time lag, solo reviews include more utilitarian claims ($b=.17$, $p=.01$) while couple reviews do not ($p=.37$). Yet, while over time the number of hedonic claims remains unchanged for solo reviews ($p=.12$), the difference in the number of these claims compared to couple reviews diminishes as more time passes since the experience of the service ($p=.05$). Altogether, this suggests potential encoding/memory differences in utilitarian and hedonic attributes based on consumption mode. Importantly, a mediation analysis using bootstrapping (Hayes 2012; Model 8) on the persuasiveness of the reviews (measured as in Study 1) predicted by the interaction of consumption mode and time lag with review length as a covariate and the number of utilitarian and hedonic claims in each review as simultaneously operating mediators show that only the number of utilitarian claims emerges as a significant mediator ($b=-.43$, $SE=.31$, 95% CI: -1.38 ; $-.04$), while the number of hedonic claims does not (95% CI: $-.29$; $.51$).

In sum, our research involving more than 4,000 reviews demonstrates that reviews about joint experiences are more persuasive than those about solo experiences when written immediately after a service consumption; however, with increasing time between the experience and the review writing, solo reviews become more persuasive due to the greater number of statements about utilitarian service attributes included in them. Our next steps involve conducting a set of lab experiments to (1) investigate the mechanism behind the review content changes over time for solo and couple reviews and (2) test whether the content differences in solo and couple reviews impact purchase intentions for consumers planning to experience the reviewed service alone vs. jointly with another person.

Relationship Norms in Response to Online Reviews in P2P Exchanges

EXTENDED ABSTRACT

Traditionally, marketing exchanges have involved commercial buyer and seller exchanges. However, in today's Internet-enabled world, another form of exchange, peer-to-peer (P2P) exchange, which involves peers selling products to other peers, is gaining prominence (Boesler 2013).

There are distinctive characteristics of P2P exchanges that motivate this research. First, sellers in P2P exchanges share their personal property (e.g., apartment) for economic benefits with peers, who are unknown to them (Habibi, Kim, and Laroche 2016). Second, unlike traditional commercial providers operating under the aegis of brands and subject to quality controls, P2P exchanges are conducted by small, independent providers, resulting in variability in product quality. One way for potential P2P buyers to reduce their uncertainty about product quality is to read previous users' online ratings (Fradkin et al. 2015). Further, P2P exchanges are driven by not only exchange norms, but also by communal norms, which involve concern for the welfare of others. In view of these differences, it is unclear whether the insights on consumers' responses to online ratings in traditional marketing exchanges will apply to P2P exchanges.

Addressing this key research gap, we examine whether consumers' responses to users' online reviews in P2P exchanges are different from those in traditional marketing exchanges.

We develop a theory relating consumers' relationship norms and users' online ratings to consumers' P2P buying intentions. We hypothesize that a match between the communal (vs. exchange) norms of consumers and the communal characteristics of P2P providers (vs. exchange characteristics of traditional providers) should strengthen consumers' P2P buying intentions.

We further hypothesize that two characteristics of P2P providers will change the balance of communal vs. exchange norms in P2P exchanges, moderating the responses of communal- (vs. exchange-) oriented consumers' to users' online ratings. First, as amateur P2P providers treat their income as supplementary (vs. professionals treat their income primary), they tend to not invest (vs. significantly invest) in service provision (Li et al. 2015). Hence the differences in the economic (vs. social) motivations of amateur (vs. professional) P2P providers may shift the balance toward communal (vs. exchange) norms in P2P exchanges. Second, people differentiate between others on the basis of warmth and competence (e.g., Cuddy, Fiske, and Glick 2008). P2P providers' positioning as being warm (vs. competent) may change the balance of communal (vs. exchange) norms in the P2P exchange.

Accordingly, we hypothesize that communal-oriented versus exchange-oriented consumers will respond differently to users' online ratings of amateur (vs. professional) and warm (vs. competent) P2P providers. Further, we hypothesize that the responses of communal- (vs. exchange-) oriented consumers to users' online reviews of P2P providers will be mediated by consumers' certainty about the P2P provider offering (Faraji-Rad, Samuelson, and Warlop 2016) and increase their intention to buy the P2P offering. Six studies tested our theory.

In Study 1, participants read a positive (5-star) online review of a traditional (Hotels.com) or a P2P (Airbnb.com) accommodation provider. Participants indicated their purchase interest in the accommodation and completed a scale of relationship (communal vs. exchange) orientation (Mills and Clark 1994). As expected, whereas individuals with a communal orientation were more responsive to the online review of a P2P accommodation provider (i.e. they were more likely to book the accommodation following a positive review), individuals with an exchange orientation were more responsive to the online review of a traditional provider.

Study 2 tested whether this effect is symmetric for positive and negative P2P provider reviews, and it examined the underlying process. Participants read a positive (5-star) or a negative (1-star) review of a P2P accommodation provider and indicated their purchase interest. They then completed the scale of relationship orientation and indicated their subjective certainty about the provider. As expected, compared to exchange-oriented individuals, communal-oriented individuals were had more positive responses toward P2P providers following a positive review and more negative responses to P2P providers following a negative review, and this effect was mediated by individuals' certainty about the provider.

Study 3A replicated the effect of consumers' communal (vs. exchange) relationship orientation on their responses to P2P provider reviews using an established manipulation (Aggarwal and Law 2005), instead of an inherent measure, of relationship orientation. Study 3B showed that this effect does not depend on reviewers' communal (vs. exchange) orientation.

Study 4 tested the effect of consumers' relationship orientation on responses to online reviews of amateur versus professional P2P service providers. Participants completed the manipulation of rela-

tionship orientation from Study 3A. They then read a positive (5-star) review of a P2P meal (dinner) provider on a popular P2P meal service platform (Eatwith.com). The P2P provider was described as either amateur (“self-taught home cook”) or professional (“professionally trained chef”). Participants expressed their purchase interest and indicated their certainty with the provider. The results showed that communal orientation increased individuals’ response to an amateur P2P provider, whereas exchange orientation increased individuals’ response to a professional P2P provider. This effect was mediated by individuals’ certainty about the provider.

Study 5 tested the effect of consumers’ relationship orientation on responses to online reviews of P2P providers with warm versus competent positioning. Participants read a positive (5-star) online review of a P2P meal provider on Eatwith.com. The provider positioned themselves as either warm or competent in their self-description. Participants indicated their willingness-to-pay for the dinner hosted by the provider, and they completed the scale of relationship orientation. The results showed that individuals with a communal orientation had a higher WTP for a meal following a positive review of a warmly positioned P2P provider, but individuals with an exchange orientation had a higher WTP for a meal following a positive review of a competently positioned P2P provider.

Our findings have important implications for existing theory, which has so far overlooked the role of online reviews in the increasingly prevalent P2P exchange paradigm. Our results generate useful insights for managers of P2P platforms (who wish to increase the effectiveness of their platforms and to compete with traditional commercial platforms for the share of the service market) and P2P providers (who wish to increase the appeal of their offerings to different segments of consumers).

REFERENCES

- Aggarwal, Pankaj (2004), “The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior,” *Journal of Consumer Research*, 31 (1), 87–101.
- Aggarwal, Pankaj and Sharmistha Law (2005), “Role of Relationship Norms in Processing Brand Information,” *Journal of Consumer Research*, 32 (3), 453–64.
- Anderson, Myles (2014, July 7), “88% of consumers trust online reviews as much as personal recommendations.” Retrieved from <http://searchengineland.com/88-consumers-trust-online-reviews-much-personal-recommendations-195803>
- Boesler, Matthew (2013), “The Rise of the Renting and Sharing Economy Could Have Catastrophic Ripple Effects,” *Business Insider*. August 12. Retrieved from <http://www.businessinsider.com/rise-of-the-renting-and-sharing-economy-2013-8?op=1> on June 28, 2016.
- Cesario, Joseph, E. Tory Higgins, and Abigail A. Scholer (2008), “Regulatory Fit And Persuasion: Basic Principles And Remaining Questions,” *Social and Personality Psychology Compass*, 2(1), 444-463.
- Cesario, Joseph, Heidi, Grant, and E. Tory Higgins (2004), “Regulatory Fit And Persuasion: Transfer From” Feeling Right,” *Journal of Personality And Social Psychology*, 86(3), 388.
- Chae, Minhee, and Jinwoo Kim (2004), “Do Size and Structure Matter to Mobile Users? An Empirical Study of the Effects of Screen Size, Information Structure, and Task Complexity on User Activities with Standard Web Phones.” *Behaviour & Information Technology*, 23 (3), 165-181.
- Chevalier, Judith A. and Dina Mayzlin, D (2006), “The Effect of Word Of Mouth On Sales: Online Book Reviews,” *Journal of Marketing Research*, 43 (3), 345-354.
- Colquitt, Jason A., Brent A. Scott, Timothy A. Judge, and John C. Shaw (2006), “Justice and Personality: Using Integrative Theories To Derive Moderators Of Justice Effects,” *Organizational Behavior and Human Decision Processes*, 100(1), 110-127.
- Crowley, Ayn E. and Wayne D. Hoyer (1994), “An Integrative Framework for Understanding Two-Sided Persuasion,” *Journal of Consumer Research*, 561-574.
- Cuddy, Amy J.C., Susan T. Fiske, and Peter Glick (2008), “Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map,” in *Advances in Experimental Social Psychology*, Vol. 40, Mark P. Zanna, ed. London: Academic Press, 61–149.
- Desai, Sreedhari D., Harris Sondak, and Kristina A. Diekmann (2011), “When Fairness Neither Satisfies Nor Motivates: The Role Of Risk Aversion And Uncertainty Reduction In Attenuating And Reversing The Fair Process Effect,” *Organizational Behavior and Human Decision Processes*, 116(1), 32-45.
- eMarketer (2016, September 12), “Internet Users Rely on Reviews When Deciding Which Products to Purchase,” Retrieved from <https://www.emarketer.com/Article/Internet-Users-Rely-on-Reviews-Deciding-Which-Products-Purchase/1014465>
- eMarketer (2010, August 12), “What Makes Social Media Trustworthy?” Retrieved from <https://www.emarketer.com/Article/What-Makes-Social-Media-Trustworthy/1007863>
- Faraji-Rad, Ali, Bendik M. Samuelson, and Luk Warlop (2016), “On the Persuasiveness of Similar Others: The Role of Mentalizing and the Feeling of Certainty,” *Journal of Consumer Research*, 42 (3), 458-471.
- Fradkin, Andrey, et al. (2015), “Bias and Reciprocity in Online Reviews: Evidence from Field Experiments on Airbnb,” *Proceedings of the Sixteenth ACM Conference on Economics and Computation*.
- Habibi, Mohammad Reza, Andrea Kim, and Michel Laroche (2016), “From Sharing to Exchange: An Extended Framework of Dual Modes of Collaborative Nonownership Consumption,” *Journal of the Association for Consumer Research* 1 (2), 277-294.
- Hayes, Andrew F. (2012), “PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling,” <http://www.afhayes.com/public/process2012.pdf>.
- Hayes, Andrew F. (2013), “Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach,” New York, NY: Guilford Press.
- Johanson, J. C. (2000), “Correlations of Self-Esteem And Intolerance Of Ambiguity With Risk Aversion,” *Psychological Reports*, 87(2), 534-534.
- Judd, Charles M., Laurie James-Hawkins, Vincent Yzerbyt, and Yoshihisa Kashima (2005), “Fundamental Dimensions of Social Judgment: Understanding the Relations between Judgments of Competence and Warmth,” *Journal of Personality and Social Psychology*, 89 (December), 899–913.
- Kahneman, Daniel and Amos Tversky (1979), “Prospect Theory: An Analysis Of Decision Under Risk,” *Econometrica: Journal of the Econometric Society*, 263-291.

- King, Robert Allen, Pradeep Racherla, and Victoria D. Bush (2014), "What We Know And Don't Know About Online Word-Of-Mouth: A Review And Synthesis of The Literature," *Journal of Interactive Marketing*, 28(3), 167-183.
- Kruger, Justin, Derrick Wirtz, Leaf Van Boven, and T. William Altermatt (2004), "The Effort Heuristic." *Journal of Experimental Social Psychology*, 40 (1), 91-98.
- Lee, Angela Y. and Jennifer L. Aaker (2004), "Bringing The Frame Into Focus: The Influence Of Regulatory Fit On Processing Fluency And Persuasion," *Journal of Personality And Social Psychology*, 86(2), 205.
- Ludwig, Stephan, Ko de Ruyter, Mike Friedman, Elisabeth C. Bruggen, Martin Wetzels, and Gerard Pfann (2013), "More Than Words: The Influence Of Affective Content And Linguistic Style Matches In Online Reviews On Conversion Rates," *Journal of Marketing*, 77, 87-103.
- March, James G. (1996), "Learning To Be Risk Averse," *Psychological Review*, 103(2), 309.
- Mills, Judson and Margaret S. Clark (1994), "Communal and Exchange Relationships: Controversies and Research," in *Theoretical Frameworks for Personal Relationships*, Ralph Erber and Robin Gilmour, eds. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Purnawirawan, Nathalia, Patrick De Pelsmacker, and Nathalie Dens (2012), "Balance And Sequence In Online Reviews: How Perceived Usefulness Affects Attitudes And Intentions," *Journal of Interactive Marketing*, 26(4), 244-255.
- Ratner, Rebecca K. and Rebecca W. Hamilton (2015), "Inhibited from Bowling Alone," *Journal of Consumer Research*, 42, 266-283.
- Reber, Rolf, Norbert Schwarz, and Piotr Winkielman (2004), "Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience?" *Personality and Social Psychology Review*, 8 (4), 364-82.
- Schlosser, Ann E. (2005), "Posting Versus Lurking: Communicating In A Multiple Audience Context," *Journal of Consumer Research*, 32(2), 260-265.
- Schlosser, Ann E. (2011), "Can Including Pros And Cons Increase The Helpfulness And Persuasiveness Of Online Reviews? The Interactive Effects of Ratings And Arguments," *Journal of Consumer Psychology*, 21(3), 226-239.
- Schwarz, Norbert (1990), "Feelings As Information: Informational And Motivational Functions Of Affective States," In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of Motivation and Cognition: Foundations of Social Behavior: Vol. 2 (pp. 527-561)*. New York: Guilford Press.
- Schwarz, Norbert and Gerald L. Clore (1983), "Mood, Misattribution, And Judgments Of Well-Being: Informative And Directive Functions Of Affective States," *Journal Of Personality and Social Psychology*, 45(3), 513.
- Sorrentino, Richard M., D. Ramona Bobocel, Maria Z. Gitta, James M. Olson, and Eric C. Hewitt (1988), "Uncertainty Orientation And Persuasion: Individual Differences In The Effects Of Personal Relevance On Social Judgments," *Journal of Personality and Social Psychology*, 55(3), 357.
- Sweeney, Simon, and Fabio Crestani (2006), "Effective Search Results Summary Size and Device Screen Size: Is there a Relationship?" *Information Processing & Management*, 42 (4), 1056-1074.
- Tetlock, Philip E., Linda Skitka, and Richard Boettger (1989). "Social and Cognitive Strategies For Coping With Accountability: Conformity, Complexity, And Bolstering," *Journal of Personality and Social Psychology*, 57(4), 632.
- The Economist (2015), "The Truly Personal Computer," <http://www.economist.com/news/briefing/21645131-smartphone-defining-technology-age-truly-personal-computer>.
- Wang, Haizhong, Rajeev Batra, and Zengxiang Chen (2016), "The Moderating Role Of Dialecticism In Consumer Responses To Product Information," *Journal of Consumer Psychology*, 26 (3), 381-394.
- Zemboirain, Martin R. and Gita V. Johar (2007), "Attitudinal Ambivalence And Openness To Persuasion: A Framework For Interpersonal Influence," *Journal of Consumer Research*, 33(4), 506-514.
- Zhu, Feng and Xiaoquan (Michael) Zhang (2010), "Impact of Online Consumer Reviews On Sales: The Moderating Role Of Product And Consumer Characteristics," *Journal of Marketing*, 74 (2), 133-148.

The Social Context of Consumption

Chairs: Kelley Gullo, Duke University, USA

Peggy Liu, University of Pittsburgh, USA

Paper #1: Are My Dog's Treats Making Me Fat? The Effects of Choices Made for Others on Subsequent Choices for the Self

Kelley Gullo, Duke University, USA

Peggy Liu, University of Pittsburgh, USA

Lingrui Zhou, Duke University, USA

Gavan Fitzsimons, Duke University, USA

Paper #2: Mindful Mimicry of Food Choices: Vertically versus Horizontally Differentiated Attributes

Peggy Liu, University of Pittsburgh, USA

Brent McFerran, Simon Fraser University, Canada

Kelly Haws, Vanderbilt University, USA

Paper #3: The Social Path To Satiation: Satisfying Desire Vicariously via Other's Consumption

Yanping Tu, University of Florida, USA

Ayelet Fishbach, University of Chicago, USA

Paper #4: Suit Up and Shop: Social Confidence and the Influence of Consumer Attire on Purchasing Decisions

Keisha Cutright, Duke University, USA

Shalena Srna, University of Pennsylvania, USA

Adriana Samper, Arizona State University, USA

SESSION OVERVIEW

Consumer choices and consumption are rarely solitary. They often involve others in an array of ways, from choosing for others, to co-consuming with others, to viewing others' consumption, or even just thinking about others. While decision-making research has taught us much about how people make choices for themselves (e.g., Bettman, Luce, and Payne 1998), less is known about how this rich social context affects consumption decisions for the self.

Therefore, it is important for both researchers and practitioners to understand the nuances of the array of roles that others play in consumers' choices. How do the consumption choices made by and for others affect subsequent choices for oneself? How does thinking about others' consumption and others' perceptions of us affect our own consumption choices?

In this symposium, four papers explore these questions by considering the multitude of roles that others play in affecting our consumption choices. The four papers address various social aspects of consumption: choosing for others, consuming with others, considering others' consumption and considering others' perceptions of the self.

The first paper (Gullo, Liu, Zhou, Fitzsimons) considers how choosing for others affects subsequent choices for the self. Specifically, the authors examine how choices for others in the domain of a personal goal affect subsequent goal-relevant choices for the self. Three studies show that making a personal goal consistent (inconsistent) choice for a relationally close other—such as one's child, friend, or even pet—liberates (reinforces) a subsequent goal-relevant choice for the self, but only if the chooser also views the relationship as non-competitive.

The second paper (Liu, Haws, McFerran) considers how co-consuming with others affects concurrent choices for the self. Specifically, the authors propose a new conceptual basis based on product attributes for predicting when and why consumers match their co-consumers' choices. Six studies show that consumers are more likely to match their own choices with their co-consumers' choices

on vertically-differentiated attributes (e.g., price or portion size) than on horizontally-differentiated attributes (e.g., flavor).

The third paper (Tu and Fishbach) considers how viewing others' consumption affects one's own consumption. Specifically, the authors propose that people can satiate on what other people eat vicariously. Five studies demonstrate that, when the other is similar to the self, people experience lower desire to consume food that is similar (rather than dissimilar) in taste to what they have viewed others consume.

Finally, the fourth paper (Cutright, Srna, Samper) considers how thinking about others' perceptions of oneself affects choices for the self. Specifically, the authors propose that believing that others will view their decisions positively (i.e., having social confidence) leads to greater purchase intent. Four studies demonstrate that consumers feel more socially confident when wearing formal clothing (vs. casual clothes), which causes them to be less hesitant about their purchases, ultimately increasing purchasing.

Across four papers and 18 studies, this session investigates decisions in a wide array of "others" contexts. This session is directed at a wide audience including those interested in social influences on choice, choices for others, and interpersonal goal pursuit.

Are My Dog's Treats Making Me Fat? The Effects of Choices Made for Others on Subsequent Choices for the Self

EXTENDED ABSTRACT

Consumers often make choices for others intermixed with choices for themselves—parents choose activities for their children, coworkers grab lunch for each other, and pet owners choose snacks for their pets. Do choices made for someone else's consumption affect subsequent choices for our own consumption?

Prior research has shown that preceding choices for the self can impact subsequent choices (Fishbach and Dhar 2005; Huber, Goldsmith, and Mogilner 2008; Khan and Dhar 2006). Even thinking about refraining from indulging or being in the presence of healthy options can license indulgent subsequent decisions (Fitzsimons, Nunes, and Williams 2007; Wilcox et al. 2009). These prior findings suggest that making a choice for someone else may have the potential to affect a subsequent choice for oneself. However, little research has examined whether, when, and how choices for others affect subsequent choices for the self.

Across three studies, we show that when a consumer makes a personal goal consistent (inconsistent) choice for someone else's consumption—such as for children, friends, and even pets—it liberates (reinforces) a subsequent goal inconsistent (consistent) choice for the self. We identify two important boundary conditions: the extent to which the target other is perceived as included in the self and the competitiveness of the relationship with the target other. We theorize that, when the other is close and non-competitive, people encode the choices they make for others as progress (or lack of progress) toward their own goals. We argue that this falsely perceived progress towards one's own goals liberates (reinforces) the goal in a subsequent choice for the self.

Study 1 had a 2 (choice for other: healthy vs. indulgent) between-subjects design. Participants (N = 312) were MTurk workers who reported having a health goal and as being a parent of a child

between the ages of 8 and 12 years old. To activate their health goal, all participants edited an article about healthy eating (adapted from Haws and Winterich 2013). Then, participants imagined registering their child for a summer day camp. As the manipulation of choice for other, the registration process had participants choose between either two healthy (e.g., whole wheat pita sandwich) or two indulgent (e.g., bacon cheese burger) lunch choices for their child to eat while at camp. Then, participants were informed that one participant would actually be randomly selected to receive an Edible Arrangement fruit basket of their choice. The dependent variable was whether they chose a healthy (all fruit) or indulgent (chocolate-covered fruit) basket as their drawing prize. As predicted, parents were more likely to choose an indulgent prize for themselves if they chose a healthy lunch for their child ($M = 45.16\%$) than if they chose an indulgent lunch for their child ($M = 35.67\%$, $p = .088$).

Study 2 explored the moderating role of closeness with other. In this field study, we recruited dog owners ($N = 109$) at a 50-acre off-leash dog park where visitors must hike through uphill trails to get to the main area of the park. Thus, visitors are likely to have a health or active lifestyle goal, and simply being at the park should activate this goal. All participants then completed an incentive-compatible grocery shopping task in which they chose between pairs of products (of importance, one choice was randomly selected to be real for each participant). The manipulation was whether participants were randomly assigned to choose between two healthy treats or two indulgent treats for their dog. The dependent variable was whether participants then subsequently chose a healthy apple or an indulgent chocolate bar as a snack for themselves. We also measured the extent to which the dog was included in the self (Inclusion of Other in Self, "IOS", Aron et al., 1992). As predicted, a logistic regression on snack choice for self (apple vs. chocolate) by IOS and manipulated choice for other (healthy vs. indulgent) revealed a significant 2-way interaction ($p < .05$). To decompose this interaction, we used the Johnson-Neyman technique to identify the range of IOS for which the simple effect of the manipulated choice for other was significant. There was a significant effect of choice for other on the likelihood to choose chocolate as a snack for the self for any dog owner who has an IOS score of 6.62 or higher ($B_{\text{N}} = -1.18$, $SE = .5998$, $p = .05$), but not for dog owners with an IOS score less than 6.62.

Study 3 explored competitiveness as a boundary condition. Participants ($N = 426$) were MTurk workers who reported having a health goal. All participants completed the same health goal activation task as in Study 1 and provided the first name of a close, same gendered friend. Then, they imagined picking up lunch for their friend as a favor. Choice for other was manipulated via choosing between either two healthy (e.g., salad) or two indulgent (e.g., fries) side options to go along with their friend's entree. Then, all participants completed the dependent variable as Study 1 and the same measure of closeness with their friend as Study 2. Finally, participants completed a measure of relational competitiveness (item 15 from Ryckman et al. 1990).

As predicted, a logistic regression on prize choice for self (fruit vs. chocolate) by IOS, relational competitiveness, and choice for other reveals a significant 3-way interaction ($p = .019$). Follow-up simple-effects analyses revealed the following pattern of results: with a low IOS other (i.e., less than 4), there was no simple 2-way interaction between CFO and competitiveness ($p > .20$). However, with a high IOS other (i.e., greater than 6), there was a significant simple 2-way interaction between CFO and competitiveness ($p < .05$) such that at low competitiveness, the choice for other led to the same basic effect as in the prior studies whereas at high competitive-

ness, the basic effect was reversed (i.e., choosing healthy for other led to decreased likelihood of choosing indulgent for self).

Across three studies, we demonstrate that, when consumers choose for close "others," such choices can affect subsequent choices for the self.

Mindful Mimicry of Food Choices: Vertically versus Horizontally Differentiated Attributes

EXTENDED ABSTRACT

Much consumer behavior occurs in a social context involving co-consuming alongside others (Etkin 2016; Gorlin and Dhar 2012; Liu et al. 2013; Lowe and Haws 2014; McFerran et al. 2010). For instance, friends may have ice cream together, and co-workers may each have a glass of wine after dinner. Prior research in the eating/drinking domain has produced divergent findings on whether consumers match their co-companions' consumption choices. On the one hand, mimicry research suggests that consumers match (McFerran et al. 2010; Tanner et al. 2008). For example, McFerran et al. (2010) found that consumers matched companions' portion size selections. On the other hand, other research suggests that consumers sometimes do not match (Ariely and Levav 2000). For instance, Ariely and Levav (2000) found that consumers did not match their co-consumers' beer selections.

We propose a new conceptual basis for predicting when matching is more (and less) likely to occur, based on *product attributes*. This framework helps reconcile these apparently divergent findings and also generates new predictions. Specifically, we distinguish between attributes that are perceived to be more vertically versus horizontally-differentiated. These terms are commonly used in economics and quantitative marketing to indicate ranked/objective (vertical) versus unranked/subjective (horizontal) attributes (Lauga and Ofek 2011; Randall, Ulrich, and Reibstein 1998; Sutton 1986). We propose that consumers match co-consumers on vertically-differentiated attributes, but not horizontally-differentiated attributes.

Our rationale is that mismatching on vertically-differentiated (vs. horizontally) attributes represents a greater social norm violation. Namely, people are highly attuned to relative rank/performance (Duesenberry 1949; Festinger 1954; Frank 1985). Furthermore, people both dislike being lower rank (Kuziemko et al. 2014) and dislike being a target of upward social comparison (Exline and Lobel 1999). We thus propose that in the consumption context, consumers match co-consumers on vertically-differentiated attributes because occupying different positions generates discomfort. In contrast, occupying different positions on horizontally-differentiated attributes does not convey relative rank/performance differences and thus consumers need not match (and may even mismatch for various reasons).

Our conceptualization can thus help explain apparently divergent prior findings, which has frequently shown mimicry of others' portion sizes (vertically-differentiated attribute) and has also shown non-mimicry but typically examined flavor selections (horizontally-differentiated attribute). A pre-test and six studies tested our novel conceptualization.

For the pre-test, participants ($N = 154$) were provided with definitions of horizontal and vertical differentiation and rated food-related attributes (1 = *completely horizontally differentiated* to 7 = *completely vertically differentiated*). Portion size ($M = 4.27$) and price ($M = 5.37$) were deemed more vertically-differentiated, whereas flavor ($M = 3.31$) was deemed more horizontally-differentiated, as one-sample *t*-tests indicated that the mean ratings for portion size and price were both greater than the scale midpoint (portion size: $p = .086$; price: $p < .001$), whereas flavor was less than the midpoint ($p <$

.001). Studies 1 and 3-6 thus operationalized the vertically-differentiated attribute using portion size (Study 2 used price), and all studies operationalized the horizontally-differentiated attribute using flavor.

Study 1 had a 2(friend's portion size: small, large)×2(friend's flavor: chocolate, vanilla)+1(control: friend's order not specified) between-subjects design. Undergraduate participants (N=205) first provided a same-gender friend's name and imagined arriving at an ice creamery together. Participants viewed a four-option menu: 1 scoop chocolate, 2 scoops chocolate, 1 scoop vanilla, and 2 scoops vanilla. Depending on random assignment, participants were told that their friend ordered one of these four options. Participants then chose an option for themselves. First, regarding portion size, participants were significantly more likely to choose a large portion size themselves if their friend chose a large versus small portion size (68.4% vs. 51.2%; $p = .028$). Second, regarding flavor, participants were similarly likely to choose the chocolate flavor if their friend chose chocolate versus vanilla (56.6% vs. 53.6%; $p = .703$). There were no interactions between the friend's portion size and the friend's flavor on the participant's portion size choice ($p = .767$) or flavor choice ($p = .643$). Study 2 replicated these effects with actual food choices.

Study 3 had a 2(friend's price: low, high)×2(friend's flavor: fruity, earthy)+1(control: friend's order not specified) between-subjects design. MTurk participants (N = 315) provided a same-gender friend's name and imagined arriving at a wine bar with their friend. Participants viewed a menu with four glass-of-wine options: Grenache–fruit-flavored (\$4), Malbec–fruit-flavored (\$8), Syrah–earthy-flavored (\$4), and Chianti–earthy-flavored (\$8). Depending on randomly-assigned condition, participants were told that their friend ordered one of these four options. Participants then chose an option for themselves. Study 3 results generally replicated Study 1-2's. Participants were significantly more likely to choose a higher-priced glass of wine if their friend chose a higher-priced versus lower-priced glass (40.9% vs. 24.8%; $p = .007$). However, participants were marginally *less* likely to choose the fruity flavor if their friend chose a fruity versus earthy flavor (60.0% vs. 71.7%; $p = .052$), reflecting some mis-matching. There were no interactions between the friend's price and the friend's flavor on the participant's price choice ($p = .758$) or flavor choice ($p = .342$).

In Studies 1-3, participants knew their friend's standing on *both* the vertically-differentiated and horizontally-differentiated attributes. Optimal distinctiveness theory (Brewer 1991) thus raises the alternative explanation that people may match on just one attribute because of optimal distinctiveness reasons. Our account, however, is that matching is dependent on the attributes themselves. Accordingly, our findings should hold even when consumers only have information about their friend's standing on one attribute (vertical or horizontal). Study 4 (N = 378) thus only provided participants with one piece of information about their friend's order (either size or flavor). Study 4 found matching on the vertical attribute but not the horizontal attribute, providing further support for our account.

Finally, Studies 5-6 used different approaches to show that matching on vertically-differentiated attributes occurs because consumers anticipate, and want to decrease, social discomfort associated with mismatching on such attributes.

In sum, consumers match co-consumers on vertically-differentiated attributes (portion size, price) but not horizontally-differentiated attributes (flavor). These findings extend the social influences literature by offering a broad conceptual basis for predicting which attributes are matched.

The Social Path To Satiation: Satisfying Desire Vicariously via Other's Consumption

EXTENDED ABSTRACT

Consumers frequently receive information on other people's food consumption, such as in food commercials and when dining together. Recently, *Mukbang* – a combination of the Korean word for eating and broadcasting – has caught on. People worldwide share “eating show” videos of themselves eating large quantities of food, attracting billions of viewers globally (Evans 2015; Pequenino 2016). How does another's food consumption influence one's own desire for that food? Whereas it may whet one's appetite and signal the positive quality of the food (i.e., increase liking), we explore the possibility that consumers may desire the specific food others just had less momentarily (i.e., decrease wanting) (Garbinsky, Morewedge, and Shiv 2014).

Building on the notion that, as social animals, people experience blurred interpersonal boundaries (Aron et al. 1991; Kelley and Thibaut 1978; Small and Simonsohn 2008), and can perceive others' traits (Goldstein and Cialdini 2007), decision conflict (Schrift and Amar 2015) and ownership (Tu and Fishbach 2015), as partially their own, we propose that other's consumption can make people feel as if they have consumed it too, which in turn leads to lower desire, postponement of consumption and switching consumption. It follows that the degree of perceived self-other overlap matters – *people will experience vicarious satiation only when self-other overlap is sufficiently large*. Crucially, we study attribute-based (rather than hunger-based) satiation, which is sensory-specific (Inman 2001; Larson, Redden, and Elder 2014) and predict *people will desire the food that is similar (rather than dissimilar) in taste to what others consumed less*. Five studies tested the theoretical framework.

Study 1 documented the vicarious satiation effect by having participants watch an adapted “eating show” video, in which the protagonist ate a whole pizza, slice by slice. Participants' desire for pizza changed over time – before watching the video, 1 minute, 3 minutes, and 4 minutes into the video ($F(3, 120) = 8.71, p < .001$; $M_{10} = 3.93, SD_{10} = 1.85$; $M_{11} = 4.12, SD_{11} = 1.85$; $M_{12} = 3.49, SD_{12} = 1.82$; $M_{13} = 3.15, SD_{13} = 1.90$) and followed a linear pattern ($F(1, 40) = 10.78, p = .002$). Moreover, they desired pizza less after than before watching the video ($F(1, 40) = 9.34, p = .004$).

Study 2 used postponement of consumption as a behavioral marker of vicarious satiation. We recruited acquaintances-dyads and presented them with two flavors of candies. We assigned one person (1st mover) to eat one flavor [consumption], or to evaluate its wrapper design without eating it [non-consumption]. We then invited the other person (2nd mover) to eat both flavors and measured his/her consumption order. In support of our hypothesis, more participants postponed consumption of the flavor the 1st mover received when the 1st mover consumed it (73%) than not (46%; $\chi^2(1) = 4.38, p = .036$).

Study 3 used switching consumption as a behavioral marker of vicarious satiation, and explored the similarities between vicarious satiation (for observers) and physiological satiation (for actors). Specifically, observers watched a video of a person either eating [consumption] or counting [non-consumption] M&M's; actors watched the same video and mimicked corresponding actions. We then asked participants to choose between three equally priced gifts: a pack of M&Ms, a pack of Skittles (a different food) or Post-it notes (non-food). We found a main effect that participants chose M&M's less in the consumption conditions (35%) than in the non-consumption conditions (57%; $\chi^2(1) = 9.27, p = .002$), regardless of whether they were observers (vicarious satiation; 39% vs. 60%; $\chi^2(1) = 4.15, p =$

.042) or actors (physiological satiation: 32% vs. 55%; $\chi^2(1) = 5.23$, $p = .022$).

Study 4 shed light on the proposed mechanism—vicarious satiation happens because people treat other's consumption as their own, meaning that the degree of self-other overlap matters. We had participants watch the same eating [consumption] or counting [non-consumption] video as in study 3, and manipulated perceived self-other overlap by informing participants that the protagonist either shares [high self-other overlap] or opposes [low self-other overlap] their political view. We measured participants' desire for M&M's, for something sweet, and for something chocolate after they finished watching the video. A Behavior (consumption vs. non-consumption) x Self-other Overlap (high vs. low) ANOVA on desire for M&M's yielded the predicted interaction ($F(1, 292) = 5.25$, $p = .023$). Specifically, watching another person eat ($M = 2.94$, $SD = 2.03$) rather than count ($M = 3.72$, $SD = 1.97$) reduced desire for M&M's ($F(1, 150) = 5.84$, $p = .017$) but only in the high self-other overlap conditions. When self-other overlap was low, this effect disappeared ($M_{\text{eat}} = 3.25$, $SD = 2.29$ vs. $M_{\text{count}} = 2.93$, $SD = 2.01$; $F < 1$). Desire for something sweet and something chocolate followed the same pattern.

Study 5 aimed to 1) explore whether vicarious satiation can happen when imagination is minimal by providing only text information and 2) document its sensory-specific nature. We had participants read either a daily food journal [consumption], in which a gender-matched person recorded that he/she had lots of Reese's peanut butter cups, or a daily task log [non-consumption], in which the person recorded the tasks he/she performed. We then measured desire for Reese's, for snacks that taste similarly (Snickers bar and M&M's), and for snacks that taste differently (Doritos, Lay's chips, and Goldfish crackers). We found that information about another person's consumption of Reese's (vs. daily tasks) reduced desire for Reese's ($M_{\text{food}} = 2.87$, $SD = 2.06$ vs. $M_{\text{task}} = 3.48$, $SD = 2.25$, $F(1, 220) = 4.46$, $p = .036$) and for similar snacks ($M_{\text{food}} = 2.51$, $SD = 1.72$ vs. $M_{\text{task}} = 3.11$, $SD = 2.04$, $F(1, 220) = 5.57$, $p = .019$; $M_{\text{food}} = 2.43$, $SD = 1.70$ vs. $M_{\text{task}} = 3.11$, $SD = 1.92$, $F(1, 220) = 7.73$, $p = .006$), but not for dissimilar snacks.

Eating is largely a social phenomenon; so much so that people are reluctant to dine alone (Ratner and Hamilton 2015). We identify a social path to satiation and discuss its implications in marketing and social coordination.

Suit Up and Shop: Social Confidence and the Influence of Consumer Attire on Purchasing Decisions

EXTENDED ABSTRACT

We investigate the relationship between formality of dress and purchase intent. Drawing from research on consumer confidence (Bearden, Hardesty and Rose 2001), we argue that when consumers are wearing formal clothing, they are more likely to feel socially confident, or that they have the ability to impress others with the products that they choose to purchase. This enhanced social confidence, which is distinct from other forms of confidence, leads to higher purchase intent in shopping domains that are related and unrelated to clothing.

We expect that formality of dress is an important precursor to social confidence because a primary function of clothing is to communicate one's self to others and generate positive social outcomes. Research has shown that people in formal dress view themselves more positively (Hannover and Kuhnen 2002) and have a greater sense of authoritativeness and competence (Peluchette and Karl 2007; Cardon and Okoro 2009). In this sense, formally dressed indi-

viduals should expect to be viewed positively by others, or socially confident. We expect that they should also be more eager to make purchases, as believing that others will view one's decisions positively reduces the hesitancy associated with making a purchase decision. Although not focusing on social confidence, prior research has shown that when people feel more confident, they perceive less risk and require less information to make a decision (Hisrich, Dornoff, Kernan 1972).

In Study 1, we test our predictions in the behavioral lab. The day before their scheduled session, participants received an email asking them to arrive to the lab dressed formally (sport coat or blazer, slacks or dress) or casually (sweat pants, t-shirts, tennis shoes and flip flops) in exchange for \$5. Undergraduate participants were told that we were collaborating with a retailer to learn about college students' clothing style and the types of items they purchase. They would have the opportunity to spend up to \$30 in a store sponsored by this retailer, which had a variety of college life products (e.g., water bottles, school supplies). Our dependent variable was the number of items participants purchased. We found that participants chose more items in the formal relative to the casual condition ($F(1, 245) = 4.37$, $p = .04$, $M_{\text{formal}} = 10.53$, $M_{\text{casual}} = 8.89$). We also measured perceived economic and social status, financial resource slack, and deservingsness, and ruled these out as alternative explanations.

In Study 2, we examine formal versus casual dress in an online context. To manipulate dress, we use avatars, or computer-based representations of our participants. Participants created an avatar in the image of themselves and were told to select an outfit for this avatar. Those in the formal and casual dress conditions were given options that were purely formal (slacks, dresses, business casual shirts) or casual (athletic pants, sweatshirts and sneakers or flip flops). All participants imagined entering a virtual store as their avatar. Our focal dependent measures were the likelihood participants would buy themselves something and feelings of confidence using Bearden et al.'s Consumer Self-Confidence scale, focusing specifically on the "Social Outcomes Decision-Making" dimension (i.e., "social confidence" $\alpha = .88$). We found that participants were more likely to purchase something for themselves in the formal (vs. casual) dress condition ($F(1, 253) = 7.71$, $p = .01$, $M_{\text{formal}} = 4.53$, $M_{\text{casual}} = 4.02$). This effect was mediated by feelings of social confidence, but not other types of confidence.

In Study 3, we identify type of store as a boundary condition. While in more traditional stores, we predict that formal dress should lead to feelings of being at one's best, in stores where the norm is to dress casually, casual dress may also be consistent with being socially confident, since casual dress is associated with engaging in effort to build or repair. Thus, we conducted a 2 (dress: formal vs. casual) x 2 (shopping environment: formal store vs. casual store) experiment, again using avatars. We also measure feelings of best self, feelings of fit and consumers' desires for self-consistency in addition to our primary dependent measure of purchase likelihood. We found a significant store x dress interaction ($F(1, 395) = 5.52$, $p = .02$). In the formal store, those assigned to formal (vs. casual) dress showed greater purchase intent ($F(1, 395) = 6.77$, $p = .01$, $M_{\text{formal}} = 4.88$, $M_{\text{casual}} = 4.30$). Within the casual store, however, there were no such differences ($F(1, 395) = .51$, $p = .48$, $M_{\text{formal}} = 4.30$, $M_{\text{casual}} = 4.46$). Consistent with predictions, mediation within the formal store condition revealed the predicted mediation within the formal store condition, formal dress \rightarrow social confidence \rightarrow purchase intent.

Finally, in Study 4 we look at whether simply feeling socially confident or actually needing to publicly use a product drives our effect. We assigned MTurk participants to a 2 (formality of dress: formal vs. casual) x 2 (usage objective: public vs. private) experi-

ment. We reasoned that if social confidence is indeed a critical component, the effect of dress should be strongest when individuals are focusing on decisions for social contexts rather than private ones. Participants then imagined that they decided to shop online, in the privacy of their own home (with no one else around) and were shown an online shopping interface. To manipulate the public versus private use of goods, participants were told that they were shopping for new clothes that they would wear exclusively while working from a private home office or a public office. Our dependent measures were purchase intent and social confidence. Results revealed a significant dress x store environment interaction, $F(1, 395) = 5.18, p = .02$. For public use, those dressed formally (vs. casually) displayed greater purchase intent ($F(1, 395) = 4.36, p = .04, M_{\text{formal}} = 4.89, M_{\text{casual}} = 4.44$). For private use, however, there were no differences ($F(1, 395) = 1.27, p = .26, M_{\text{formal}} = 4.18, M_{\text{casual}} = 4.42$). Further analyses replicated our prior mediation paths in the public condition, emphasizing the dependence of our effect on public display.

In sum, across 4 studies, we formal attire enhances the extent to which consumers feel socially confident, which heightens desires for consistency and feelings of belonging, and consequently purchase intent. This can be turned off by shopping in non-traditional contexts where casual clothing is reflective of social confidence, and in contexts where usage is private.

REFERENCES

- Aarts, Henk, Peter M. Gollwitzer, and Ran R. Hassin (2004), "Goal Contagion: Perceiving is for Pursuing," *Journal of Personality and Social Psychology*, 87 (1), 23-37.
- Ariely, Dan and Jonathan Levav (2000), "Sequential Choice in Group Settings: Taking the Road Less Traveled and Less Enjoyed," *Journal of Consumer Research*, 27 (3), 279-90.
- Aron, Arthur, Elaine N. Aron, and Danny Smollan (1992), "Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness," *Journal of Personality and Social Psychology*, 63(4), 596-612.
- Aron, Arthur, Elaine N. Aron, Michael Tudor, and Greg Nelson (1991), "Close Relationships as Including Other in the Self," *Journal of Personality and Social Psychology*, 60 (2), 241-53.
- Bearden, William O., David M. Hardesty and Randall L. Rose (2001), "Consumer Self-Confidence: Refinements in Conceptualization and Measurement," *Journal of Consumer Research*, 28(1), 121-134.
- Bettman, James R., Mary Frances Luce, and John W. Payne (1998), "Constructive Consumer Choice Processes," *Journal of Consumer Research*, 25 (3), 187-217.
- Brewer, Marilynn B (1991), "The Social Self: On Being the Same and Different at the Same Time," *Personality and Social Psychology Bulletin*, 17 (5), 475-82.
- Cardon, Peter W. and Ephraim A. Okoro (2009), "Professional Characteristics Communicated By Formal Versus Casual Workplace Attire," *Business Communication Quarterly*, 72, 355-60.
- Duesenberry, James S. (1949), *Income, Saving, and the Theory of Consumer Behavior*, Cambridge, MA: Harvard University Press.
- Evans, Stephen (2015), "The Koreans Who Televisive Themselves Eating Dinner" (accessed Feb 1, 2017) [available at <http://www.bbc.com/news/magazine-31130947>]
- Etkin, Jordan (2016), "Choosing Variety for Joint Consumption," *Journal of Marketing Research*, 53 (6), 1019-33.
- Exline, Julie Juola and Marci Lobel (1999), "The Perils of Outperformance: Sensitivity About Being the Target of a Threatening Upward Comparison," *Psychological Bulletin*, 125 (3), 307-37.
- Festinger, Leon (1954), "A Theory of Social Comparison Processes," *Human Relations*, 7 (2), 117-40.
- Fishbach, Ayelet and Ravi Dhar (2005), "Goals as Excuses or Guides: The Liberating Effect of Perceived Goal Progress on Choice," *Journal of Consumer Research*, 32(3), 370-77.
- Fitzsimons, Gavan J, Joseph C Nunes, and Patti Williams (2007), "License to Sin: The Liberating Role of Reporting Expectations," *The Journal of Consumer Research*, 34(1), 22-31.
- Frank, Robert H (1985), *Choosing the Right Pond: Human Behavior and the Quest for Status*, New York: Oxford University Press.
- Goldstein, Noah J. and Robert B. Cialdini (2007), "The Spyglass Self: A Model of Vicarious Self-perception," *Journal of Personality and Social Psychology*, 92 (3), 402-17.
- Gorlin, Margarita and Ravi Dhar (2012), "Bridging the Gap between Joint and Individual Decisions: Deconstructing Preferences in Relationships," *Journal of Consumer Psychology*, 22 (3), 320-23.
- Hannover, Bettina and Ulrich Kuhnen (2002), "'The Clothing Makes the Self' Via Knowledge Activation," *Journal of Applied Social Psychology*, 32(12), 2513-25.
- Haws, Kelly L and Karen Page Winterich (2013), "When Value Trumps Health in a Supersized World," *Journal of Marketing*, 77(3), 48-64.
- Hisrich, Robert D., Ronald J. Dornoff and Jerome B. Kernan (1972), "Perceived Risk in Store Selection," *Journal of Marketing Research*, 9(2), 435-39.
- Huber, Joel, Kelly Goldsmith, and Cassie Mogilner (2008), "Reinforcement versus Balance Response in Sequential Choice," *Marketing Letters*, 19(3), 229-39.
- Inman, Jeffrey J. (2001), "The Role of Sensory Specific Satiety in Attribute Level Variety Seeking," *Journal of Consumer Research*, 28 (1), 105-20.
- Kelley, Harold H. and John W. Thibaut (1978), *Interpersonal Relations: A Theory of Interdependence*, New York: Wiley.
- Khan, Uzma and Ravi Dhar (2006), "Licensing Effect in Consumer Choice," *Journal of Marketing Research*, 43(2), 259-66.
- Kuziemko, Ilyana, Ryan W Buell, Taly Reich, and Michael I Norton (2014), "'Last-Place Aversion': Evidence and Redistributive Implications," *Quarterly Journal of Economics*, 129 (1), 105-49.
- Lauga, Dominique Olié and Elie Ofek (2011), "Product Positioning in a Two-Dimensional Vertical Differentiation Model: The Role of Quality Costs," *Marketing Science*, 30 (5), 903-23.
- Liu, Peggy J., Troy H. Campbell, Gavan J. Fitzsimons, and Gráinne M. Fitzsimons (2013), "Matching Choices to Avoid Offending Stigmatized Group Members," *Organizational Behavior and Human Decision Processes*, 122 (2), 291-304.
- Lowe, Michael L and Kelly L Haws (2014), "(Im) Moral Support: The Social Outcomes of Parallel Self-Control Decisions," *Journal of Consumer Research*, 41 (2), 489-505.
- McAlister, Leigh and Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9 (December), 311-22.

- McFerran, Brent, Darren W Dahl, Gavan J Fitzsimons, and Andrea C Morales (2010), "I'll Have What She's Having: Effects of Social Influence and Body Type on the Food Choices of Others," *Journal of Consumer Research*, 36 (6), 915-29.
- Peluchette, Joy V. and Katherine Karl (2007), "The Impact of Workplace Attire on Employee Self-Perceptions," *Human Resource Development Quarterly*, 18(3), 345-60.
- Pequenino, Karla (2016), "Do You Mukbang? It's the New Form of 'Social Eating'" (accessed Feb 1, 2017), [available at <http://www.cnn.com/2016/10/20/health/vegans-go-mukbang-in-new-social-eating-trend>]
- Randall, Taylor, Karl Ulrich, and David Reibstein (1998), "Brand Equity and Vertical Product Line Extent," *Marketing Science*, 17 (4), 356-79.
- Ratner, Rebecca K. and Rebecca W. Hamilton (2015), "Inhibited from Bowling Alone," *Journal of Consumer Research*, 42 (2), 266-83.
- Ryckman, Richard M, Max Hammer, Linda M Kaczor, and Joel A Gold (1990), "Construction of a Hypercompetitive Attitude Scale," *Journal of Personality Assessment*, 55(3-4), 630-39.
- Schrift, Rom Y. and Moty Amar (2015), "Pain and Preferences: Observed Decisional Conflict and the Convergence of Preferences," *Journal of Consumer Research*, 42 (July), 515-34.
- Stroebe, Wolfgang, Guido M. Van Koningsbruggen, Esther K. Papias, and Henk Aarts (2013), "Why Most Dieters Fail But Some Succeed: A Goal Conflict Model of Eating Behavior," *Psychological Review*, 120 (1), 110.
- Sutton, John (1986), "Vertical Product Differentiation: Some Basic Themes," *The American Economic Review*, 76 (2), 393-98.
- Tanner, Robin J., Rosellina Ferraro, Tanya L. Chartrand, James R. Bettman, and Rick Van Baaren (2008), "Of Chamelions and Consumption: The Impact of Mimicry on Choice and Preferences," *Journal of Consumer Research*, 34 (6), 754-66.
- Tu, Yanping and Ayelet Fishbach (2015), "Words Speak Louder: Conforming to Preferences More Than Actions," *Journal of Personality and Social Psychology*, 109(2) 193-209.
- Wilcox, Keith, Beth Vallen, Lauren Block, and Gavan J. Fitzsimons (2009), "Vicarious Goal Fulfillment: When the Mere Presence of a Healthy Option Leads to an Ironically Indulgent Decision," *Journal of Consumer Research*, 36(3), 380-93.

When Low Control and Uncertainty Do Good

Chair: Bora Min, University of Southern California, USA

Paper #1: I Can Do More with My Time, but Less with My Money: The Role of Control on Resource Efficacy Perceptions

Jerry Han, University of Texas at Austin, USA
Adriana Samper, Arizona State University, USA
Andrew Gershoff, University of Texas at Austin, USA

Paper #2: Novelty as Risk and Opportunity: Opposite Effects of Low Personal Control and Perceived Unpredictability on Novelty Seeking

Bora Min, University of Southern California, USA
Norbert Schwarz, University of Southern California, USA

Paper #3: The Surprising Effects of Attitude Certainty on Advocacy and Advocacy Receptivity

Lauren Cheatham, University of Hawaii, USA
Zakary Tormala, Stanford University, USA

Paper #4: Desire to Learn About the Category Sparks Preference for Authenticity

Sharlene He, Northwestern University, USA
Gregory S. Carpenter, Northwestern University, USA
Kent Grayson, Northwestern University, USA

OVERVIEW

Consumers are inherently motivated to have mastery of the environment, which leads them to seek control and certainty. A voluminous literature has shown that situations in which consumers feel out of control or uncertain are threatening to the self (Dow et al. 1992; Kay et al. 2008), which primarily highlights the downside of such states. Yet, low control and uncertainty may not always have detrimental effects on consumer behavior. The four papers of this session address a set of related questions focused on potential benefits of such 'aversive' states.

The first two papers of the session deal with the downstream consequences of low control on consumer belief and choice, differentiating its upsides and downsides. **Han, Samper, and Gershoff** document how a feeling of low (vs. high) control affects consumers' perceptions of two resources: time and money. They find that while incidental low (vs. high) control decreases consumers' money efficacy perceptions, it also *increases* their time efficacy perceptions. This is because time is perceived as more self-representative compared to money. They also show that low (vs. high) control leads consumers to have higher expectations about outcomes when spending time, but lower expectations when spending money. **Min and Schwarz** differentiate two aspects of low control that have been treated as equivalent and subsumed under a generic "control" label: perceptions of unpredictability and low personal control. They show that perceptions of unpredictability (vs. low personal control) give rise to different perspectives on novelty (opportunity vs. risk, respectively), hence thinking about an unpredictable world actually *increases* novelty-seeking whereas thinking about a lack of personal control decreases novelty-seeking.

The second two papers of the session focus on potential advantages of uncertainty in the context of consumer belief and choice. **Cheatham and Tormala** look at the effectiveness of advocacy messages depending on the level of perceived certainty about one's attitude toward an issue (e.g., labeling of GMO foods, banning/taxing of high sugar drinks). They find that consumers who hold less certain attitudes are perceived as actually *more persuasive* than certain advocates, when advocates and recipients have dissimilar (vs.

similar) views. Their work provides evidence that uncertainty can be more persuasive than certainty under some conditions. **He, Carpenter, and Grayson** identify a novel antecedent of preference for authenticity: uncertainty about a product category. They show that authenticity is *more preferred* when consumers are uncertain about a product category than when they are certain and familiar with the category. Authentic options are perceived as more prototypical and representative of the unfamiliar category, thereby providing an opportunity to reduce uncertainty (i.e., learn) about that category. They demonstrate that this learning mechanism is distinct from a risk-reduction account.

Taken together, the combination of the current work contributes to shifting perspectives on the effects of low control and uncertainty by providing convergent support for their favorable effects on consumer belief and choice and demonstrating when and how they can do good. We expect this session to generate significant interest among researchers investigating control, uncertainty, and consumer choice-making and evaluation more broadly.

I Can Do More with My Time, but Less with My Money: The Role of Control on Resource Efficacy Perceptions

EXTENDED ABSTRACT

As consumers, we all use resources such as time and money to obtain the outcomes we want. However, even though a unit of resource should have a fixed objective value, incidental factors may influence how people view their resources (e.g. Soster, Gershoff, & Bearden, 2014) including those in which participants earn and spend real resources and evaluate real products, explore this bottom dollar effect. This research contributes to prior mental accounting research regarding how costs influence decision making (e.g., bundling, coupling, sunk costs). It is important to understand how certain factors impact consumers' evaluation of resources, since such evaluations can further affect consumer expectations and satisfaction. In this paper, we show that while incidental low (vs. high) control increases people's time efficacy perceptions, it decreases people's money efficacy perceptions. Moreover, we find that this change in resource efficacy perception has commensurate effects on consumer expectation and satisfaction.

Since the belief that one has control is integral to the self (Skinner, 1995), incidental events that make one feel low control can be perceived as a threat to the self (e.g. Chaxel, 2016). Past work shows that one way in which people respond to such threats is by becoming defensive, where they reinforce their personal beliefs or engage in compensatory behavior (Hart et al., 2009). Alternatively, the literature also suggests that people can become more conservative, where they become more cautious during decision-relevant information search (Fischer et al., 2011) yet others have found contradictory effects. The present series of 5 studies consistently found that the crucial moderator for these inconsistent findings was whether the induced threat was contextually related to the subsequent decision and information search tasks. Contextual incongruence (e.g., an induction of terrorist threat followed by an economic decision case). Importantly, past work shows that whether people become defensive or conservative in response to a threat depends on the relevance of the subsequent task to the threat itself (Fischer et al., 2011) yet others have found contradictory effects. The present series of 5 studies consistently found that the crucial moderator for these inconsistent

findings was whether the induced threat was contextually related to the subsequent decision and information search tasks. Contextual incongruence (e.g., an induction of terrorist threat followed by an economic decision case. Considering that feelings of low control is a threat to the self, low control could lead to defensive processing for self-relevant evaluations, whereas it could result in conservative processing for non-self-relevant evaluations. A pertinent situation is when consumers are thinking of their time versus money resources. Specifically, the literature on consumer resources finds that people view their time (vs. money) as more reflective of the self (Mogilner & Aaker, 2009; Reed, Aquino, & Levy, 2007) activating time (vs. money, and this could mean that consumers engage in defensive (conservative) processes when evaluating their time (money) resources in response to a threat to the self. Therefore, we predicted that incidental feelings of low (vs. high) control would heighten people's time efficacy perceptions, whereas it would decrease their money efficacy perceptions. We tested these predictions across four studies.

In study 1, we manipulated control by having participants read a purported science article on how effort (high control) or genes (low control) are responsible for people's life outcomes (Cutright & Samper, 2014) what role should products play in helping consumers pursue their goals (e.g., losing weight, maintaining a clean home. Next, we measured people's resource efficacy perceptions using an adopted version of the Instrumentality of Money Scale (Duclos, Wan, & Jiang, 2013). As expected, the data revealed a significant interaction effect ($F(1, 166) = 7.36, p < .01$). Moreover, simple effects analyses showed that low (vs. high) control people felt higher time efficacy perceptions ($F(1, 166) = 3.54, p < .06$), but lower money efficacy perceptions ($F(1, 166) = 3.84, p < .05$). The results provided initial evidence that threats to control differentially affect time vs. money resource efficacy perceptions.

Study 2 investigated the underlying process of our effect. Here, we measured perceived self-representativeness of the resource in addition to manipulating control and measuring people's perceived resource efficacy. First, the results again yielded a significant interaction effect ($F(1, 235) = 8.91, p < .01$). Also, low (vs. high) control people felt higher time efficacy perceptions ($F(1, 235) = 6.37, p < .01$), whereas they felt marginally lower money efficacy perceptions ($F(1, 235) = 2.88, p < .09$). Importantly, as our theory would predict, a mediated moderation model using the PROCESS macro (model 15; Preacher & Hayes, 2004) formal significance tests of indirect effects are rarely conducted. After a brief overview of mediation, we argue the importance of directly testing the significance of indirect effects and provide SPSS and SAS macros that facilitate estimation of the indirect effect with a normal theory approach and a bootstrap approach to obtaining confidence intervals, as well as the traditional approach advocated by Baron and Kenny (1986) showed that perceived self-representativeness of the resource was driving the differential effect of low (vs. high) control on time versus money (95% CI in low control: [0.0189, 0.2164], high control: [-0.0395, 0.1842]).

In study 3, we examined the downstream consequences of biased resource efficacy perceptions on expected outcomes. In the study, participants first went through a control manipulation task and then were instructed to imagine that they had to use either time or money in order to search for a moving company (Saini & Monga, 2008). After reading the scenario, we measured participants' resource efficacy perceptions and also their expectations toward the moving company. First, there was a significant interaction effect of control and resource type on efficacy perceptions ($F(1, 146) = 11.15, p < .001$), where the mean patterns replicated previous results. Moreover, there was a significant interaction effect of control and resource

type on expected outcomes ($F(1, 146) = 8.73, p < .004$), where low (vs. high) control people had higher expectations when spending time ($F(1, 146) = 6.38, p < .01$), but marginally lower expectations when spending money ($F(1, 146) = 2.76, p < .09$). Finally, a moderated mediation using the PROCESS macro (model 8) revealed that the interaction effect of control and resource type on outcome expectations was driven by the interaction effect of control and resource type on efficacy perceptions (95% CI: [-0.2472, -0.0597]).

Finally, study 4 looked at how perceived control affects post-experience satisfaction. We expected that those who spent resources that were perceived as more efficacious would be less satisfied with the same experience. After completing the control manipulation task, participants read a scenario in which they had spent either 4 hours of work (time) or \$ 50 (money) to purchase a restaurant dinner voucher and further read that the actual dinner was a mix of positive and negative experiences. Subsequently, they were asked how likely they would write a positive or negative review for the restaurant. The data again revealed a significant interaction effect ($F(1, 165) = 10.41, p < .002$). As expected, low (vs. high) control led to decreased satisfaction when using time ($F(1, 165) = 3.79, p < .05$), but increased satisfaction when using money ($F(1, 165) = 6.88, p < .01$).

In short, the current paper finds that incidental feelings of control can differentially impact consumers' perceptions of time versus money resources and that control can further affect consumer expectations and satisfactions.

Novelty as Risk and Opportunity: Opposite Effects of Low Personal Control and Perceived Unpredictability on Novelty Seeking

EXTENDED ABSTRACT

Novelty can have two different implications in consumer behavior. Trying out new products can offer consumers opportunities to explore potentially superior alternatives (Hirschman 1980) but can also entail risks of handling uncertainty (Kalish 1985; Schiffman 1972). Since the propensities of consumers to adopt novel products play a critical role in forming brand loyalty (Thompson and Sinha 2008), decision making, and preferences (Bianchi 2006; Hekkert et al. 2003), understanding when consumers regard novel products as positive versus negative carries considerable weight.

One stream of research that investigates consumer novelty-seeking concerns the warm glow effect (James 1961; Titchener 1910) which claims that familiarity is associated with security and safety, thus consumers tend to stick with familiar products when they confront problematic situations (e.g., "chicken soup for the soul"). Low control is one of the detrimental states that consumers are motivated to overcome (Janoff-Bulman 1992). Past research on control showed that consumers who lack personal control show aversion to novel products (Faraji-Rad et al. 2016). However, personal control is only one aspect of control; motivation for personal control fulfills the motivation to overcome perceptions of unpredictability/randomness (Hafer and Bègue 2005) so previous research has treated low personal control and perceived unpredictability as two interchangeable causes of low control (e.g., Rutjens et al. 2013). In this research, we examined whether perceptions of unpredictability and low personal control would have the same downstream consequences on novelty-seeking. In contrast to earlier work, we hypothesized that perceptions of unpredictability would increase novelty-seeking, whereas perceptions of low personal control would decrease novelty-seeking. Six studies confirmed these predictions.

In all studies, participants chose 3 chocolate bars from a set of 6 choice options that consisted of 3 familiar (domestic) and 3 unfa-

miliar (international) chocolate bars. In study 1, participants read a news excerpt (from Friesen et al. 2014) and wrote about an event where they felt like the world is unpredictable (vs. predictable) before choosing 3 chocolate bars (which they received for consumption). Those who thought about unpredictability chose more novel items ($M = 1.15$) than those who thought about predictability ($M = .74$; $t(171) = -2.64$, $p = .009$).

Studies 2A and 2B directly juxtaposed two different aspects of low control: perceptions of unpredictability and low personal control. Consistent with previous findings, participants who wrote about an event where they had a complete lack (vs. sense) of control over the situation (from Faraji-Rad et al. 2016) were *less* likely to choose unfamiliar products ($M_{\text{high-personal-control}} = .99$ vs. $M_{\text{low-personal-control}} = .61$), whereas participants who wrote about the unpredictable (vs. predictable) world were *more* likely to choose unfamiliar products ($M_{\text{predictability}} = .58$ vs. $M_{\text{unpredictability}} = 1.07$) replicating study 1, yielding a significant 2-way interaction ($F(1, 274) = 14.94$, $p < .001$, $\eta^2_p = .052$).

These divergent effects of unpredictability and low personal control highlight that the two constructs are distinct, although they are often treated as equivalent and subsumed under a generic “control” label (e.g., Rutjens et al. 2013). Study 3 added a neutral condition to make comparisons with a baseline. Participants in the neutral condition wrote a short summary about vitamins. This study replicated the 2-way interaction of studies 2A and 2B ($M_{\text{predictability}} = .45$ vs. $M_{\text{unpredictability}} = .95$; $M_{\text{high-personal-control}} = .94$ vs. $M_{\text{low-personal-control}} = .54$; $F(1, 220) = 14.07$, $p < .001$, $\eta^2_p = .06$). In addition, participants in the neutral condition ($M_{\text{neutral}} = .96$) showed as much novelty-seeking as participants in high personal control condition and unpredictability condition (r 's $< .1$), but more novelty-seeking than low personal control condition and predictability condition (p 's $< .004$). This suggests that consumers may perceive the world as generally unpredictable, but their own personal circumstances as controllable.

These findings presumably reflect that different control manipulations give rise to different perspectives on novelty. An unpredictable world requires flexible adaptation and preparation for change, making novel products an opportunity worth exploring. In contrast, familiar alternatives may be comforting in a context where one lacks an opportunity to exert influence. Study 4 explicitly manipulated these perspectives. It replicated all conditions of study 3 while adding conditions that highlighted that new products can be seen as new opportunities (opportunity framing) versus risks resulting in wasted resources (risk framing). The replication conditions reproduced the interaction pattern observed in studies 2 and 3. The frame manipulations produced the expected results in the absence of any control manipulation (i.e., increased novelty-seeking under opportunity framing and decreased novelty-seeking under risk framing). More important, the choices of the participants exposed to unpredictability resembled those under *opportunity* framing, and the choices of the participants exposed to low personal control resembled those under *risk* framing.

These findings highlight that thinking about an unpredictable world differs from thinking about a lack of personal control, despite a long history of treating both manipulations as interchangeable. Whereas an unpredictable world fosters the exploration of novel products, a lack of personal control impairs it. We discuss the conceptual implications for theories of control, highlight the need for distinctions, and note their implications for consumer behavior.

The Surprising Effects of Attitude Certainty on Advocacy and Advocacy Receptivity

EXTENDED ABSTRACT

What drives people to advocate on behalf of their own attitudes? When, and why, do people engage in advocacy and how successful are they when they do? On a daily basis, we are exposed to countless advocacies generated by individuals. One person might advocate for the purchase of fair trade clothing after learning about how garment makers are often underpaid, whereas another might endorse a policy proposal such as the legalization of marijuana based on having recently learned a bit about it. What drives the success or failure of these advocacy attempts? Despite a voluminous literature on attitude change and persuasion, we know relatively little about the psychological drivers of advocacy, and whether the processes that motivate people to advocate also affect the success of their advocacy. One variable that has been studied in this context is attitude certainty (Akhtar, Paunesku, and Tormala, 2013; Cheatham & Tormala 2015; Cheatham & Tormala 2017).

Attitude certainty refers to the subjective sense of conviction with which one holds one's attitude (Rucker, Tormala, Petty, and Briñol, 2014). For the most part, past research has indicated that people are more likely to advocate on behalf of their own views—for example, more likely to try to persuade others—when they feel certain about those views (Akhtar et al. 2013; Cheatham and Tormala 2015; Visser, Krosnick, & Simmons 2003). More recently, Cheatham and Tormala (2017) found that attitude certainty has a curvilinear relationship to advocacy such that low and high certainty participants both advocate more than their moderately certainty counterparts. The current research is designed to further examine this unique relationship. First we will explore the different ways that individuals engage in advocacy across the certainty spectrum. Second we will investigate how these differences affect the receptivity of the advocacy recipient. In other words we will explore how persuasive different types of advocacy are across the certainty spectrum.

Based on the differences in what they do and what they say, we posit that there may be conditions under which low certainty advocacy is more persuasive than high certainty advocacy. We predict that uncertain individuals will be more persuasive than highly certain individuals under conditions of disagreement. Low certainty advocacy is likely much less threatening than high certainty advocacy when individuals disagree. However, if individuals are in agreement they will likely prefer the more certain advocacy because they will be drawn to expressions of confidence and a belief that they are correct.

In study 1 (N=600) we experimentally manipulated three levels of certainty using a novel paradigm. Participants were asked to think of an issue that they were very uncertain, somewhat certain, or very certain about. They were then asked what their attitude and attitude certainty was toward that issue. Finally, participants responded to an open-ended behavioral question asking them what they would say to someone who did not necessarily agree with them. As expected, we successfully manipulated attitude certainty at three levels and found that highly certain advocate messages were significantly longer (more word, more arguments) than either moderate or low certain advocate messages. However, our core interest was in determining the distinctly different forms of advocacy engagement across the certainty spectrum. While an overwhelming majority of participants across the three conditions expressed a clear belief, what they said subsequent to that belief expression was substantively different. Specifically, we found that high certainty fostered significantly more expressions of rational argumentation, moral conviction, judgment of others who disagree, as well as making salient that one's own

opinion is clear and correct. While low certainty fostered significantly more expressions of a desire for conversation, a desire for more information, interest in opposing viewpoints, as well as hedging or qualifying statements.

In study 2 (N=583) we aimed to explore how advocacy across the certainty spectrum was perceived by either pro- or counter-attitudinal others. Participants were first asked to report their attitude and attitude certainty toward an issue from study 1, followed by instructions to read one of the messages written by the former participants, such that each new participant in study 2 read one of the participant's messages from study 1. Participants were then asked to rate those messages on a number of dimensions including receptiveness to the views of the advocate, openness to the views of the advocate, how convinced they were by the message, how interested they were in the message, and how reasonable they felt the advocate was. Importantly, as predicted, all of the above items showed a significant interaction (all $p < .05$) between study 1 certainty condition and initial attitude agreement between advocate and recipient. We found consistent evidence suggesting that when recipients generally agreed with advocates, in other words if the participants' attitude from study 1 aligned with the new participants' attitude in study 2, they had a preference for highly certain attitude advocacy messages; however, this relationship was eliminated or reversed when recipients generally disagreed with advocates.

In sum, using a two-study yoked design, we found that when the advocate and recipient have similar views on an issue, highly certain attitude advocacy is perceived to be more persuasive than moderate or low certain advocacy. When advocates and recipients have dissimilar views, however, low certainty advocacy appears to be seen as more persuasive. This finding suggests that there are contexts in which uncertain advocacy expressions can be more successful than more certain advocacy expressions. This work builds on limited past research showing that uncertainty can be more persuasive than certainty under some conditions (Karmarker & Tormala, 2010). Implications for understanding and eliciting advocacy in consumer contexts will be discussed.

Desire to Learn About the Category Sparks Preference for Authenticity

EXTENDED ABSTRACT

Authenticity as a brand concept has become popular among marketing practitioners; indeed, some view authenticity as fundamental to brand success (The Economist 2015; Gilmore and Pine 2007). Despite the apparent importance of authenticity in marketing practice, a fundamental question remains under-examined in consumer behavior research: what psychological factors drive preference for authentic options? Our research identifies a novel antecedent of preference for authenticity.

Authenticity is often defined as what is real or genuine (Grayson and Martinec 2004). The present research demonstrates that greater preference for authentic options can manifest in unfamiliar product categories, relative to familiar categories. We suggest that in an unfamiliar product category (e.g., Ethiopian restaurants), a natural motive arises to learn about – thus reduce uncertainty regarding – the category. In such situations, consumers have a stronger preference for authentic options than they would in a familiar category (e.g., Italian restaurants) because authenticity is associated with a greater opportunity for category learning. Specifically, we hypothesize that in unfamiliar categories, authentic options are perceived to be more prototypical or representative members of the category. Due to their representativeness, authentic options facilitate greater learn-

ing about what the category is like. Moreover, we distinguish this “learning” account from a “risk-reduction” account. A risk-reduction account predicts that in an unfamiliar category, consumers would prefer a “safe” option, and the perceived typicality of the authentic option may also cause it to be viewed as safer. However, we find that preference for the authentic option persists despite the existence of another, safer alternative in the set.

Experiment 1. A 2 (category: familiar vs. unfamiliar) x 2 (attribute type: regular vs. authentic) mixed design was used to test our hypothesis. Participants (N=97) were randomly assigned to rate a series of attributes for Italian restaurants (familiar) or Tunisian restaurants (unfamiliar). They rated their preference for four “regular” attributes (e.g., service, menu options, etc.) as well as four attributes that connoted authenticity (e.g., chef was trained in Italy [Tunisia], spices imported from Italy [Tunisia], etc.). Participants subsequently rated how authentic each attribute was of Italian [Tunisian] restaurants, how typical, as well as several measures assessing their familiarity with the category ($\alpha=0.95$).

The familiarity manipulation check confirmed that participants were more familiar with Italian restaurants ($M=4.95$) than Tunisian restaurants ($M=1.84$), $t(95)=13.95$, $p<.0001$. The authenticity manipulation check revealed that attributes intended to convey authenticity were indeed rated as more authentic ($M=6.52$) than the regular attributes ($M=4.64$), $p<.0001$. This was true across both the familiar category ($p<.0001$) and unfamiliar category ($p<.0001$).

The core dependent measure of preference showed a main effect of the authenticity factor, $p<.0001$. Overall, regular attributes ($M=5.87$) were more preferred than authentic attributes ($M=5.24$). Importantly, a significant familiarity x authenticity interaction emerged, $p<.0001$. Authentic attributes were more preferred when the category was unfamiliar ($M=5.60$) versus familiar ($M=4.89$), $p=.0001$. In contrast, preference for regular attributes did not differ across familiar ($M=5.98$) and unfamiliar categories ($M=5.76$), $p=.214$.

The proposed mediator of typicality exhibited a familiarity x authenticity interaction, $p<.0001$. Authentic attributes were perceived as more typical in the unfamiliar ($M=5.57$) compared to familiar category ($M=4.69$; $p<.0001$), whereas regular attributes did not differ in perceived typicality ($M_{\text{unfamiliar}}=4.68$ vs. $M_{\text{familiar}}=4.91$; $p=.205$). Moderated mediation analysis revealed that for authentic attributes, typicality mediated the effect of category familiarity on preferences ($b=0.31$, $p<.001$, bootstrapped C.I. [0.19, 0.44]). In contrast, for regular attributes, typicality did not significantly mediate preferences ($b=-0.06$, $p>.05$, bootstrapped C.I. [-0.11, 0]). This provides initial evidence that in unfamiliar categories, authenticity is preferred because it is viewed as more typical of the category, and thus facilitates category learning.

Experiment 2. This experiment distinguished the proposed learning account from risk-reduction. We assessed choice of an authentic option when another alternative in the set was indicated to be more certain (less risky), versus when such indication was absent. Participants (N=202) were assigned to conditions in a 2 (category: familiar vs. unfamiliar) x 2 (certainty information: present vs. absent) between-participants design. Participants read short descriptions of three Ethiopian or Italian restaurants and were asked to make a choice. One of the descriptions was constructed to indicate authenticity: the restaurant's chef was trained in Ethiopia [Italy]. In the certainty-information *absent* conditions, only the descriptions were presented. In the certainty-information *present* conditions, the number of reviews for each restaurant was shown: the authentic restaurant had the fewest reviews (less than 50; least certain), while the safe option had five times more reviews (most certain), and the

other option had an intermediate number. Average rating was held constant. Participants also rated the perceived authenticity, typicality, and certainty regarding each restaurant.

Manipulation checks showed that participants rated the restaurant with the chef as more authentic than the other two options ($p < .001$), and this was true across both categories. The authentic restaurant was also rated as more typical on average than the others ($p < .001$), but consistent with experiment 1, significantly more so in the unfamiliar ($M = 5.77$) than familiar category ($M = 5.25$), $p = .006$. Lastly, the option with the most reviews was rated as more certain or safer ($M = 5.38$) than the authentic option ($M = 4.74$) when review information was present ($p < .001$), and equivalently certain when this information was absent ($M_{\text{certain}} = 4.78$ vs. $M_{\text{authentic}} = 4.88$; $p = .491$).

A logit model of choice with the two factors and their interaction revealed only a significant main effect of category familiarity: a greater percentage of participants chose the authentic option when the category was unfamiliar ($M = 46.0\%$) versus familiar ($M = 32.4\%$). The two-way interaction was not significant ($p = .61$). Thus, preference for authenticity under unfamiliarity persisted despite the presence of a safer option, thereby ruling out a risk reduction account.

The present research demonstrates a novel mechanism – category learning – that drives consumer preference for authenticity. This work deepens marketers' understanding of when consumers value authenticity in products and brands.

REFERENCES

Overview

- Dow, James, and Sergio Ribeiro da Costa Werlang (1992), "Uncertainty aversion, risk aversion, and the optimal choice of portfolio." *Econometrica: Journal of the Econometric Society*, 60 (1), 197-204.
- Kay, Aaron C., Danielle Gaucher, Jamie L. Napier, Mitchell J. Callan, and Kristin Laurin (2008), "God and the government: testing a compensatory control mechanism for the support of external systems," *Journal of personality and social psychology*, 95 (1), 18-35.

Paper #1

- Chaxel, A.-S. (2016). Why, When, and How Personal Control Impacts Information Processing: A Framework, 0, 1–54.
- Cutright, K. M., and Samper, A. (2014). Doing It the Hard Way: How Low Control Drives Preferences for High-Effort Products and Services. *Journal of Consumer Research*, 41(3), 730–745.
- Duclos, R., Wan, E. W., and Jiang, Y. (2013). Show Me the Honey! Effects of Social Exclusion on Financial Risk-Taking. *Journal of Consumer Research*, 40(1), 122–135.
- Fischer, P., Kastenmüller, A., Greitemeyer, T., Fischer, J., Frey, D., and Crelley, D. (2011). Threat and selective exposure: the moderating role of threat and decision context on confirmatory information search after decisions. *Journal of Experimental Psychology: General*, 140(1), 51–62.
- Hart, W., Albarracín, D., Eagly, A. H., Brechan, I., Lindberg, M. J., and Merrill, L. (2009). Feeling validated versus being correct: a meta-analysis of selective exposure to information. *Psychological Bulletin*, 135(4), 555–588.
- Mogilner, C., and Aaker, J. L. (2009). "The Time vs. Money Effect": Shifting Product Attitudes and Decisions through Personal Connection. *Journal of Consumer Research*, 36(2), 277–291.

- Preacher, K. J., and Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers: A Journal of the Psychonomic Society, Inc.*, 36(4), 717–31.
- Reed, A., Aquino, K., and Levy, E. (2007). Moral Identity and Judgments of Charitable Behaviors. *Journal of Marketing*, 71(1), 178–193.
- Saini, R., and Monga, A. (2008). How I Decide Depends on What I Spend: Use of Heuristics Is Greater for Time than for Money. *Journal of Consumer Research*, 34(6), 914–922.
- Skinner, E. A. (1995). *Perceived control, motivation, & coping*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Soster, R. L., Gershoff, A. D., and Bearden, W. O. (2014). The Bottom Dollar Effect: The Influence of Spending to Zero on Pain of Payment and Satisfaction. *Journal of Consumer Research*, 41(3), 656–677.

Paper #2

- Bianchi, Marina (2006), Ed. *The active consumer: Novelty and surprise in consumer choice*. Vol. 20. Routledge.
- Faraji-Rad, Ali, Shiri Melumad, and Gita Venkataramani Johar (2016), "Consumer Desire for Control as a Barrier to New Product Adoption," *Journal of Consumer Psychology*, in press.
- Friesen, Justin P., Aaron C. Kay, Richard P. Eibach, and Adam D. Galinsky (2014), "Seeking Structure in Social Organization: Compensatory Control and the Psychological Advantages of Hierarchy," *Journal of Personality and Social Psychology*, 106 (4), 590- 609.
- Hafer, Carolyn L., and Laurent Bègue (2005), "Experimental Research on Just-world Theory: Problems, Developments, and Future Challenges." *Psychological Bulletin*, 131 (1), 128-67.
- Hekkert, Paul, Dirk Snelders, and Piet CW Wieringen (2003), "'Most Advanced, Yet Acceptable': Typicality and Novelty as Joint Predictors of Aesthetic Preference in Industrial Design," *British Journal of Psychology*, 94 (1), 111-24.
- Hirschman, Elizabeth C (1980), "Innovativeness, Novelty Seeking, and Consumer Creativity," *Journal of consumer research*, 7 (3), 283-95.
- James, W. (1961), *Psychology: The Briefer Course*. New York, NY: Harper & Row.
- Janoff-Bulman, R. (1992), *Shattered Assumptions: Towards a New Psychology of Trauma*. New York: Free Press
- Kalish, Shlomo (1985), "A New Product Adoption Model with Price, Advertising, and Uncertainty," *Management science*, 31 (12), 1569-85.
- Rutjens, Bastiaan T., Frenk van Harreveld, and Joop van der Pligt (2013), "Step by Step: Finding Compensatory Order in Science," *Current Directions in Psychological Science*, 22 (3), 250-5.
- Schiffman, Leon G (1972), "Perceived Risk in New Product Trial by Elderly Consumers," *Journal of Marketing Research*, 9 (1), 106-8.
- Titchener, E. B. (1910), *A Textbook of Psychology*. New York, NY: Macmillan.
- Thompson, Scott A. and Rajiv K. Sinha. (2008), "Brand Communities and New Product Adoption: The Influence and Limits of Oppositional Loyalty," *Journal of Marketing*, 72 (6), 65-80.

Paper #3

- Akhtar, Omair, David Paunesku, and Zakary L. Tormala (2013), "Weak > strong: The ironic effect of argument strength on supportive advocacy." *Personality and Social Psychology Bulletin*, 39, 1214-1226.
- Cheatham, Lauren and Zakary L. Tormala (2015), "Attitude certainty and attitudinal advocacy: The unique roles of clarity and correctness." *Personality and Social Psychology Bulletin*, 41, 1537-1550.
- Cheatham Lauren and Zakary L. Tormala (2017), "The Curvilinear Relationship Between Attitude Certainty and Attitudinal Advocacy." *Personality and Social Psychology Bulletin*, 43, 3-16.
- Karmarkar, Uma R and Zakary L. Tormala (2010), "Believe me, I have no idea what I'm talking about: The effects of source certainty on consumer involvement and persuasion." *Journal of Consumer Research*, 36, 1033-1049.
- Petrocelli John V., Zakary L. Tormala and Derek D. Rucker (2007), "Unpacking attitude certainty: Attitude clarity and attitude correctness." *Journal of Personality and Social Psychology*, 92, 30-41

- Rucker Derek D., Zakary L. Tormala, Richard E. Petty, and Pablo Briñol (2014), "Consumer conviction and commitment: An appraisal-based framework for attitude certainty." *Journal of Consumer Psychology*, 24(1), 119-136.
- Visser, Penny S., Jon A. Krosnick, and Joseph P. Simmons.(2003), "Distinguishing the cognitive and behavioral consequences of attitude importance and certainty: A new approach to testing the common-factor hypothesis." *Journal of Experimental Social Psychology*, 39, 118-141.

Paper #4

- Gilmore, James H. and B. Joseph Pine (2007), "Authenticity: What Consumers Really Want," Boston, MA: Harvard Business School Press.
- Grayson, Kent and Radan Martinec (2004), "Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings," *Journal of Consumer Research*, 31(September), 296-312.
- Schumpeter column (2015, November 14), "It's the Real Thing," *The Economist*.

How Can I Help You (or Not)?

Choice Architecture and Consumers' Decision Appraisal in Product Assortments

Chairs: Liz Friedman, Yale University, USA
Nahid Ibrahim, University of Alberta, Canada

Paper #1: The Dual Impact of Personalized Product Recommendations on Consumers' Subjective Appraisal of Their Product Choices

Gerald Häubl, University of Alberta, Canada
Benedict G. C. Dellaert, Erasmus University Rotterdam, The Netherlands
Murat Usta, Dalhousie University, Canada
Nahid Ibrahim, University of Alberta, Canada

Paper #2: Purchase Quantity Decisions and Default Effects in Assortments

Liz Friedman, Yale University, USA
Jennifer Savary, University of Arizona, USA
Ravi Dhar, Yale University, USA

Paper #3: Mixing It Up: The Influence of Unsystematic Product Arrangements on Assortment Processing, Exploratory Search, and Product Choice

Maik Walter, University of St. Gallen, Switzerland
Christian Hildebrand, University of Geneva, Switzerland
Gerald Häubl, University of Alberta, Canada
Andreas Herrmann, University of St. Gallen, Switzerland

Paper #4: Label Structure, Processing Disfluency, and Consumers' Responses to Credence-Labeled Foods

Jeffrey R. Parker, Georgia State University, USA
Omar Rodriguez-Vila, Georgia Institute of Technology, USA
Ryan Hamilton, Emory University, USA
Iman Paul, Georgia Institute of Technology, USA
Sundar Bharadwaj, University of Georgia, USA

SESSION OVERVIEW

Extensive choice research has documented that the way choices are presented can significantly affect consumer decision making (Thaler and Sunstein 2008). Choice architecture (e.g. framing, spatial arrangement of alternatives, etc.) can therefore be used to encourage choices that not only improve consumers' objective well-being (i.e. utility), but also to enhance their subjective appraisal of the decisions (i.e. satisfaction) (e.g., Johnson et al. 2012). In the current session, we seek to explore how changes to the choice architecture of product assortments influence not only which options consumers choose, but also how they perceive the choices. We explore a variety of choice aids, including personalized recommendations, default options, display formats and label structures, and their influence on decision appraisal.

This session seeks to answer two questions: In choices from product assortments, how do various decision aids facilitate the decision making process? How does manipulating different aspects of the choice architecture influence consumers' appraisal of their choices?

The first two papers explore the role of assortment structure on the appraisal of product choices. Häubl, Dellaert, Usta, and Ibrahim explore an ironic effect of personalized product recommendations on consumers' satisfaction with the chosen alternative. In four studies they demonstrate that personalized product recommendations may lead to less satisfaction with their choices when greater choice difficulty outweighs the greater perceived attractiveness of the assortment. They explore the moderating role of assortment size and

propose a "balanced design" to reduce the unintended negative effect. Friedman, Savary, and Dhar examine the default effect in assortments -- specifically, how the number and type of options defaulted affect the number of options chosen. In five studies they establish that due to an asymmetry between selection and rejection criteria, consumers choose more options when less attractive options are defaulted compared to when the most attractive options are defaulted. Importantly, the authors show that default options do not decrease choice satisfaction.

The latter two papers examine the role of fluency in assortment design. Walter, Hildebrand, Häubl, and Herrmann examine how perceptual fluency (vs. disfluency) of display formats influence consumers' product choices. Evidence from three lab experiments and two large-scale field experiments suggest that when an assortment combines both familiar and unfamiliar alternatives, presenting them in an unsystematic (vs. systematic) manner stimulates an exploratory mindset in consumers, and subsequently increases the size of consideration set and promotes the choice of unfamiliar products. Finally, Parker, Rodriguez-Vila, Hamilton, Paul, and Bharadwaj demonstrate how the label structure influences consumers' responses toward food products. In four studies they demonstrate that credence-labels (e.g., organic, gluten-free, hormone-free, etc.) generate less positive responses when applied at the product-level (e.g., organic burrito) than at the ingredient-level (e.g., burrito with organic ingredients), due to increased processing disfluency.

Using a combination of lab experiments and field studies, the four papers examine the underlying psychological mechanisms of the impact of choice architecture and decision aids on choice from product assortments. The insights from these papers may also serve as guidelines for marketers who aim to optimize consumers' well-being both objectively and subjectively.

The Dual Impact of Personalized Product Recommendations on Consumers' Subjective Appraisal of Their Product Choices

EXTENDED ABSTRACT

A common form of decision assistance is to provide consumers with personalized recommendations that screen the available products according to their idiosyncratic preferences. Prior work suggests that such personalized product recommendations benefit consumers by enabling them to identify better alternatives than they would without such assistance (Diehl, Kornish, and Lynch 2003; Häubl and Trifts 2000; Xiao and Benbasat 2007). Intuitively, this increase in decision quality should translate into a more favorable subjective appraisal of the product that is ultimately chosen.

However, providing consumers with a truncated set of alternatives that only includes the most attractive ones tends to also increase the difficulty of identifying the most attractive alternative, which in turn adversely affects consumers' subjective appraisal of their chosen alternative (Dhar 1997; Liberman and Förster 2006).

These two opposing forces are at the center of our conceptual framework of how decision assistance in the form of personalized recommendations affects consumers' subjective appraisal of their

product choices – i.e., choice satisfaction. We present evidence from four studies that were designed to test this dual-pathway framework.

Study 1 demonstrates that personalized product recommendations can both improve objective decision quality and *reduce* choice satisfaction. Across two between-subjects conditions, participants chose a digital music player from a set of eight alternatives that were described on four feature dimensions: sound quality, battery life, memory capacity, and weight. In the *unassisted* condition, the alternatives varied considerably in their attractiveness and were presented in an arbitrary order. In the *recommended* condition, the alternatives were closer in attractiveness than in the unassisted condition and were presented in descending order of attractiveness. For each participant, the utility of each alternative was calculated based on his/her ratings (scale: 0-100) of the importance of the four features. The utility of the chosen alternative was higher in the recommended than in the unassisted condition ($p < .001$). However, despite this positive effect of personalized recommendations on objective decision quality, participants in the recommended condition were significantly *less* satisfied with their chosen alternatives than those in the unassisted condition ($p < .05$).

Study 2 tests the proposed dual-pathway model that captures the opposing effects of personalized product recommendations on objective decision quality and on consumers' subjective appraisal of their chosen alternative. Across two between-subjects conditions, participants chose a hotel from a set of alternatives that were described on five feature dimensions: cleanliness, facilities, location, service, and sleep quality. Participants in the *unassisted* condition were presented with sixteen alternatives that had been selected at random from a pool of 64. Those in the *recommended* condition were presented with the sixteen best alternatives (based on their 0-100 ratings of feature importance) from the same pool of 64. The order of presentation was unique and random for each participant. Consistent with prior findings, the utility of the chosen alternative was significantly higher in the recommended than in the unassisted condition ($p < .001$). Mediation analysis (Preacher and Hayes 2008) revealed both a significant negative indirect effect of recommendation via choice difficulty ($p < .05$) and a significant positive indirect effect via the perceived attractiveness of the presented set of alternatives ($p < .05$), rendering the direct effect of recommendation on choice satisfaction nonsignificant ($p > .05$).

Study 3 examines the moderating role of the size of the presented set of alternatives. We hypothesized that choice difficulty would be lower in smaller recommended sets, which should attenuate the negative indirect effect of recommendations on choice satisfaction via choice difficulty. Participants were randomly assigned to a 2 (condition: unassisted vs. recommended) \times 2 (recommendation set size: large vs. small) between-subjects design, and they were presented with the same choice task as in Study 2. Participants were presented with either sixteen or four alternatives drawn from a pool of 64 hotels. In the *unassisted* condition, the alternatives were selected at random from the pool. In the *recommended* condition, the best alternatives (based on participants' 0-100 ratings of feature importance) were selected. As hypothesized, moderated mediation analysis (Preacher and Hayes 2008) revealed a significant negative indirect effect of recommendation via choice difficulty for the large set ($p < .05$), but not for the small set ($p > .05$). By contrast, the positive indirect effect of recommendation via the perceived attractiveness of the presented alternatives was significant for the small set ($p < .05$), but not for the large set ($p > .05$).

Finally, Study 4 examines whether it might be possible to reduce the negative effect of personalized recommendations on choice satisfaction by presenting consumers with a "balanced" recommen-

dation set that is constructed so as to contain a combination of some attractive alternatives and some less attractive ones. Using the same basic paradigm as in Study 3, participants were presented with sixteen alternatives drawn from a pool of 64 hotels. They were randomly assigned to one of three conditions – the sixteen alternatives were drawn at random (*unassisted*), or they were the sixteen best alternatives ("*good*"), or they were a set of alternatives that covered the spectrum of attractiveness close to uniformly (*balanced*). The results reveal that the utility of the chosen alternative was higher in the "good" condition than in the balanced and unassisted conditions ($ps < .05$). However, perceived choice difficulty was greater in the "good" condition compared to the other two ($ps < .04$). Mediation analysis with pairwise contrasts revealed that the dual-pathway model was supported for the contrast between the "good" and unassisted conditions. However, for the contrast between "good" and balanced, the effect on choice satisfaction is mediated only by choice difficulty ($p < .05$), whereas for the contrast between balanced and unassisted, this effect is mediated only by the perceived attractiveness of the set ($p < .05$). The latter result suggests that the negative effect of product recommendations on choice satisfaction vanished because choice difficulty was about as low in the balanced condition as it was in the unassisted condition.

This research advances our understanding of the psychological forces that govern consumers' subjective appraisal of the product choices they make. The findings identify a significant caveat associated with personalized product recommendations, and they have important implications for the construction of choice architectures for consumer decision assistance.

Purchase Quantity Decisions and Default Effects in Assortments

EXTENDED ABSTRACT

Although most choice research examines how consumers choose a single option from a choice set, many choices in the real world allow them to choose as many (or as few) options as they would like from an assortment or menu of goods. In contrast to the standard theory of choice where the number of options purchased from an assortment depends on the utility and price of each item, we extend the literature on default effects in single choice to explore how the number and type of options preselected or defaulted in an assortment affects the total amount chosen. While prior research has focused on how preselecting a particular option increases preference for that option over a non-defaulted option and the possible mechanisms underlying this finding (Johnson and Goldstein 2003; Choi et al. 2004; Kressel, Chapman and Leventhal 2007), past work does not make a systematic prediction about how many *non*-defaulted options will be chosen when certain other options are preselected.

In the current work, we explore how the number and type of default options will influence the total quantity chosen from an assortment. Consistent with past work that shows that preselecting an option increases the likelihood of choosing that option, we first show that increasing the number of defaulted options linearly increases the quantity chosen. We further research how the total number of options purchased depends on *which* options are defaulted, holding the total number constant. Our main proposition is that preselecting less attractive items increases the total number of items chosen compared to preselecting the most attractive items.

Our results can be explained by a documented asymmetry between selection and rejection criteria. Specifically, consumers have a higher threshold for choosing non-selected items than they do for keeping preselected items (Yaniv and Schul 1997; Levin, Huneke

and Jasper 2000; Huber, Neale and Northcraft 1987). As a result, items in an assortment that might not be attractive enough to actively select but may be sufficiently attractive to keep (or not reject) when already preselected. In contrast, the most attractive items are less likely to be impacted by defaults, because they are likely to exceed even the higher threshold. As a consequence, when less attractive items are preselected, they are more likely to be chosen than when they are not preselected, but preselecting the most attractive items does not increase the likelihood of choosing them to the same extent. As a result, consumers choose more items overall when the less attractive items are preselected than when the most attractive items are.

We test our hypotheses in five studies. Study 1 establishes that there is a significant effect of defaults on the number of items purchased. We presented participants with two assortment scenarios, each with 16 options: a party scenario where they were shopping for snacks, and a home office scenario where they were shopping for supplies. We varied between subjects whether 0, 4, 12 or 16 of the options were preselected. We find a strong and significant linear relationship between the number of preselected options and total number of items purchased for both assortment scenarios: snacks ($b = .17$, $SE = .03$, $p < .001$) and supplies ($b = .15$, $SE = .03$, $p < .001$).

Moreover, in contrast to research that suggests consumers may react negatively to a perceived attempt to manipulate their preferences with defaults (Brown and Krishna 2004), we find that consumers are no less satisfied, and may be marginally *more* satisfied with their choice when options are defaulted, compared to when no options are defaulted.

In studies 2A, 2B, 3 and 4 we test the hypothesis that preselecting less attractive options increases quantity chosen compared with preselecting more attractive options. In studies 2A and 2B, we again use the party snacks and supplies scenarios, with 16 options each, which were all at least somewhat attractive. We pre-tested the options to identify the most and least attractive options. We then manipulated between subjects whether the 4 most attractive or 4 least attractive options were preselected. We find that participants selected more items overall when the least attractive items were preselected compared to when the most attractive items were pre-selected ($M = 8.0$ vs. 6.9 , $p < .001$ for snacks; $M = 7.6$ vs. 6.5 , $p = .006$ for supplies). This result is driven by the number of less attractive items increasing when preselected ($M = 1.7$ v. 0.6 for snacks; $M = 1.8$ vs. 0.4 for supplies) more than more attractive items increase when preselected ($M = 3.4$ vs. 3.0 for snacks, $p(\text{interaction}) < .001$; $M = 3.4$ vs. 2.8 for supplies, $p(\text{interaction}) < .001$).

In study 3, we manipulate which items are attractive by setting certain items on sale. Again we find that people choose more items on average when the less attractive (i.e. full price items) are preselected than when the more attractive (i.e. sale items) are ($M = 7.1$ v. 6.0 , $p = 0.040$). Again the result was driven by defaults increasing full price items ($M = 1.5$ vs. 0.7) more than sale items ($M = 2.3$ vs. 1.9 , $p(\text{interaction}) = .001$). Finally, study 4 tests a charitable giving scenario in which participants could hypothetically donate \$2 to any number of 10 charities. In this scenario, donations for 3 of the charities would be "matched," making them more attractive. We varied between subjects whether the 3 matched (more attractive) charities were preselected, or whether 3 other charities were (less attractive). Again we find that preselecting the unmatched options resulted in fewer charities selected than preselecting the matched charities ($M = 5.2$ vs. 4.4 , $p = .045$). Donations to matched charities were not significantly increased by defaults ($M = 2.1$ vs. 1.9), but donations to unmatched charities were ($M = 1.5$ vs. 0.8 , $p(\text{interaction}) < .001$).

As more retailers begin to add default options to their marketing mix with tactics such as "starter carts" or pre-loaded shopping lists, it becomes increasingly important to investigate the effect of defaults in larger assortments. Our results suggest that preselecting options may be effective in increasing basket size without reducing customer satisfaction, particularly when less attractive items are preselected.

Mixing It Up: The Influence of Unsystematic Product Arrangements on Assortment Processing, Exploratory Search, and Product Choice

EXTENDED ABSTRACT

How best to present product assortments in order to attract consumers' interest and attention is a key challenge for retailers (Mantrala et al. 2009). A common way of arranging a product display entails presenting the most popular, and thus most familiar, alternatives in highly prominent display positions (Nowlis and Simonson 1997; Valenzuela, Raghuram, and Mitakakis 2013), resulting in consumers' attention being directed towards specific alternatives that they tend to already be aware of (Christie and Klein 1995; Downing 2000). This is consistent with findings that greater fluency promotes simplified decision processes by selectively directing consumer attention towards familiar products (Alter et al. 2007; Janiszewski, Kuo, and Tavassoli 2012), and that fluency can reduce consumers' motivation to explore other alternatives (Deng et al. 2016; Janiszewski 1998).

Recent work suggests that perceptual disfluency can act as a metacognitive cue that stimulates the more in-depth processing of information by eliciting a need for cognitive enrichment (Alter 2013; Alter et al. 2007; Graf and Landwehr 2015). In line with these findings, Pocheptsova, Labroo, and Dhar (2010) showed that a difficult-to-read description (i.e., such as one using a grayish font) of an individual product can create perceptions of exclusivity and heightened attractiveness, particularly when the product is unfamiliar.

Against the background of this prior research, we propose that an unsystematic (versus systematic) product arrangement promotes perceptual disfluency. Moreover, we hypothesize that perceptions of disfluency increase consumers' motivation to engage in more exploratory search, resulting in consideration of a larger and more diverse set of products as candidates for purchase, and ultimately promoting the choice of unfamiliar alternatives. We present evidence from three studies that supports this theorizing.

Study 1 was designed to examine the effect of systematic (versus unsystematic) product arrangements on consumers' perceptions of fluency, and to provide initial evidence on how this might affect the motivation to explore unfamiliar products. In cooperation with a large Swiss chain of grocery stores, we selected two stores that were closely matched but differed in one critical respect—whether their assortment of chocolate products was arranged systematically (by brand, flavor, and price) or unsystematically (in a seemingly arbitrary manner). A sample of shoppers ($n = 102$) was recruited in the immediate vicinity of the stores' chocolate displays to complete a short survey. As predicted, shoppers perceived the unsystematic product arrangement to be more disfluent than its systematic counterpart ($p < .01$), and expressed a greater interest in exploring unfamiliar products in connection with the unsystematic than with the systematic arrangement ($p < .05$). In line with our theorizing, a mediation analysis (Hayes 2013) reveals that the effect of unsystematic (versus systematic) product arrangement on consumers' inclination to explore unfamiliar alternatives is significantly mediated by perceptions of disfluency.

Study 2 was a large-scale field experiment across 36 stores conducted in cooperation with a Swiss mobile phone retailer. All stores

used an interactive assortment tracking technology that logged consumers' product search behavior for a total of 21 mobile phones that were arranged in a 3 (rows) x 7 (columns) product display. Each of the 36 stores was randomly assigned to one of four conditions where the 7 most familiar products (identified in a pretest) were presented either (1) according to the retailer's original display format [systematic] (2) grouped together in the top row (salient position; Chandon et al. 2009) [systematic], (3) grouped together in the bottom row (non-salient position) [systematic], or (4) dispersed randomly across the entire product display [unsystematic]. In line with our theorizing, a pretest ($n=82$) showed that the unsystematic product arrangement was perceived as substantially more disfluent than the systematic ones (all $ps < .001$). Moreover, the unsystematic arrangement led to more exploratory product search (all $ps < .05$) and increased customers' likelihood of choosing an unfamiliar mobile phone (all $ps < .05$) relative to the systematic arrangements where the familiar products were presented in salient positions or in line with the retailer's original display format, but not relative to the systematic arrangement where the familiar products were placed in non-salient positions ($ps > .7$). Study 2 provides support for our theorizing based on the in-store behavior of actual shoppers. However, we cannot rule out the possibility of hidden confounding variables in this field experiment, nor the potential alternative explanation that the relocation of familiar products to less salient display positions reduced their likelihood of being chosen (Chandon et al. 2009; Drèze, Hoch, and Purk 1994).

Study 3 was designed to rule out these potential confounds by using a tightly controlled experimental setting. To eliminate the possible influence of prior product/brand familiarity, we created fictitious smart phones and made participants ($n=153$) familiar with a subset of these products in the initial phase of the experiment. For a subsequent consequential choice task, participants were randomly assigned to one of two conditions where the assortment of phones was arranged either in a systematic or unsystematic manner in terms of whether the (now) familiar alternatives were grouped together or dispersed across the display. After a short filler task, participants completed a quiz to assess their memory of product information. The results reveal a significantly higher choice share of unfamiliar products in the unsystematic relative to the systematic product arrangement condition ($p < .05$). A mediation analysis (Hayes 2013) supports our theorizing by showing that this effect is serially mediated by more extensive exploratory search and enhanced recall of information about the unfamiliar products.

This research introduces a novel theoretical perspective on how spatial arrangements of products can trigger perceptual (dis)fluency and affect consumers' shopping behavior. It shows that the perceptual disfluency that is induced by an unsystematic product arrangement increases consumers' motivation to explore a product assortment, ultimately promoting consumers' choice of unfamiliar alternatives. The current work also contributes to our understanding of consumers' reaction to, and adoption of, innovations (Alexander, Lynch, and Wang 2008; Moreau, Lehmann, and Markman 2001), as well as of individuals' preference for unfamiliar or novel stimuli more generally (Wittmann et al. 2008).

Label Structure, Processing Disfluency, and Consumers' Responses to Credence-Labeled Foods

EXTENDED ABSTRACT

For foods, the term credence-labeling refers to products being marketed with claims related to the sustainability (e.g., organic), healthfulness (e.g., GMO-free, gluten-free), and ethicality (e.g., free-range) of the product. Generally, credence-labels signal desir-

able product benefits and consumers use such labels to make quality inferences about food products. In contrast to previous research, this paper investigates the impact of how credence-labels are structured, rather than just the consequences of their mere presence or absence. Specifically, we differentiate between *product-level credence-labels*, which apply to the food product as a whole, and *ingredient-level credence-labels*, which apply to the components that constitute the food item. We predict that credence-labels will generate less positive responses when applied at the product-level (e.g., organic burrito) than at the ingredient level (e.g., burrito with organic ingredients). This prediction is based on the expectation that credence-labels applied at the product-(vs. ingredient) level will be processed more *disfluently* (Alter and Oppenheimer 2009), thereby resulting in less positive attitudes toward the food product.

Studies 1a and 1b demonstrated the basic effect of credence-label structure (ingredient vs. product level) on preferences for foods by measuring the likelihood of ordering a dish at a restaurant. Study 1a asked participants to imagine they were at a restaurant and then randomly assigned to one of two conditions. In the ingredient-level condition, participants were asked to imagine they found a dish called "Our Famous Burger (w/ all organic ingredients)." In the product-level condition, participants were asked to imagine they found a dish called "Our Famous Organic Burger." Participants then indicated the likelihood they would order this dish on a 1 ("very unlikely") to 10 ("very likely") scale. As expected, the likelihood of ordering the dish was significantly higher in the ingredient- (vs. product-) level condition ($M = 7.23$ vs. 5.83 , $p < .001$). Study 1b used an identical study design except it additionally included a control condition in which the dish did not have a credence-label. Additionally, the food type was change to either a burrito or fajitas. In the control condition, the dish was called "Our Famous Burrito [Fajitas]". A 2 (food type) x 3 (credence-label) between-subjects ANOVA revealed neither a main effect of food-type (burrito vs. fajitas) on likelihood of ordering ($F < 1$, NS) nor an interaction between food-type and credence-label structure ($F < 1$, NS). However, the predicted main effect of label structure (control vs. ingredient-level vs. product-level) was significant ($p < .001$). As in study 1, the likelihood of ordering the dish was significantly higher in the ingredient- (vs. product-) level condition ($M = 6.73$ vs. 5.20 , $p < .001$). Importantly, the likelihood of ordering the dish was significantly higher in the control (vs. product-level) condition ($M = 6.51$ vs. 5.20 , $p < .005$), while no significant difference was found between the control and ingredient-level conditions ($F < 1$, NS). Thus, using product-level credence-labels for foods diminished their appeal, as opposed to ingredient-level labels increasing their appeal.

Study 2 tested the underlying process, *disfluency*, by directly measuring the fluency with which participants processed (i.e., the ease with which they understood) the food descriptions and used these measures to test mediation. Participants were asked to imagine they were shopping in the frozen foods section of their local grocery store and then randomly assigned to one of three conditions. In the control condition, participants were asked to imagine they found "Mozzarella Sticks." In the ingredient-label condition, participants were asked to imagine they found "Mozzarella Sticks (all ingredients Hormone-Free, Gluten-Free, Organic)." In the product-label condition, participants were asked to imagine they found "Hormone-Free, Gluten-Free, and Organic Mozzarella Sticks." Participants then indicated how appetizing they found this food product on a 1 ("not at all") to 10 ("very much") scale. Next, participants were asked to indicate their agreement with four statements on 1 ("strongly disagree") to 7 ("strongly agree") scales: (i) *I can easily visualize (mentally picture) this product*, (ii) *I get what this product is*, (iii) *This*

product sounds weird to me (reverse-coded), and (iv) *This product makes sense to me*. Consistent with results of the previous studies, those participants exposed to the product-level credence-label found the mozzarella sticks to be significantly less appetizing than those who were exposed to the ingredient-level credence-label ($M = 7.28$ vs. 5.78 , $p < .001$) and those in the control (no-label) condition ($M = 7.45$, $p < .001$). This fluency measure was then tested as a potential mediator of the influence of credence-label structure on preferences using Hayes's (2013) PROCESS macro for multiple mediation (95% confidence interval; 5,000 bootstrap samples) which revealed that the four-item fluency scale was a significant mediator ($b = .6229$, $LLCI = .3841$, $ULCI = .9311$).

Lastly, study 3 found that the negative influence of product-level credence-labels was mitigated when participants were asked to elaborate on the meaning of the product before evaluating it. Specifically, participants in the elaboration condition were asked to write a short response in a provided text box to the following question before evaluating the food product: *Before proceeding, please describe what you think the burrito described above contains, looks like, and tastes like*. In contrast, participants in the no-elaboration condition were not asked to describe the burrito. As expected, there was a significant interaction between the elaboration factor (yes vs. no) and the label-structure factor (product vs. ingredient) on how appetizing the participants found the food ($p < .05$). While no effect of label structure was found for those who elaborated before evaluating ($M = 7.40$ vs. 7.60 , $F < 1$, NS), the effect documented in the preceding studies was replicated for those who did not elaborate before evaluating ($M = 7.40$ vs. 6.30 , $p < .02$). The same fluency measures used in study 2 were collected in study 3. These revealed that disfluency mediated the above interaction.

In sum, these results demonstrate that while there may be some heterogeneity in consumer's general responses to credence-labels, these responses become more negative overall when credence labels are applied at the product- (vs. ingredient-) level.

REFERENCES

- Alexander, David L., John G. Lynch, and Qing Wang (2008), "As time goes by: Do cold feet follow warm intentions for really new versus incrementally new products?," *Journal of Marketing Research*, 45 (3), 307-319.
- Alter, Adam L., Daniel M. Oppenheimer, Nicholas Epley, and Rebecca N. Eyre (2007), "Overcoming intuition: metacognitive difficulty activates analytic reasoning," *Journal of experimental psychology: General*, 136, 569-576.
- _____, and Daniel M. Oppenheimer (2009), "Uniting the Tribes of Fluency to Form a Metacognitive Nation," *Personality and Social Psychology Review*, 13, 219-235.
- Brown, C. L., and Aradhna Krishna (2004), "The skeptical shopper: A metacognitive account for the effects of default options on choice," *Journal of Consumer Research*, 31 (3), 529-539.
- Chandon, Pierre, J. Wesley Hutchinson, Eric T. Bradlow, and Scott H. Young (2009), "Does in-store marketing work? Effects of the number and position of shelf facings on brand attention and evaluation at the point of purchase," *Journal of Marketing*, 73, 1-17.
- Choi, J. J., D. Laibson, B. C. Madrian, and A. Metrick (2004), "For better or for worse: Default effects and 401 (k) savings behavior," in *Perspectives on the Economics of Aging* (pp. 81-126), University of Chicago Press.
- Christie, John and Raymond Klein (1995), "Familiarity and attention: Does what we know affect what we notice?," *Memory & cognition*, 23, 547-550.
- Deng, Xiaoyan, Barbara E. Kahn, H. Rao Unnava, and Hyojin Lee (2016), "A 'Wide' Variety: Effects of Horizontal Versus Vertical Display on Assortment Processing, Perceived Variety, and Choice," *Journal of Marketing Research*, 53 (5), 682-698.
- Dhar, Ravi (1997), "Consumer Preference for a No-Choice Option," *Journal of Consumer Research*, 24 (2), 215-231.
- Diehl, Kristin, Laura J. Kornish, and John G. Lynch Jr. (2003), "Smart Agents: When Lower Search Costs for Quality Information Increase Price Sensitivity," *Journal of Consumer Research*, 30 (1), 56-71.
- Downing, Paul E. (2000), "Interactions between visual working memory and selective attention.," *Psychological science : a journal of the American Psychological Society / APS*, 11 (6), 467-473.
- Drèze, Xavier, Stephen J. Hoch, and Mary E. Purk (1994), "Shelf management and space elasticity," *Journal of Retailing*, 70 (4), 301-326.
- Graf, Laura K. M., and Jan R. Landwehr (2015), "A dual-process perspective on fluency-based aesthetics: The pleasure-interest model of aesthetic liking," *Personality and Social Psychology Review*, 19 (4), 395-410.
- Häubl, Gerald and Valerie Trifts (2000), "Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids," *Marketing Science*, 19 (1), 4-21.
- Hayes, A. F. (2013), *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*, New York, NY: Guilford Press.
- Huber, V. L., M. A. Neale, and G. B. Northcraft (1987), "Decision bias and personnel selection strategies," *Organizational Behavior and Human Decision Processes*, 40 (1), 136-147.
- Janiszewski, Chris (1998), "The influence of display characteristics on visual exploratory search behavior," *Journal of Consumer Research*, 25, 290-301.
- _____, Andrew Kuo, and Nader T. Tavassoli (2012), "The Influence of Selective Attention and Inattention to Products on Subsequent Choice," *Journal of Consumer Research*, 39, 1258-1274.
- Johnson, Eric J., and D. Goldstein (2003), "Do defaults save lives?," *Science*, 302 (5649), 1338-1339.
- _____, Suzanne Shu, Benedict Dellaert, Craig Fox, Daniel Goldstein, Gerald Häubl, Richard Larrick, John Payne, Ellen Peters, David Schkade, Brian Wansink, and Elke Weber (2012), "Beyond Nudges: Tools of a Choice Architecture," *Marketing Letters*, 23 (2), 487-504.
- Kressel, L. M., G. B. Chapman, and E. Leventhal (2007), "The influence of default options on the expression of end-of-life treatment preferences in advance directives," *Journal of general internal medicine*, 22 (7), 1007-1010.
- Levin, I. P., M. E. Huneke, and J. D. Jasper (2000), "Information processing at successive stages of decision making: Need for cognition and inclusion-exclusion effects," *Organizational behavior and human decision processes*, 82 (2), 171-193.
- Liberman, Nira and Jens Förster (2006), "Inferences from Decision Difficulty," *Journal of Experimental Social Psychology*, 42 (3), 209-301.
- Mantrala, Murali K., Michael Levy, Barbara E. Kahn, Edward J. Fox, Peter Gaidarev, Bill Dankworth, and Denish Shah (2009), "Why is assortment planning so difficult for retailers? A framework and research agenda," *Journal of Retailing*, 85, 71-83.

- Moreau, C. Page, Donald R. Lehmann, and Arthur B. Markman (2001), "Entrenched knowledge structures and consumer response to new products," *Journal of Marketing Research*, 38, 14–29.
- Nowlis, Stephen M. and Itamar Simonson (1997), "Attribute-Task Compatibility as a Determinant of Consumer Preference Reversals," *Journal of Marketing Research*, 34 (2), 205.
- Pocheptsova, Anastasiya, Aparna A. Labroo, and Ravi Dhar (2010), "Making Products Feel Special: When Metacognitive Difficulty Enhances Evaluation," *Journal of Marketing Research*, 47 (6), 1059–1069.
- Preacher, Kristopher J., and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40 (3), 879-891.
- Thaler, R. H., and Cass R. Sunstein (2008), *Nudge: Improving Decisions about Health, Wealth, and Happiness*, New Haven: Yale University Press.
- Valenzuela, Ana, Priya Raghurir, and Chrissy Mitakakis (2013), "Shelf space schemas: Myth or reality?," *Journal of Business Research*, 66, 881–888.
- Wittmann, Bianca C., Nathaniel D. Daw, Ben Seymour, and Raymond J. Dolan (2008), "Striatal activity underlies novelty-based choice in humans," *Neuron*, 58, 967–973.
- Xiao, Bo, and Izak Benbasat (2007) "Consumer Decision Support Systems for E-Commerce: Design and Adoption of Product Recommendation Agents," *MIS Quarterly*, 31 (1), 137-209.
- Yaniv, I., and Y. Schul (1997), "Elimination and inclusion procedures in judgment," *Journal of Behavioral Decision Making*, 10 (3), 211-220.

How Do Humans Interact with Machines? Implications for Experience and Identity

Chair: Eugina Leung, Erasmus University Rotterdam, The Netherlands

Paper #1: Object Experience and Object Consumers

Donna Hoffman, George Washington University, USA
Thomas Novak, George Washington University, USA

Paper #2: Automation and Identity

Eugina Leung, Erasmus University Rotterdam, The Netherlands
Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands
Stefano Puntoni, Erasmus University Rotterdam, The Netherlands

Paper #3: Touch-Sensitive Computing Interfaces as Drivers of Experiential Consumption

Christian Hildebrand, University of Geneva, Switzerland
Johnathan Levav, Stanford University, USA

Paper #4: The Soul and the Machine: Humanlike Machines and Machinelike Humans

Russell Belk, York University, USA

SESSION OVERVIEW

Advances in digital technologies and artificial intelligence are changing the world. In fact, we have come a long way in less than a decade. Picture this: when Jones is on his way home, the smart thermostat already knows that and turns on the heating system to automatically warm his house. Once he arrives home, he quickly puts some ingredients in the bread-making machine to make some bread for dinner. Then he sits down comfortably on his couch to order a birthday gift for a friend on his tablet. Just a few years ago, it was hard to imagine this mass diffusion of technology in every realm of consumption, from the smart home to automation to touch-sensitive devices.

However, despite the transformational impact on everyday consumption of recent technological progress, we know surprisingly little about human-machine interaction in the marketplace. For example, does interaction with machines shape our identity and consumption experience? Does interaction with humans in turn create an experience for machines?

This special session brings together papers spanning different technological contexts to showcase this exciting research domain. The papers feature research on the Internet of Things, automation, computing interfaces and human-machine interaction. This special session will contribute to the consumer behavior literature by providing timely insights into the value of technology. First, it complements the literature on the consumption experience of technological products. Previous research shows that interaction with technological products can create both positive and negative experiences (Etkin 2016; Mick and Fournier 1998; Wilcox and Stephen 2013). This special session complements this research stream to present these experiences from different perspectives. Second, this special session answers the call to investigate how technological developments may affect people's sense of self (Reed et al. 2012). Recent research suggests that consumers develop digital extended selves (Belk 2013). This special session examines how the rise of more sophisticated technology, such as robotics and artificial intelligence, affects sense of self.

Given the lack of research on these new technologies, new theory is needed in order to define foundational constructs and processes and provide direction for future research. This special session starts

with a theoretical paper on humans and machines interaction. The first paper "Object Experience and Object Consumers" develops a framework to capture how consumers can access object experience with Internet of Things devices in the smart home domain. The second paper "Automation and Identity" investigates how identity can influence preference of automation with empirical data in various consumption contexts. The third paper "Touch-Sensitive Computing Interfaces as Drivers of Experiential Consumption" examines how interaction with computing interfaces can change consumption experience with field and lab data. The final paper "The Soul and the Machine: Humanlike Machines and Machinelike Humans" discusses the fundamental issues concerning how humans can coexist with machines and how technology is revolutionizing the concept of self. Together, these papers will advance our understanding of the technological trends in the marketplace and their significance. This session would be particularly of interest to researchers interested in technology, identity and experiential consumption.

Object Experience and Object Consumers

EXTENDED ABSTRACT

The consumer Internet of Things (IoT) has the potential to revolutionize consumer experience because consumers can actively interact with smart objects. Hoffman and Novak (2016) have proposed using assemblage theory (DeLanda 2006) to conceptualize consumer experience in the IoT, focusing on the smart home domain. In this paper, we draw on that conceptualization to develop a framework for understanding how object experience emerges in the smart home, how consumers can access these experiences, and the implications of object experience for expanding the domains of consumer behavior.

A first step toward object experience is consideration of object ontology. The human-centric approach considers experience from the perspective of the human, and so precludes our ability to evaluate objects as having the capacity to interact with other entities, enabling other objects or humans or constraining other objects or humans. In a position consistent with the object-oriented ontology perspective (Harman 2002) that has recently emerged in consumer behavior research (Canniford and Bajde 2016), we argue that it is not just consumers that have their own ontology; so do objects.

A critical assumption in our approach is that smart objects, as well as the assemblages that form from consumer interaction with these objects, and objects with each other, have meaning on their own and are something more than passive entities that consumers possess with meaning (Belk 1988). Smart objects, possessing their own ontology, equally exist alongside consumers in the relationship. Objects do not exist just for consumers. They engage in interactions on their own and from these interactions, their experiences emerge. But these experiences are very different from consumer experiences.

To develop our conceptualization, we start with three properties that define the ontology of smart objects: agency, autonomy and authority. While it is straightforward to argue that the constructs of agency, autonomy and authority are relevant to consumer behavior, we submit that smart objects in the IoT also possess these characteristics. Drawing on the computer science literature on autonomous agents, smart objects have agency to the extent that they possess the ability for (inter)action (Franklin and Graesser 1996; Latour 2005), having the ability to affect and be affected. Autonomous objects can function independently without human intervention (Parasura-

man and Riley 1997 and independently interact with other entities, serving their own agendas (Franklin and Graesser 1996; Luck and d'Inverno 1995). Smart objects possess authority when they can implement communication and decision-making with other smart objects and with humans (Hansen, Pigozzi, and van der Torre 2007).

We then define object experience as an assemblage that emerges from all object-centric interactions, including the part-whole interactions of the object and the smart-home assemblage of which the object is a part, the part-whole interactions of the object and the various smart home micro-assemblages of which the object is a part, and the within-assemblage interactions of the object with individual smart home components. The main difference between consumer and object experience is that consumers as entities are realized not only through interaction with the external world, but also through interactions inside themselves, whereas objects are only realized through external interactions with other entities (Bryant 2011). However, Bryant (2011) also notes that object realization likely resides on a continuum, so we can argue that even though objects are not living, to the extent that they are smart, they actually can operate on themselves to a certain degree. This suggests that the properties and capacities of a smart object will dictate how it is realized in interaction with other objects and the kinds of experiences it is capable of having. If objects can experience, does this mean they are conscious? Recent work in neuroscience suggests that consciousness can be measured, is graded, and can be found in small amounts even in certain simple systems (Tononi and Koch 2015). Thus, object consciousness can be quantified. However, while many believe machines will eventually achieve consciousness, most think that machine consciousness will not be like human consciousness (Bostrom 2014).

Next, we evaluate how object experience can be perceived by consumers. Because consumers can never have direct access to the exact properties of an object, they can only interact with it in the context of an assemblage. So, experience is constructed from that interaction. We propose that consumers can speculate about object experience through the mechanism of anthropomorphic metaphor (Bogost 2012a). In this approach, anthropomorphism (Epley, Waytz and Cacioppo 2007) is applied as a metaphor where we strive to consider the object's experience not from our own perspective, but by speculating how the object might perceive things from its own, (non-human) perspective.

Finally, we explore the implications of the concept of object experience for consumer research. Marketing scholars tend to view intelligent agents from the perspective of how marketers can use them to improve the effectiveness of their marketing efforts to human consumers (Kumar, et.al. 2016). But, what if instead, we view a smart object as an "intelligent agent" which itself is a consumer that can be understood and marketed to directly? We introduce the idea of "object consumers" to explore what it means to be a consumer. Object consumers can have the equivalent of affective responses, such as when Brad the Toaster (Rebaudengo, Aprile and Hekkert 2012) is only happy when he is making lots of toast. Object consumers can make decisions, such as when Amazon's Dash Replenishment service allows washing machines, pet feeders and printers to re-order laundry detergent, pet food and printer cartridges on their own they are running low (Rao 2015). Objects consumers can participate in consumption such as when, through a smartphone app, smart refrigerators can display the inside of her refrigerator to a consumer at the grocery store and suggest products and recipes contingent on what she already has at home. The consumer IoT is beginning to revolutionize consumption and consumer experience in a broad and growing range of consumer-facing categories. Object experience and how consumers can access it can contribute to a fuller understanding of

the nature of consumer behavior, and its expanding domain, in complex, interactive environments like the IoT.

Automation and Identity

EXTENDED ABSTRACT

Automation is transforming consumption. Innovations such as GPS and food processors perform tasks that would normally require people's skills and effort, allowing us to accomplish more in less time. Whereas anglers in the old days relied on their experience to locate fish, now with a click on a technological device they can know which type of fish is in the areas and at which distance from their boat. Across domains such as food, commuting and entertainment, products are increasingly integrating automated features that improve their efficiency, resulting in higher utilitarian-driven satisfaction.

However, our research documents a drawback of automation for the utility of consumption. Consumers like products not only for their utilitarian-benefits, but also in light of their "non-consumption utility" (Loewenstein 1999). Of particular importance for skill-related consumption, consumers often use products to signal their identities (Berger and Heath, 2007). When consumers are performing tasks to signal their identities, they derive non-consumption benefits from attributing the outcome to their own skills or efforts. By performing a task that would otherwise be performed by the consumer, automation decreases the extent to which consumers can attribute the outcome internally, and in turns reducing the preference for automated products. In seven studies in different domains (e.g., cycling, bread-baking) and with different approaches (correlational, experimental), we test the hypothesis that identity goals lead consumers to forgo automated products in favor of non-automated products. Due to the word-limit, we are going to discuss four studies in details.

Study 1 documents the link between strength of identification and preferences for automation with a manipulation of identity salience. 338 Dutch students were asked to either write for five minutes on what Dutch biking culture (vs. Dutch flower culture) means to them. Then they were asked to read a bike purchase scenario and make a choice whether they want to have a free automated feature which assists the pedalling of the biking task. We found that participants were less likely to choose the free automated feature in the biking priming condition compared to in the control condition ($M_{\text{biking}} = 66\%$, $M_{\text{control}} = 78\%$, Chi-square = 5.79, $p = .016$).

Study 2 extends the findings of Study 1 with a consequential choice. 406 lab participants were asked to finish a coloring task. They could choose either to paint with a color choice automated feature (paint-by-number) or to paint with the colors they choose. Then they were asked questions regarding internal attribution and identification in creativity. Consistent with the hypothesis, stronger identification leads to higher likelihood to choose to paint with the color choice automated feature ($b = .095$, $t(404) = 6.29$, $p < .01$). The desire to attribute outcome mediates the effect of strength of identification on preference for automation (95% $CI_{\text{Attribution}}: [.18; .37]$). Furthermore, the anonymity of the lab settings also suggest that our effect is not limited to observable choices.

Study 3 rules out alternative explanations of expertise and perceived outcomes and provides process evidence that consumers dislike automation because it does not allow them to attribute outcomes to their skills. 403 MTurk participants were randomly assigned to one condition of a 2 (bread baking identity: present vs. absent) x 2 (product: bread-baking machine vs. dough-mixer). Participants were either assigned to imagine that they were a keen amateur baker or given no specific identity instructions. Subsequently, they rated their

willingness to borrow either a bread-baking machine or a dough-mixer on a bipolar scale. These two machines were pretested to present different degrees to which they allow to attribute the bread to the skills of the users. Afterwards, participants answered questions regarding expertise and perceived outcome. As expected, participants in the identity conditions were less (equally) willing to borrow the bread-making machine (dough mixer) than participants in the no-identity conditions (Bread-making machine: $M_{\text{strong}} = .91$, $SE = .18$ vs. $M_{\text{control}} = 1.51$, $SE = .18$; $F(1, 402) = 5.80$, $p = .016$ vs. dough mixer: $p = .74$). Additional analyses reveal that neither expertise nor perceived outcome could explain the findings.

Study 4 aims at showing that strong identifiers' resistance to automation is contingent on products being framed as replacers of skills. If the need for internal attribution drives the documented effect of identification on preferences for automation, automation should be perceived more negatively when framed as replacing the user's skills. When automation is framed as allowing users to deploy their skills, strong identifiers should perceive automation less negatively. 203 lab participants were randomly assigned to one condition of a 3 (no automation vs. skill-replacing automation vs. skill-allowing automation). Participants were shown an advertisement for a cooking product and asked to evaluate its attractiveness. In a between-participants design, we manipulated whether the product was a non-automated cooking set, an automated cooking machine framed as replacing the user's skills, or an automated cooking machine framed as allowing for the user's skills. These products were pretested to show varying degrees to which they are skill-replacing or skill-allowing. Then participants indicated their identification in cooking. As predicted, stronger identification corresponds to higher liking of the product in the no automation condition ($b = .18$, $t(133) = 3.14$, $p < .01$) whereas stronger identification leads to lower liking of the product in the skill-replacing automation condition ($b = -.33$, $t(131) = -4.34$, $p < .001$). Moreover, in line with our predictions about the role of internal attribution, this effect disappeared in the skill-allowing automation condition ($p = .39$).

This paper makes several theoretical contributions. First, despite the prevalence and the growing trend of automated products in the marketplace, consumers' reaction to these products have been understudied. Second, while the consumer identity literature has focused mainly on the product acquisition and display, this research takes an action-oriented perspective and highlights how identity-based consumption relies on consumer being able to attribute consumption outcomes to their skills. Our findings have also important managerial implications. In particular, our work offers actionable insights into a number of important marketing decisions, including targeting, product innovation, and communication.

Touch-Sensitive Computing Interfaces as Drivers of Experiential Consumption

EXTENDED ABSTRACT

This paper explores the idea whether the input-modalities of novel computing interfaces change the psychological process, preference, and actual choices of the person using it. Do changes in the input-modality of a computing interface systematically affect how consumers experience a shopping process, the products they choose in response, and their ultimate shopping expenses? We explore and answer these questions in a series of field studies and laboratory experiments across a wide range of product categories (automobiles, spa packages, and custom-made bikes). The findings of this research reveal that touch-sensitive interfaces relative to touch-insensitive interfaces render the same shopping task more experiential

and less instrumental. This change in consumers' experience has a series of critical downstream consequences such as a greater sensitivity toward the benefits of hedonic product features relative to utilitarian ones, which ultimately drive greater shopping expenses. These results highlight that the malleable factor of input-modalities of computing interfaces can profoundly change how people experience even the same content and how they systematically change consumer's preference in predictable ways.

The conceptual background of the current research is built around recent work on the role of preference modalities and the role of touch as a driver of attachment toward objects (Krishna 2012). A prominent finding in the latter research is that objects that are actively touched, or come into contact with the self, are judged more positively (Olausson et al. 2008). These effects were found to be even stronger for more affect-rich relative to affect-poor stimuli (Shu and Peck 2011). These more direct forms of touch may even persist in the context of more indirect (or mere) forms of touch using touch-sensitive interfaces (Brasel and Gips 2014; Peck, Barger, and Webb 2013). Thus, the central proposition of the current research is that the use of touch-sensitive interfaces promotes more experiential (shopping) experiences during a product configuration task and increase the choice of more hedonic product features, ultimately leading to more higher-priced products.

In Study 1, we examined the influence of touch-sensitive interfaces on actual customers' product configurations in cooperation with a large European car manufacturer. We collected data of $N=95,886$ car buyers over a time-span of 2 years and merged two distinct streams of data. We combined the data of actual car configurations from the manufacturers' ordering system with on-site tracking data logging customers' device information during the car configuration process. In line with our proposition, we find that customers using a touch-sensitive (such as a tablet) relative to a touch-insensitive interfaces (such as a desktop computer) configured significantly more feature-rich cars ($M_{\text{Desktop}} = 19.3$, $M_{\text{Tablet}} = 21.4$, $t(95,884)=9.267$, $p<.001$) which were ultimately higher priced ($M_{\text{Desktop}} = €52,461.82$, $M_{\text{Tablet}} = €61,563.39$, $t(95,884)=18.05$, $p<.001$). Although Study 1 provides initial support for our proposition, the current results are likely to be affected by various self-selection effects of the field data.

Study 2 was designed with the purpose to examine the proposed direction of causality and to assess consumers' subjective experiences during a product configuration task. In cooperation with a European market research company, $N=205$ prospective car buyers were pre-screened to own both a tablet and a desktop PC, and were randomly assigned to configure a car for themselves either using their own touch device or desktop PC. As predicted, the use of a touch-sensitive interface relative to the touch-insensitive interface caused significantly more feature-rich, higher priced cars ($M_{\text{Desktop}} = €40,100.70$, $M_{\text{Tablet}} = €44,566.72$, $t(203)=5.491$, $p<.001$), consisting of significantly more hedonic relative to utilitarian product features (identified by pre-test), as well as a significantly more experiential configuration experience which mediated the main effect on price (95% $CI_{\text{ExpConfig}}$: [687.04; 2230.96]).

Study 3 was designed to rule out a series of alternative explanations by using non-owned devices and holding screen size constant. A total of $N=70$ participants were randomly assigned to configure a bike for themselves in a lab setting, either using a touch-enabled or a touch-disabled tablet (with mouse input). In line with our theorizing, we find that consumers using the touch-enabled tablet perceived the configuration process substantially more experiential ($M_{\text{TouchEnabled}} = 5.66$, $M_{\text{TouchDisabled}} = 4.59$, $t(68)=3.923$, $p<.001$), explaining the significant increase in consumers' choice share of hedonic (relative to utilitarian) product features (as rated by a pre-test; 95% CI_{ExpCon}

fig.: [.03; 15]). This study also ruled out alternative explanations via psychological ownership, processing fluency, and mental simulation.

Studies 4 and 5 were designed to provide an experimental field demonstration and a generalization across product categories respectively. In Study 4, we conducted a field experiment in cooperation with a Swiss day spa. In this study, $N=75$ actual customers configured their preferred day spa package for themselves mirroring the experimental setup of study 3 (random assignment to touch-enabled or touch-disabled tablet). As predicted, the touch enabled vs. disabled tablet caused significantly higher-priced day spa packages ($M_{\text{TouchEnabled}} = \text{CHF } 554.61$, $M_{\text{TouchDisabled}} = \text{CHF } 328.89$, $t(73)=3.658$, $p<.01$), which was mediated by the substantially greater experiential as opposed to instrumental perception of the configuration process (95% CI_{SequMed} : [44.76; 184.94]).

In Study 5, participants ($N=180$) chose for each of 28 product categories whether they would choose a tablet device or a PC with mouse input to configure a product for themselves. Following the binary choice between both devices, consumers rated each product category on a utilitarian vs. hedonic scale based on prior work. A logistic mixed effects model with random intercept revealed that consumers choose multi-touch devices for more hedonic product categories ($p<.01$). However, qualitative interviews revealed that consumers were not aware of the effect that the device itself may have on their purchases.

Overall, the current work contributes to the emerging literature on human-computer interaction and preference modalities in consumer research, highlighting the critical interplay between computing interfaces and human perception (i.e., haptics). Contributing to prior work on consumer self-designs and customization, the current findings also highlight a novel antecedent by revealing that the computing interface consumers use when entering the self-design process can systematically affect their preference for specific product features and how they ultimately experience the process of a product configuration task.

The Soul and the Machine: Humanlike Machines and Machinelike Humans

EXTENDED ABSTRACT

Where does the self reside? What makes us human? Can a robot, like a corporation, become a legal being? Can it become a person? Such questions lie at the heart of this inquiry. They are no longer questions of philosophy or science fiction, but involve very real issues that we will have to deal with in coming decades. Is a robot still a possession or a tool as it becomes more autonomous? Who is to be held responsible if a self-driving car has an accident? Are computers becoming more intelligent than human beings? If computerized robots can learn, reprogram themselves, and reproduce themselves, will they need mere humans? If not, can we humans enhance ourselves enough to keep up with our creations? With biological and genetic enhancements and mechanical and computerized prostheses, can humans in fact approach immortality? Can we, alternatively, upload our consciousness to computers and the devices that house them? And what becomes of the idea of the self as machines become more humanlike and humans become more machine-like (Black 2014; Johnson 2008)?

Consumers are likely to first encounter robots directly in the home, health care facilities, self-driving vehicles, and in service contexts such as retailing, hotels, and restaurants. The robots in these contexts may or may not be humanoid (android if male, gynoid if female), but regardless, they are likely to be anthropomorphized and regarded as human-like (e.g., Aggarwal, and McGill 2007; Belk

2016; Brown and Ponsonby-McCabe, 2014; Goudey and Bonnin 2016; Landwehr, McGill, and Herrmann 2011; Lanier, Rader, and Fowler 2013). They may also potentially be regarded as surrogate selves.

Robot selves frame two changes in the notion of extended self in “The Age of Robots” (Moravec 1994). The first is the prospect that as we acquire personal robots to serve us, we will begin to think of these devices as extensions of our selves, continuing a progression from the extended self (Belk 1988) to the digital extended self (Belk 2013) to the robotic extended self (Groom, Takayama, Ochi, and Nass 2009; Nishio, Watanab, Ogawa, and Ishiguro 2013). Fictional media portrayals help shape our hopes and fears regarding robots and the extent to which we may identify with them (e.g., Barsanti 2014). The second, and potentially more profound prospect is that these robots will evolve from programmed tools to semi-autonomous and autonomous beings that can become non-human legal persons and perhaps moral persons with selves of their own. Robots displaying their own personhood and selfhood go beyond issues of anthropomorphic projection and offer a further catalyst for considering what it means to be a person or a thing. There are even forecasts that we may someday soon marry robots (Levy 2007). Robots, whether as a special object or an emerging subject, prompt us to re-examine our fundamental existential concepts.

A related concept is “the singularity,” the predicted point at which computerized robot intelligence overtakes human intelligence, which according to some will quickly bring about the extinction of the human species, perhaps within the current century (e.g., Barrat 2013; Bostrom 2014; Del Monte 2013; Kurzweil 1999, 2006). Developments pursuing Artificial General Intelligence (AGI), the point at which artificial intelligence (AI) equals human intelligence, is a key goal in the advance of robotics. After that point is reached, the singularity scenario holds that robots, unhampered by biological evolution, would increase in intelligence and strength at an exponential rate leaving us far behind (Barrat 2013).

One human response may be to become cyborgs. Cyborgs (cybernetic organisms) are machine-like humans. Although others described the concept earlier (see Gray, Mentor, and Figueroa-Sarriera 1995), the term was coined by Clynes and Kline (1960) to refer to internal and external bodily modifications needed for a human to survive in space. They began their article by saying that “Space travel challenges mankind not only technologically but also spiritually, in that it invites man to take an active part in his own biological evolution” (26). Norbert Wiener (1948/1965) announced that “We have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name of cybernetics...” (11). Recent developments have shifted cybernetics from robots to cyborgs with such as human enhancements as auto-adjusting pacemakers, insulin pumps, and brain-controlled prosthetics. Today its increasing applicability to both entities is one indication of the growing convergence of the two figures. But a basic difference remains: cyborgs are augmented or modified organisms while robots are cybernetic machines.

The figure of the cyborg was brought to prominence by Donna Haraway’s (1985) “A Manifesto for Cyborgs,” and especially in its reproduction as a chapter, in her book *Simians, Cyborgs, and Women* (Haraway 1991). Although Haraway defines the cyborg as “a hybrid of machine and organism,” she also notes that it is “a creature of social reality as well as a creature of fiction” (149). She was more concerned with using the cyborg as a metaphor than a material reality (Best and Kelner 2001; Ranisch and Sorgner 2014). As a metaphorical boundary-straddler, the cyborg that Haraway celebrates is one that collapses dualisms such as “self/other, mind/body, culture/nature,

male/female, civilized/primitive, reality/appearance, whole/part, agent/resource, maker/made, active/passive, right/wrong, truth/illusion, total/partial, God/man" (Kang 2011, 304). Based on a netnographic study, Bhattacharyya and Kedzior (2012) find three threats posed by cyborg technology: humans giving up control to technology; humans using cyborg technology to control other humans; and humans losing the essence of being human by becoming cyborgs. As Robots threaten to gain a soul, humans may be threatened with losing ours.

In assessing such possibilities, I outline questions for consumer research. Key consumer issues involve identity, intimate relations between humans and artificially intelligent robots, interspecies acceptance and trust, and safety and morality. I provide a conceptual understanding of these developments and urge consumer research to address this agenda of issues.

REFERENCES

- Aggarwal, Pankaj and Ann McGill (2007), "Is That Car Smiling At Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products," *Journal of Consumer Research*, 34 (4), 468-79.
- Barrat, James (2013), *Our Final Invention: Artificial Intelligence and the End of the Human Era*, New York: Thomas Dunne.
- Barsanti, Chris (2014), *The Sci-Fi Movie Guide: The Universe of Film from Alien to Zardoz*, Canton, MI: Visible Ink Press.
- Belk, Russell (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (2), 139-68.
- Belk, Russell (2013), "Extended Self in a Digital World," *Journal of Consumer Research*, 40 (October), 477-500.
- Belk, Russell (2016), "Understanding the Robot: Comments on Goudey and Bonnin," *Recherche et Applications en Marketing*, 31 (2).
- Berger, Jonah, and Chip Heath (2007), "Where consumers diverge from others: Identity signaling and product domains," *Journal of Consumer Research*, 34 (2), 121-34.
- Best, Steven and Douglas Kellner (2001), *The Postmodern Adventure: Science, Technology, and Cultural Studies*, New York: Guilford Press.
- Bogost, Ian (2012), *Alien Phenomenology, of What It's Like to Be a Thing*, Minneapolis, MN: University of Minnesota Press.
- Bostrom, Nick (2005), "A History of Transhumanist Thought," *Journal of Evolution and Technology*, 14(1), April. <http://www.nickbostrom.com/papers/history.pdf>
- Bostrom, Nick (2014), *Superintelligence: Paths, Dangers, Strategies*, Oxford: Oxford University Press.
- Brasel, S. Adam, and James Gips (2014), "Tablets, touchscreens, and touchpads: How varying touch interfaces trigger psychological ownership and endowment," *Journal of Consumer Psychology*, 24, 226-33.
- Brown, Stephen and Sharon Ponsonby-McCabe, ed. (2014), *Brand Mascots and Other Marketing Animals*, Abingdon, UK: Routledge.
- Bryant, Levi R. (2011), *The Democracy of Objects*, Ann Arbor, MI: Open Humanities Press.
- Canniford, Robin and Domen Bajdes (2016), "Assembling Consumption," in *Assembling Consumption: Researching Actors, Networks and Markets*, R. Canniford and D. Bajdes, eds., New York, NY: Routledge, 1-17.
- Clynes, Manfred and Nathan Kline (1960), "Cyborgs and Space," *Astonautics*, September, 26-27, 75-76.
- Del Monte, Louis (2013), *The Artificial Intelligence Revolution: Will Artificial Intelligence Serve Us or Replace Us?* Minnetonka, MN: Louis A. Del Monte.
- DeLanda, Manuel (2006), *A New Philosophy of Society: Assemblage Theory and Social Complexity*, London: Continuum.
- Epley, Nicholas, Adam Waytz, and John T. Cacioppo (2007), "On Seeing Human: A Three-Factor Theory of Anthropomorphism.," *Psychological Review*, 114 (4), 864-86.
- Etkin, Jordan (2016), "The Hidden Cost of Personal Quantification," *Journal of Consumer Research*, 42 (6), 967-84.
- Franklin, Stan and Art Graesser (1996), "Is It an Agent, or Just a Program?: A Taxonomy for Autonomous Agents," *ECAI '96 Proceedings of the Workshop on Intelligent Agents III, Agent Theories, Architectures, and Languages*, 21-35.
- Gallace, Alberto, and Charles Spence (2010), "The science of interpersonal touch: An overview," *Neuroscience and Biobehavioral Reviews*.
- Goudey, Alain and Gael Bonnin (2016), "Must Smart Objects Look Human? Study of the Impact of Anthropomorphism on the Acceptance of Companion Robots," *Recherche et Applications en Marketing*, 31 (2).
- Gray, Chris, Steven Mentor, Heidi Figueroa-Sarriera (1995), "Cyborgology: Constructing the Knowledge of Cybernetic Organisms," in *The Cyborg Handbook*, Chris Gray, ed., London: Routledge, 1-14.
- Groom, Victoria, Leila Takayama, Paloma Ochi, and Clifford Nass (2009), "I Am My Robot: The Impact of Robot-building and Robot Form on Operators," *Proceedings of the 4th ACM/IEEE International Conference on Human Robot Interaction*, March 9, 31-36.
- Hansen, Jorg, Gabriella Pigozzi, and Leendert van der Torre (2007), "Ten Philosophical Problems in Deontic Logic," In G. Boella, L. van der Torre, and H. Verhagen (eds.), *Normative Multi-Agent Systems. Dagstuhl Seminar Proceedings 07122*, Internationales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany.
- Haraway, Donna (1985) "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s," *Socialist Review*, 80, 65-107.
- Haraway, Donna (1991), "A Cyborg Manifesto: Science, Technology and Socialist-Feminist in the Late Twentieth Century," *Simians, Cyborgs, and Women: The Reinvention of Nature*, New York: Routledge, 149-81.
- Harman, Graham (2002), *Tool-Being: Heidegger and the Metaphysics of Objects*, Peru, IL: Carus Publishing Company.
- Hoffman, Donna L. and Thomas P. Novak (2016), "Consumer and Object Experience in the Internet of Things: An Assemblage Theory Approach," Available at SSRN: <http://ssrn.com/abstract=2840975>
- Kang, Minoo (2011), *Sublime Dreams of Living Machines: The Automaton in the European Imagination*, Cambridge, MA: Harvard University Press.
- Krishna, Aradhna (2012), "An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior," *Journal of Consumer Psychology*.
- Kumar, V., Ashutosh Dixit, Rajshekar (Raj) G. Javalgi and Mayukh Dass (2016), "Research Framework, Strategies and Applications of Intelligent Agent Technologies (IATs) in Marketing," *Journal of the Academy of Marketing Science*, 44, 24-45.

- Kurzweil, Raymond (1999), *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, New York: Viking.
- Kurzweil, Ray (2006), *The Singularity is Near: When Humans Transcend Biology*, New York: Penguin.
- Landwehr, Jan, Ann McGill, and Andreas Herrmann (2011), "It's got the Look: The Effect of Friendly and Aggressive 'Facial' Expressions on Product Liking and Sales." *Journal of Marketing*, 75 (3), 132-46.
- Lanier, Clinton, Scott Rader, and Aubrey Fowler (2013), "Anthropomorphism, Marketing Relationships, and Consumption Worth in the *Toy Story Trilogy*," *Journal of Marketing Management*, 29 (1-2), 26-47.
- Latour, Bruno (2005), *Reassembling the Social: An Introduction to Actor-Network Theory*, New York: Oxford University Press, Inc.
- Levy, David (2007), *Love + Sex with Robots: The Evolution of Human-Robot Relationships*, New York: Harper Perennial.
- Loewenstein, George (1999), "Because it is there: The challenge of mountaineering... for utility theory," *Kyklos*, 52 (3), 315-43.
- Luck, Michael and Mark d'Inverno (1995), "A Formal Framework for Agency and Autonomy," *Proceedings of the First International Conference on Multi-Agent Systems*, AAAI Press/MIT Press, 254-260.
- Mick, David G. and Susan Fournier (1998), "Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies," *Journal of Consumer Research*, 25 (9), 123-43.
- Moravec, Hans (1994), "The Age of Robots," *Extro 1, Proceedings of the First Extropy Institute Conference on TransHumanist Thought*, 84-100, http://www.ri.cmu.edupublication_view.html?pub_id=1810, last accessed April 18, 2015.
- Nishio, Shuichi, Tetsuya Watanabe, Kohei Ogawa, and Hiroshi Ishiguro (2013), "Body Ownership Transfer to Teleoperated Android Robot," *Journal of the Robotics Society of Japan*, 31 (9), 854-857.
- Olausson, Håkan W., Jonathan Cole, Åke Vallbo, Francis McGlone, Mikael Elam, Heidrun H. Krämer, Karin Rylander, Johan Wessberg, and M. Catherine Bushnell (2008), "Unmyelinated tactile afferents have opposite effects on insular and somatosensory cortical processing," *Neuroscience Letters*, 436, 128-32.
- Parasuraman, Raja and Victor Riley (1977), "Humans and Automation: Use, Misuse, Disuse, Abuse," *Human Factors*, 39(2), 230-253.
- Peck, Joann, Victor A. Barger, and Andrea Webb (2013), "In search of a surrogate for touch: The effect of haptic imagery on perceived ownership," *Journal of Consumer Psychology*, 23, 189-96.
- Peck, Joann, and Suzanne B. Shu (2009), "The Effect of Mere Touch on Perceived Ownership," *Journal of Consumer Research*, 36(3), 434-47.
- Ranisch, Robert and Stefan Sorgner (2014), "Introducing Post- and Transhumanism," in Robert Ranisch and Stevan Sorgner, ed., *Post- and Transhumanism: An Introduction*, Frankfurt: Peter Lang, 7-27.
- Rao, Leena (2015), "Amazon Will Allow Smart Washing Machine to Order Laundry Detergent," *Fortune*, October 1, <http://fortune.com/2015/10/01/amazon-dash-internet-of-things/>
- Rebaudengo, Simone, W Aprile, and P Hekkert (2012), "Addicted Products, a Scenario of Future Interactions Where Products are Addicted to Being Used," In J. Brassett, J. McDonnell and M. Malpass (Eds.), *Out of Control: Proceedings of the 8th International Conference Design and Emotion Conference*, 1-10.
- Reed Americus, Mark Forehand, Stefano Puntoni, and Luk Warlop (2012), "Identity-Based Consumer Behavior," *International Journal of Research in Marketing*, 29 (4), 310-21.
- Shu, Suzanne B., and Joann Peck (2011), "Psychological ownership and affective reaction: Emotional attachment process variables and the endowment effect," *Journal of Consumer Psychology*, 21, 439-52.
- Tononi, Giulio and Christof Koch (2015), "Consciousness: Here, There and Everywhere?," *Philosophical Transactions of the Royal Society B Biological Sciences*, 370, 20140167.
- Weiner Norbert (1948/1965), *Cybernetics or Control and Communication in the Animal and the Machine*, 2nd ed., Cambridge, MA: MIT Press.
- Wilcox, Keith and Andrew T. Stephen (2013), "Are Close Friends the Enemy? Online Social Networks, Self-Esteem, and Self-Control," *Journal of Consumer Research*, 40 (1), 90-103
- Yadav, Manjit S., and Paul A. Pavlou (2014), "Marketing in computer-mediated environments: Research Synthesis and new directions," *Journal of Marketing*, 78, 20-40.

Consumer Financial Decision Making Research with Impact

Chairs: Quentin André, INSEAD Europe Campus, France
Nicholas Reinholtz, University of Colorado Boulder, USA

Paper #1: Does Access to FICO Scores Influence Financial Behavior? Evidence from a Field Experiment with Student Loan Borrowers

Tatiana Homonoff, New York University, USA
Rourke O'Brien, University of Wisconsin-Madison, USA
Abigail Sussman, University of Chicago, USA

Paper #2: Consumption Responses to Pay Frequency: Evidence from "Extra" Paychecks

Yiwei Zhang, University of Chicago, USA

Paper #3: Can Food Stamps Reduce Food Consumption? The Unintended Consequences of Restricted-Use Funds on Budgeting Decisions

Quentin André, INSEAD Europe Campus, France
Nicholas Reinholtz, University of Colorado-Boulder, USA
John G. Lynch Jr., University of Colorado-Boulder, USA

Paper #4: Shopping Behavior of Food Stamps Users: The Role of Decision Conflict

Dinesh Gauri, University of Arkansas, USA
Yu Ma, McGill University, Canada
Manoj Thomas, Cornell University, USA

SESSION OVERVIEW

In recent years, there has been a growing appreciation—in academia, government, and industry—for behavioral research on consumer's financial decisions. Although any consumption decision can be said to be "financial" (insofar as it involves money), the stream of consumer financial decision making is specifically concerned with decisions that "have dramatic effects on a consumer's overall financial picture due to the size of a single expenditure [...] or to the accumulated effects of repeating the same pattern [...]" (Lynch 2011). As such, it includes research not only on core decisions regarding financial resources (saving, borrowing, and repaying) but also extends to consumers' budgeting process (when, how and on what should those resources be used or invested). Because of their importance and/or of their frequency, these decisions play a critical role in consumers' welfare, and policymakers are growing increasingly concerned with understanding those decisions, and governments have created "behavioral units" aimed at researching and developing tools to improve consumers' financial behavior.

The four papers presented in the session further our understanding of such consumer financial decisions, and illustrate their importance in areas with strong policy implications. **Homonoff, O'Brien, and Sussman** present the results of a large-scale field experiment in which consumers are provided with information about credit (FICO) scores, and show that giving consumers access to that information has important positive consequences. **Zhang** investigates the consequences of misaligned cash flows (e.g. consumers paid on a bi-weekly basis receiving a "third" paycheck in a given month) and shows that they trigger a significant increase in expenditures. **André, Reinholtz, and Lynch** study the consequences of endowing consumers with a resource that can only be spent on a limited range of products and show that a resource akin to food stamps can paradoxically decrease people's food consumption. Finally, **Gauri, Ma, and Thomas** document how different financial resources (food stamps vs. money vs. credit card) lead to different food choices, with significant implications for consumers' health.

This research offers a broad view of the current issues in consumer financial decision-making research, and have strong connections to policy. First, they are tackling issues on which public institutions have a lever for action, and as such have the potential to inform policy decisions: Should consumers be given more transparent access to their FICO scores? Should bi-weekly payments be discouraged, in favor of weekly or monthly payments? Should the poor be given money, rather than food stamps? Second, they rely on methods high in external validity: the simulations, field experiments, retailer data, and natural experiments used in the projects ensure that the effects documented are ecologically valid, and representative of problems encountered by consumers in their daily lives. Finally, they are authored not only by prominent consumer behavior scholars but also by members of public policy institutes and of the Consumer Financial Protection Bureau (a leading institution in policy-relevant research). For all those reasons, we think that the four papers form a cohesive and important session, which has the potential to appeal to a large audience.

Does Access to FICO Scores Influence Financial Behavior? Evidence from a Field Experiment with Student Loan Borrowers

EXTENDED ABSTRACT

Consumers struggle when making financial decisions. Research consistently documents the costly mistakes individuals make across all domains of household finance, from investment and retirement savings decisions (e.g., Benartzi and Thaler, 2001; Choi, Laibson, and Madrian, 2009, 2011) to mortgage choice (e.g., Huang, Amromin and Sialm, 2007) to debt management (e.g., Gross & Souleles, 2002; Hershfield et al., 2016; Sussman & O'Brien, 2016; Sussman & Shafir, 2011). FICO's recent move to provide people with direct access to their FICO score was intended to empower consumers with the information they need to improve their financial lives. However, the effect of this information on financial behavior remains unknown. In this research, we examine whether and how access to credit score information influences financial decisions among a population of student loan borrowers.

Despite this increased focus and the significant resources invested by policymakers, firms, and charitable foundations, there is little evidence that financial education interventions are effective in improving financial behaviors and financial outcomes. Although consumer financial literacy is positively associated with a range of financial behaviors and financial outcomes (Ameriks et al. 2003; Lusardi & Mitchell 2006, 2007; Stango & Zinman 2009; van Rooij et al. 2012), quasi-experimental studies and randomized controlled trials of financial education interventions typically find no lasting measurable effects (for a meta-analysis see Fernandes, Lynch, Netemeyer 2014; for a review see Hastings et al. 2015).

Alongside efforts to improve financial literacy and financial decision-making, there has been a major push by policymakers, regulators, and firms in recent years to increase consumer access to their credit report information. In this paper, we isolate the effect of viewing the FICO score on consumer financial outcomes drawing on evidence from a field experiment. This intervention differs from more traditional efforts to improve financial literacy in several important ways. First, FICO scores are personalized and are based

on the actual credit behaviors of the individual. Second, FICO scores are concrete and exist on a continuous scale (0-850tk) that makes it possible for consumers to compare their score with others and track their progress over time. Third, participants view at least two “reason codes” alongside their score. These codes are generated by FICO and provide the consumer with personalized information about why their score is what is and, in so doing, provides specific action steps the individual can take to improve their score.

We implemented a randomized experiment using email correspondence between a large student loan lender and their clients. Our analytic sample is comprised of more than 450,000 student loan borrowers. The experimental design randomly assigned borrowers to either a control (no email) group or one of three treatment groups. Those randomly assigned to a treatment group received emails from the lender informing them that their FICO score was online and encouraging them to view their scores. The treatment groups varied in the message that accompanied the login information, with messages that provided (i) no additional information (ii) information about peers successfully managing their finances or (iii) specific steps for successful money management. Emails were sent quarterly starting in June 2015 and continuing through December 2016. To test the impact of viewing scores on financial behavior, we compared within-subject changes across conditions before and after the intervention using administrative data on a range of financial metrics pulled directly from the borrower’s credit report.

Our findings suggest that borrowers in all three treatment groups were significantly more likely to view their FICO scores than borrowers in the control group and that these effects did not differ significantly by message type. Additionally, we observe that viewing FICO score information induced borrowers to take actions associated with improved credit scores. For example, treatment group borrowers were less likely to have past due payments or delinquent accounts on their credit reports relative to those in the control group. At the same time, individuals in the treatment groups were more likely to increase the number of open revolving credit accounts during this period. These actions resulted in a statistically significant increase in FICO scores. Future analyses will examine the effects of the intervention by various subgroups including age, education, and initial FICO score.

Viewing their FICO score appears to induce individuals to take steps to improve their creditworthiness including reconciling delinquent accounts and increasing on-time payments as well as increasing the number of open credit accounts. This is, to our knowledge, the first research project that uses a randomized experimental design to directly examine the impact of providing FICO scores on financial behavior and outcomes. Taken together, our findings coupled with the analytic sample of student loan borrowers who are relatively new to borrowing have important implications for both theory and practice. From a theoretical perspective, the current research adds to our understanding of how we react to new information; from a practical perspective, this research suggests an effective approach for motivating people to make better financial decisions.

Consumption Responses to Pay Frequency: Evidence from “Extra” Paychecks

EXTENDED ABSTRACT

Households who engage in budgeting must manage both their inflow of income and their outflow of expenditures. For many households, however, these two cash flow streams are misaligned—the frequency at which they make their consumption decisions often differs from the frequency at which they receive their pay. This mis-

alignment can result in predictable variation in the amount of income a household receives per “consumption decision period.” Standard economic theory predicts that such variation should not matter—consumption should not respond to anticipated changes in income (Friedman 1957; Modigliani 1988). Whether this implication of the theory holds true has generated significant debate and has given rise to an extensive empirical literature testing for excess sensitivity to anticipated income changes. Results from these empirical studies vary substantially, however, and at present, no consensus exists in the literature on the extent to which households may respond to anticipated income changes or on the mechanisms underlying observed responses.

In this paper, I empirically test this prediction by exploiting variation in monthly income arising from the timing of bi-weekly pay schedules. Bi-weekly workers are paid on a regular two-week schedule and receive 26 paychecks over the course of the year. Because these 26 paychecks must be disbursed over 12 months, bi-weekly workers typically receive two paychecks per month with the exception of two months out of the year, during which they receive three. As a result, the level of wage and salary income that a household receives during these atypical months with three paychecks is higher than during typical months with only two. The timing of bi-weekly pay schedules thus provides predictable variation in monthly income while holding constant both total lifetime income and the environment in which that income is received. This is in contrast to semi-monthly or monthly pay schedules through which workers receive the same income each month.

My focus on the variation generated by bi-weekly pay schedules is motivated by two main considerations. First, this variation in income (and the extent to which there is an “extra” third paycheck) is simply an artifact of evaluating or accounting for income on a monthly basis. For a bi-weekly worker there is predictable variation in monthly income but not in twice-weekly income. While it is not difficult to imagine bi-weekly households thinking or budgeting on a monthly basis, the fact that whether or not a particular paycheck can be considered “extra” is not a priori assumed makes the evidence I provide in this paper even more compelling. Second, in contrast to much of the existing literature, the third paychecks are not referred to as a bonus, special payment, or in any other manner which might induce bi-weekly workers to differentially respond following their receipt. The concern with such special designations is that they may naturally lead households to categorize or evaluate the payments separately from other income. In my setting, the only way in which these third paychecks are “special” is if people choose to evaluate their income at a monthly frequency.

I test for excess sensitivity in months following three paycheck months using panel data from the Consumer Expenditure Survey (CEX). I first identify households whose heads are paid at a bi-weekly frequency and then determine the months during which they receive three paychecks. The empirical strategy takes advantage of the fact that the months during which bi-weekly workers receive three paychecks differ from year to year. For example, a biweekly worker paid in the first week of January in 2008 would have received three paychecks in February and August of that year. In 2009, that same worker would have received three paychecks in January and July. The causal effect of these third paychecks is identified using a difference-in-differences strategy that compares spending responses following a given calendar month in years during which there are three paychecks distributed during that month to responses in years during which there are only two paychecks during that month.

Using this identification strategy, I establish two main empirical results. First, I find that total household spending increases by rough-

ly 31 percent on average in the month following a three-paycheck month and that this effect on spending does not persist in subsequent months. Second, I find that this spending increase is due entirely to changes in durable spending, and specifically new vehicle purchases, with no corresponding response in non-durables. These results are consistent with several other papers in the literature on responses to anticipated income receipt which also find large responses in durable spending (Parker 1999; Souleles 1999; Adams et al. 2009; Parker et al. 2011; Aaronson et al. 2012). These findings suggest that, contrary to the predictions of standard economic theory, households do in fact respond to the variation induced by misalignment between the timing of consumption and the timing of income. I explore several explanations for why I find evidence of excess sensitivity and show that the empirical findings cannot be explained by the presence of liquidity constraints and are instead consistent with households engaging in mental accounting. I finally discuss several policy implications of those findings, such as recommendations for the design of employment contracts, the timing at which welfare benefits should be distributed to recipients, or unintended consequences of tax return policies in the United States.

Can Food Stamps Reduce Food Consumption? The Unintended Consequences of Restricted-Use Funds on Budgeting Decisions

EXTENDED ABSTRACT

A consumer's budget is typically viewed as a single fungible resource (money) from which the consumer allocates money to purchase goods and services. However, less fungible resources—such as gift cards, loyalty points, and coupons—should also be viewed as part of a consumer's budget. This is particularly true in the United States, where close to 15% of the population receives SNAP benefits (food stamps), a resource that can only be spent on non-prepared food products. However, little work has examined how fungibility restrictions impact consumer budgeting decisions. In the present research, we propose a theory of such “restricted-use funds,” and evaluate their impact on consumers' budgeting decisions.

Research on mental accounting has shown that when consumers consider a purchase opportunity of a focal item, they do not compare it to all possible alternatives, but only to a subset of options (Thaler, 1985). Importantly, the greater the categorical similarity between the focal item and the alternative item, the more likely it is to be considered in this subset. For instance, spending \$15 on drinks with friends will likely be contrasted with spending the same amount on a movie ticket, but not with saving the money for a washing machine. This congruency principle applies to income as well, and consumers seek coherence between its sources and destinations. For instance, Reinholz and colleagues (2015) have shown that store-specific gift cards are spent on items that are prototypical of the store (e.g. Levi's gift cards used on jeans rather than t-shirts).

When a restricted-use fund is tied to a product category (as SNAP benefits are to food), we propose that prototypical category members (specific food items) will be intrinsically linked to the fund (SNAP budget). Further, because categories can compete against each other (Chen et al. 2014), we propose that the link between other resources (such as money) and the prototypical members of the target product category will become weaker. We thus predict that consumers will be averse to spending general funds on items which can alternatively be purchased with restricted-use funds. In the context of SNAP, consumers endowed with SNAP benefits should be averse to spending their (non-SNAP) money on food; and since this endow-

ment rarely cover their food needs, they will consume less food than a similar consumer endowed with unrestricted money.

To test this hypothesis, we programmed a simulation to give participants the full experience of a budgeting task with multiple resources. The simulation was divided into four rounds (“weeks”), and each round was further decomposed in three phases: “Recurring,” “Groceries,” and “Misc.” In the “Recurring” phase, participants received their weekly salary, whatever money they had left from the previous period, and paid rent and utilities. No decision is made during this phase. In the “Groceries” phase, participants were asked to pick 14 menus for the week out of three types: “Thrifty,” “Regular,” or “Indulgent.” The total price of the menu choices was displayed to the participants and constitutes our dependent variable. In the “Misc.” phase, participants were given binary choices on non-food spending opportunities (e.g. movie tickets, birthday gift for a friend...).

The critical manipulation took place in the first round: in addition to their paycheck, all participants were given a separate resource called a “Card,” worth \$100. In the “Restricted-Use Fund” condition, participants were only able to use this card in the “Groceries” phase. In the “Control” condition, participants could use this card in both the “Grocery” and “Misc.” phases. As with the salary, any amount left on the card at the end of a round was carried over to the next round. This design allows us to control several important aspects. First, the amount of money that can be spent on food is constant between conditions; the only difference lies in the fungibility of the \$100 “Card.” Second, the weekly salary ensures that participants always have enough money to buy the amount of food that they desire. Finally, the minimum amount of money that participants can spend on food across the four rounds is \$120, which ensures that the restricted-use fund does not fully cover their food needs.

We recruited 103 participants on Mechanical Turk to participate in the simulation. In line with our prediction, participants in the “Restricted-Use Fund” condition spent significantly less money on food each week than participants in the “Control” condition ($M = \$71.05$ vs. $M = \$82.01$, $p < .001$). A week-by-week breakdown of food expenditure revealed a pattern consistent with our theoretical account. In the first week, participants in the experimental condition spent their food-specific fund to buy food, and spent as much as participants in the control condition ($M = \$79.54$ vs. $M = \$84.33$, $p = .136$). However, starting in week 2 (when those participants had to start using their general money), this difference became larger and significant ($M = \$68.22$ vs. $M = \$81.24$, $p < .001$). Since all participants had a similar amount of money that could be spent on food, this difference suggests an aversion to spending unrestricted money on a category that was already covered by a restricted-use fund.

A post-simulation survey administered to the participants revealed interesting differences. First, participants in the experimental condition expressed less discomfort at spending their “Card” on food, but more discomfort at spending their (unrestricted) salary on food, which is consistent with our hypothesized process. Second, consumers had a flawed intuition regarding the influence of the restricted-use fund: Participants in the experimental condition believed that they would have spent less food if they had received unrestricted money in place of their “Card,” but a comparison with the control condition suggests that they would, in fact, have spent more.

Our findings have important implications for the design and public acceptance of food stamps, or other policies aimed at shifting consumption through restricted-use funds (e.g. school supplies or medical allowance). A follow-up study of 200 participants revealed similar results when the cheapest meal options were described as

“unhealthy” rather than “thrifty,” further suggesting adverse effects of restricted-use fund allocations.

Shopping Behavior of Food Stamps Users: The Role of Decision Conflict

EXTENDED ABSTRACT

The food stamps program or Supplemental Nutrition Assistance Program (SNAP) provides economic assistance for low-income individuals to purchase food at grocery stores. In 2014 almost one in every seven – approximately 46 million – people in the U.S. received “food stamps” or supplemental nutrition assistance. In that year almost \$70 billion was spent on food stamps subsidies. The monetary benefit is provided through electronic benefit transfer card (or EBT card), which is an electronic system that allows state welfare departments to issue benefits via a magnetically encoded payment card, which looks and works like a debit or a charge card.

Given the magnitude of the financial outlay, and the size and vulnerability of this segment of customers, scholars, and analysts have called for a better understanding of the shopping habits of food stamps users. In this research, we examine whether the food consumption of food stamps users is more or less unhealthy than that of nonusers of food stamps, and how the mode of payment affects the purchase of unhealthy food items by these shoppers. Are food stamps users more or less likely to buy unhealthy food items? Does their propensity to buy unhealthy food change when they pay using their EBT cards, that look and feel like credit cards? Are they less likely to buy unhealthy food items when they pay for those purchases using cash? Can food stamps users be nudged to purchase more healthy food items if the benefits are disbursed in a more tangible form such as coupons instead of a plastic card resembling a credit card?

To answer these questions, the present research brings together two streams of literature – the literature on judgments and decisions of socially and financially underprivileged shoppers (Bernheim, Ray, Yeltekin 2015; Chandon and Wansink 2007; Mani et al. 2013; van Ittersum et al. 2013) and the literature on effects of mode of payment (Chatterjee and Rose 2012; Feinberg 1986; Hirschman 1979; Prelec and Loewenstein 1998; Prelec and Simester 2001; Soman 2001, 2003; Raghuram and Srivastava 2008; Srivastava and Raghuram 2002).

The form of money has changed radically over the past few decades. Today a majority of retail transactions are carried out through card payments. Although sellers and buyers both have welcomed the cashless economic environment, an emerging stream of research has identified an unintended consequence of cashless payments: they reduce the psychological pain of paying. This reduced pain of paying can, in turn, increase spending and weaken impulse control. Cash payments, in contrast, can strengthen impulse control; the pain of paying in cash can reduce impulsive purchases of unhealthy food products (Soman 2003; Thomas, Desai, Seenivasan 2011). We extend this stream of research by examining the effect of mode of payments on a specific segment of American shoppers – socially and financially underprivileged shoppers who use food stamps for their grocery purchases. We examine whether the effects of mode of payment – cash versus card – vary between food stamps users and nonusers.

We posit that because food stamps users tend to be less health conscious, they do not experience decision conflict – or they experience much less decision conflict compared to nonusers of food stamps – while purchasing unhealthy food products. Thus, food stamps users are more likely to purchase unhealthy products. Fur-

thermore, we also posit that food stamps users’ purchase decisions are less sensitive to the effects of mode of payment.

We test the predictions by analyzing the actual shopping behaviors of around 500 food stamps users and 500 nonusers of food stamps. Specifically, we analyzed the transaction-level data gathered through retail scanners at the point-of-purchase, which includes information about the mode of payment (credit card, food stamps, or cash). This allows us to observe how the unhealthiness of the shopping basket changes with different modes of payment, and whether this change is of similar magnitude for users and non-users of food stamps. This rich dataset allows us to overcome the limitations of self-reports or responses to hypothetical shopping situations and enables us to test our hypotheses across a wide range of products – the top 100 food categories. As such, this research follows a rich tradition of researchers using retail scanner data to test behavioral insights (Briesch et al. 1997; Stiving and Winer 1996; Thomas et al. 2011; Winer 1986).

The results of our empirical analyses support our hypotheses about the role of decision conflict in the purchase decisions of unhealthy food items. Using random effect models to account for individual heterogeneity, we first found that food stamps users’ shopping baskets had a greater caloric density (defined in calories per oz) compared to those of non-users. Furthermore, while non-users of food stamps exhibited a mode-of-payment effect (i.e. were less likely to spend money on high-calorie food items when they paid in cash), this effect was not observed for food stamps users, who purchased as much high-calorie items when they paid in cash as they did when they paid in food stamps. Both the main effect and the interaction were significant at conventional level ($p < .05$). Furthermore, our findings are robust to using the unhealthiness ratings of the food items as an alternative dependent variable.

These results suggest that decision conflict plays an important role in purchase decisions of unhealthy food items and that the experience of decision conflict can be moderated by individual differences (i.e., it is lower for food stamp users) as well as mode of payment (i.e., it is lower when shoppers use plastic modes of payments). We believe that our findings have substantive policy implications (as understanding decision conflict is critical to encouraging better food choices and budgeting decisions as a whole), and promise to offer new insights into the psychology of purchase decisions at the bottom of the pyramid.

REFERENCES

- Aaronson, Daniel, Sumit Agarwal, and Eric French (2012), “The Spending and Debt Response to Minimum Wage Hikes,” *American Economic Review*, 102 (7), 3111-39.
- Adams, William, Liran Einav, and Jonathan Levin (2009), “Liquidity Constraints and Imperfect Information in Subprime Lending,” *American Economic Review*, 99 (1), 49-84.
- Ameriks, John, Andrew Caplin, and John Leahy. “Wealth accumulation and the propensity to plan.” *The Quarterly Journal of Economics* 118.3 (2003): 1007-1047.
- Amromin, Gene, Jennifer Huang, and Clemens Sialm. “The tradeoff between mortgage prepayments and tax-deferred retirement savings.” *Journal of Public Economics* 91.10 (2007): 2014-2040.
- Benartzi, Shlomo, and Richard H. Thaler. “Naive diversification strategies in defined contribution saving plans.” *American Economic Review* (2001): 79-98.
- Bernheim, B. Douglas, Debraj Ray, and Şevin Yeltekin. “Poverty and Self-Control.” *Econometrica* 83, no. 5 (2015): 1877-1911.

- Briesch, Richard A., Lakshman Krishnamurthi, Tridib Mazumdar, and Sevilimedu P. Raj. "A Comparative Analysis of Reference Price Models." *Journal of Consumer Research* 24, no. 2, 202-214.
- Chandon, Pierre and Brian Wansink (2007). "Is Obesity Caused by Calorie Underestimation? A Psychophysical Model of Meal Size Estimation." *Journal of Marketing Research*, 44, 1, 84-99.
- Chatterjee, Promothesh and Randall L. Rose (2012). "Do Payment Mechanisms Change the Way Consumers Perceive Products?" *Journal of Consumer Research* 38, 6, 1129-1139.
- Chen, Stephanie Y., Brian H. Ross, and Gregory L. Murphy (2014). "Implicit and explicit processes in category-based induction: Is induction best when we don't think?." *Journal of Experimental Psychology: General*, 143 (1), 227-46.
- Choi, James J., David Laibson, and Brigitte C. Madrian. "Why does the law of one price fail? An experiment on index mutual funds." *Review of Financial Studies* (2009): hhp097.
- Choi, James J., David Laibson, and Brigitte C. Madrian. "\$100 bills on the sidewalk: Suboptimal investment in 401 (k) plans." *Review of Economics and Statistics* 93.3 (2011): 748-763.
- Feinberg, Richard A. (1986). "Credit Cards as Spending Facilitating Stimuli: A Conditioning Interpretation." *Journal of Consumer Research*, 13(3), 348-356.
- Fernandes, Daniel, John G. Lynch Jr, and Richard G. Netemeyer. "Financial literacy, financial education, and downstream financial behaviors." *Management Science* 60.8 (2014): 1861-1883.
- Friedman, Milton (1957), *A Theory of the Consumption Function*, Princeton, NJ: Princeton University Press.
- Gross, David B., and Nicholas S. Souleles. "Do liquidity constraints and interest rates matter for consumer behavior? Evidence from credit card data." *The Quarterly Journal of Economics* 117.1 (2002): 149-185.
- Hastings, Justine S., Brigitte C. Madrian, and William L. Skimmyhorn. "Financial literacy, financial education, and economic outcomes." *Annu. Rev. Econ.* 5.1 (2013): 347-373.
- Hershfield, Hal E., et al. "Leveraging psychological insights to encourage the responsible use of consumer debt." *Perspectives on Psychological Science* 10.6 (2015): 749-752.
- Hirschman, Elizabeth C. (1979). "Differences in Consumer Purchase Behavior by Credit Card Payment System." *Journal of Consumer Research*, 6(1), 58-66.
- Lusardi, Annamaria, and Olivia S. Mitchell. *Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth*. No. w12585. National Bureau of Economic Research, 2006.
- Lusardi, Annamaria, and Olivia S. Mitchell. "Financial literacy and retirement planning: New evidence from the Rand American Life Panel." (2007).
- Mani Anandi, Senthil Mullainathan, Eldar Shafir, Jiaying Zhao (2013). "Poverty Impedes Cognitive Function." *Science*, 341, 976 - 980.
- Modigliani, Franco (1988), "The Role of Intergenerational Transfers and Life Cycle Saving in the Accumulation of Wealth," *Journal of Economic Perspectives*, 2 (2), 15-40.
- Parker, Jonathan A. (1999), "The Reaction of Household Consumption to Predictable Changes in Social Security Taxes," *American Economic Review*, 89 (4), 959-73.
- Parker, Jonathan A., Nicholas S. Souleles, David S. Johnson, and Robert McClelland (2013), "Consumer Spending and the Economic Stimulus Payments of 2008," *American Economic Review*, 103 (6), 2530-53.
- Prelec, Drazen and George Loewenstein (1998). "The Red and the Black: Mental Accounting of Savings and Debt." *Marketing Science*, 17(1), 4-28.
- Prelec, Drazen and Duncan Simester (2001). "Always Leave Home Without It: A Further Investigation of the Credit-card Effect on Willingness to Pay." *Marketing Letters*, 12(1), 5-12.
- Raghubir, Priya and Joydeep Srivastava (2008). "Monopoly Money: The Effect of Payment Coupling and Form on Spending Behavior." *Journal of Experimental Psychology: Applied*, 14(3), 213.
- Reinholtz, Nicholas, Daniel M. Bartels, and Jeffrey R. Parker (2015), "On the Mental Accounting of Restricted-Use Funds: How Gift Cards Change What People Purchase," *Journal of Consumer Research*.
- Soman, Dilip (2001). "Effects of Payment Mechanism on Spending Behavior: The Role of Rehearsal and Immediacy of Payments." *Journal of Consumer Research*, 27(4), 460-474.
- Soman, Dilip (2003). "The Effect of Payment Transparency on Consumption: Quasi-experiments from the Field." *Marketing Letters*, 14(3), 173-183.
- Srivastava, Joydeep, and Priya Raghubir (2002). "Debiasing Using Decomposition: The Case of Memory-Based Credit Card Expense Estimates." *Journal of Consumer Psychology*, 12(3), 253-264.
- Stiving, Mark and Russell S. Winer (1997). "An Empirical Analysis of Price Endings with Scanner Data." *Journal of Consumer Research*, 24(1), 57-67.
- Sussman, Abigail B., and Rourke L. O'Brien. "Knowing When to Spend: Unintended Financial Consequences of Earmarking to Encourage Savings." *Journal of Marketing Research* 53.5 (2016): 790-803.
- Sussman, Abigail B., and Eldar Shafir. "On assets and debt in the psychology of perceived wealth." *Psychological Science* (2011): 0956797611421484.
- Souleles, Nicholas S. (1999), "The Response of Household Consumption to Income Tax Refunds," *American Economic Review*, 89 (4), 947-58.
- Stango, Victor, and Jonathan Zinman. "Exponential growth bias and household finance." *The Journal of Finance* 64.6 (2009): 2807-2849.
- Thaler, Richard (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4 (3), 199-214.
- Thomas, Manoj, Kalpesh K. Desai and Satheesh Seenivasan (2011). "How Credit Card Payments Increase Unhealthy Food Purchases: Visceral Regulation of Vices." *Journal of Consumer Research*, 38(1), 126-139.
- Van Ittersum, Koert, Brian Wansink, Joost M.E. Pennings, and Daniel Sheehan (2013), "Smart Shopping Carts: How Real-Time Feedback Influences Spending," *Journal of Marketing*, 77 (6), 21-36.
- Van Rooij, Maarten CJ, Annamaria Lusardi, and Rob JM Alessie. "Financial literacy, retirement planning and household wealth." *The Economic Journal* 122.560 (2012): 449-478.
- Winer, Russell S. (1986). "A Reference Price Model of Brand Choice for Frequently Purchased Products." *Journal of Consumer Research*, 13(2), 250-256.

Creativity Triggers: The Influence of Novel Antecedents on Creative Cognition

Chairs: Anoosha Izadi, University of Houston, USA
Lidan Xu, University of Illinois at Urbana-Champaign, USA

Paper #1: Physically Short, Mentally Flexible? Exploring the Relationship between Stature and Creativity

Lei Jia, Ohio State University, USA
Xiaojing Yang, University of Wisconsin-Milwaukee, USA
Xiaoyan Deng, Ohio State University, USA

Paper #2: Can Busyness Influence Consumer Creativity?

Luke Nowlan, University of Miami, USA
Juliano Laran, University of Miami, USA

Paper #3: The Way the Wind Blows: How Direction of Airflow Influences Creativity

Anoosha Izadi, University of Houston, USA
Melanie Rudd, University of Houston, USA
Vanessa M. Patrick, University of Houston, USA

Paper #4: Can Conspicuous Consumption Experience Affect Consumer Creativity?

Lidan Xu, University of Illinois at Urbana-Champaign, USA
Ravi Mehta, University of Illinois at Urbana-Champaign, USA
Jennifer Argo, University of Alberta, Canada

SESSION OVERVIEW

Creativity plays an important role in our consumption environments. Being creative not only helps companies generate original and novel business ideas, but also facilitates consumers to solve everyday problems (Burroughs and Mick 2004). Given the importance of creativity, it is not surprising that researchers have explored various factors and cognitive processes that drive creativity, such as cognitive factors (Dahl and Moreau 2002) and motivational factors (Burroughs et al. 2008). This session seeks to provide new insights into creative cognition and explores various novel antecedents from multifaceted perspectives, including physical and mental states, environmental factors and individual consumption experiences that provide important insights that are likely to be of interest to a wide range of audiences.

The previous research has thus far explored various antecedents of creativity that can be broadly categorized into person-based and situational based factors. From a person-based angle, however, research focusing on the potential relationship between consumers' physical and mental states and their creativity is relatively scarce. Two papers in this session intend to fill this gap. The first paper in this session highlights how a person's physical state of being short (or their feelings of being short)—something commonly perceived as a disadvantage in modern society—can lead to positive consequences like enhanced creativity (Jia, Yang, and Deng). The second paper investigates a certain mental state—busyness—and demonstrates how the perception of having many tasks to do can promote creativity (Nowlan and Laran). Together, these two papers show the substantial role that mental and physical states can play in influencing creativity and encourage a deeper understanding of how such states impact consumer behavior.

From a situational-based point of view, the potential role of the physical environment and individual consumption experience in creativity research has received little attention. Thus, the other two papers in this session shed light on these less investigated factors and how and why they might influence creativity. The third paper in this session examines an environmental factor, airflow, and shows that the direction of airflow (facing the source of the airflow vs. facing away from the source of the airflow) can influence creativity by

enhancing people's psychological energy (Izadi, Rudd, and Patrick). Finally, the fourth paper explores the role of individual consumption experience and shows that engaging in a conspicuous consumption experience enhances creative performance (Xu, Mehta and Argo). Together, these two papers extend our knowledge of how situational factors—both those external (airflow) and internal to the consumer (conspicuous consumption)—impact consumer creativity.

Taken together, the four papers (all in advanced stages) in this session provide multifaceted insights into the creativity literature by introducing novel antecedents. As the session integrates diverse research to highlight theoretical developments in this important area, it should be of interest not only to researchers who study creativity, but it is expected to appeal to a broad audience, including those interested in consumer status and consumption habits, physio-environmental factors, time perception, mindsets, and coping mechanisms.

Physically Short, Mentally Flexible? Exploring the Relationship between Stature and Creativity

EXTENDED ABSTRACT

A "height premium" seems to exist in the western society which suggests that taller (vs. shorter) people tend to receive more favorable evaluations and enjoy more social and professional advantages (Judge and Cable 2004). Indeed, research indicates that height is a desirable physical asset and functions as a proxy of power, status, and respect (Agerström 2014). For example, taller individuals are judged as being more attractive, intelligent, and competent (Swami et al. 2008); they are also more likely to be elected as leaders, earn more money, and become more successful in career (Gawley, Perks, and Curtis 2009; Higham and Carment 1992; Jackson and Ervin 1992; Judge and Cable 2004). Being short, however, could be considered stigmatizing and short individuals are perceived as lower in professional status and less competent in social domains (Andreoletti, Zebrowitz, and Lachman 2001).

We investigate how consumers' stature influences their problem-solving capabilities and specifically how a short stature may contribute to creativity. Consumers' physical height can shape their cognition and behavior and one crucial consequence of being short is that short individuals believe that they are more susceptible to external constraints than are taller individuals. That is, short individuals believe that to achieve success, they need to work harder and circumvent more obstacles relative to taller people (Andreoletti, Zebrowitz, and Lachman 2001). Although more disadvantaged compared to their taller counterparts, short individuals may play smart to prevent such a disadvantageous position from holding them back in competition. For example, they can strategically present themselves to counteract the stereotypes associated with being short (Agerström 2014).

Past research suggests that resources for disadvantaged individuals are scarce and opportunities fleeting, and coping with such an adverse social environment improves the executive functioning of shifting (Mittal et al. 2015). Shifting involves switching between different tasks or mindsets flexibly and efficiently, and is a critical component of cognitive flexibility, which underlies abilities such as creativity (Diamond 2013). Extending these previous findings to examining the relationship between physical height and creativity, we propose that inasmuch as short individuals perceive themselves to be in a disadvantageous position, they may cope with the situation (e.g., resource deprivation) by honing their shifting skills and being more

flexible and creative. Specifically, we propose that both a chronic state of being physically short and a situationally induced state of feeling short can promote creativity. We tested our hypothesis in three experiments.

In the first experiment, we assessed creativity using remote associates test (RAT), a well-established measure of creativity. One hundred ninety-one participants took part in the experiment. They were told that they would work on a word association test, in which they were presented with three words (e.g., paint, doll, cat) and asked to think of a fourth word that associated with all these words (house). They worked on ten RAT questions and the number of correct solutions served as our dependent variable (RAT scores). Participants' height was collected at the end of the experiment, among other demographic variables. Analysis showed a significant negative correlation between participants' self-reported height and their RAT scores ($r = -.69, p < .001$), suggesting that shorter participants solved more RAT questions than did taller participants.

In the second experiment, we measured participants' creativity using a scuffed shoe task (Burroughs and Mick 2004). One hundred seventy-eight participants took part in this experiment. They were presented with a scenario in which they found out that their shoes were badly scuffed right before an important social occasion, and they needed to generate as many creative solutions as they can think of to this situation. Their solutions were assessed using a five-point creativity scale (1 = not at all creative; 5 = very creative) and the creativity scores served as our dependent variable. After this thinking exercise, participants' height was collected, among other demographic variables. Analysis again showed a significant negative correlation between participants' self-reported height and their creativity scores ($r = -.15, p < .05$), suggesting that shorter participants generated more creative solutions than did taller participants.

In the third experiment, we attempted to replicate the results of experiments 1 and 2 by manipulating participants' perceived shortness. One hundred and fourteen participants took part in this experiment. To manipulate perceived shortness, we asked participants to role play a short (tall) person, imagining and describing what life would be like for this person. Following this manipulation and a filler task, we assessed participants' creativity. Specifically, participants were asked to come up with as many creative ideas as they could think of for a new type of mattress (Mehta, Zhu, and Cheema 2012). Again, the creativity scores served as our dependent variable. One-way ANOVA showed a significant effect of our shortness manipulation on the creativity displayed by the participants such that those in the short perception condition were more creative than those assigned to the high perception condition ($p < .05$).

To sum up, across three experiments and by employing different creativity measures (e.g., remote associates test, alternative uses test) and both self-reported height and induced state of height perception, we found evidence for our hypothesis that a short stature can make people more creative. To our knowledge, this is first such research demonstrating a relationship between physical height and creativity.

Can Busyness Influence Consumer Creativity?

EXTENDED ABSTRACT

Despite the fact that technology has relieved modern humans from many of their responsibilities, consumers today feel busier than ever before. Prior research on busyness suggests that consumers prefer being busy relative to being idle (Hsee, et al. 2010), and that busy individuals are perceived to be high in status (Bellzza, et al. 2017). However, very little is known about the psychological processes activated by busyness, and how being busy affects consumer behavior.

In this paper, we examine how the perception of being busy affects performance in tasks involving consumer creativity.

Busyness is the perception of having many tasks to complete (Gershuny 2005; Wilcox, et al. 2016). We propose that when an individual is busy, it is harder for the individual to control their thoughts and focus on a specific task. This occurs because the salience of many (vs. few) tasks makes it harder to inhibit thoughts that interfere with the execution of a focal task. Thus, the thought inhibition process that helps people navigate their environment by focusing on information that is relevant to a focal task (Fishbach, et al. 2003; Forster and Liberman 2007; Shah, et al. 2002) is easier to accomplish when the individual does not have many tasks to think about. When the individual perceives that there are many tasks to do, thoughts become less controlled and it is harder to engage in this inhibition process. We propose that this phenomenon increases creativity, and outline four studies that test this framework.

Study 1 sought to test the effect of busyness on task performance across tasks that either did or did not involve creativity. 187 undergraduates listed either three (not busy condition) or ten (busy condition) tasks on their to-do list (Wilcox et al. 2016), before being assigned to generate new names for a pasta brand (creative task) or solve a series of multiple choice analogies (control task). Results indicated that busyness affected performance on the two tasks differentially ($F(1, 183)=4.06, p<.05$). In the creative task condition, busyness ($M=6.36$) led participants to come up with more names that diverged from convention compared to the not busy condition ($M=5.24; p<.05$), but had no effect on the number of analogies answered correctly in the control task condition ($p=.69$).

Study 2 was designed to replicate the effect of busyness on creativity and directly test the proposed mechanism. 159 undergraduates completed the same busyness manipulation as study 1, then either were subtly encouraged not to control which thoughts came to mind (not-controlled thoughts condition), or read neutral text (baseline thoughts condition). Then they came up with a creative way to use bubble-wrap. An ANOVA revealed a busyness by thoughts interaction on the judged creativity of the ideas ($F(1, 155) = 6.83, p<.01$), such that the busy condition ($M=3.77$) came up with ideas that were more creative than the not busy condition ($M=3.16; p<.05$). Additionally, in the not busy condition, the suggestion not to control their thoughts ($M=3.70$) enhanced the creativity of their ideas compared to the baseline condition ($M=3.16; p=.07$).

Study 3 aimed to eliminate the effect of busyness on creativity by restoring participants' ability to control their thoughts. 211 MTurk workers first wrote about their day and how they were busier (vs. less busy) than usual. Next, they were instructed to either think about just one of these activities and block out unrelated thoughts (controlled thoughts condition) or think about their morning routine (baseline thoughts condition). Finally, they came up with a creative way that a company could engage its consumers. A busyness by thoughts interaction emerged on the judged creativity of the ideas ($F(1, 207) = 3.76, p=.05$), such that at baseline, the busy condition ($M=3.47$) came up with ideas that were more creative than the not busy condition ($M=3.15; F(1, 207)=4.10, p<.05$), but no effect emerged when participants were controlling their thoughts ($F<1$). Importantly, in the busy condition, controlling thoughts ($M=3.13$) reduced creativity compared to the baseline condition ($M = 3.47, F(1, 207)=4.08, p<.05$).

Study 4 sought to further support our framework by demonstrating that the effect of busyness on creativity is eliminated among participants who have a high tendency to focus on a single set of thoughts when working on a task. 177 MTurk workers evaluated ads that either led them to think about the tasks they had to do (busy con-

dition) or contained neutral text (not busy condition), before coming up with four creative ways to use a brown paper grocery bag. After answering filler questions, participants then responded to three self-report items measuring their tendency to keep their focus when performing tasks. Responses to these items were averaged ($\alpha=.71$) to form the “focus” individual difference variable. A regression on creativity (flexibility + originality) of the ideas revealed only a busyness by focus interaction ($B=-.13$, $SE=.06$, $p<.05$), such that the effect of busyness on creativity was eliminated as tendency to focus ($M=6.39$, $SD=1.51$) increased (Johnson-Neyman point of transition = 5.74).

In conclusion, four studies demonstrate that busyness boosts creativity. Study 1 rules out the possibility that our effect is driven by a general increase in motivation or task engagement, studies 2 and 3 directly manipulate the proposed control of thoughts mechanism, and study 4 identifies an individual difference variable that eliminates the effect. The findings presented here identify an important psychological consequence of busyness, as well as a novel antecedent of consumer creativity.

The Way the Wind Blows: How Direction of Airflow Influences Creativity

EXTENDED ABSTRACT

Does it matter where you place a fan in an office or store? Can the direction of airflow change how people think? Our research introduces an understudied environmental factor—airflow—and demonstrates that the direction of this airflow can have a profound influence on consumer creativity. We hypothesize that being upwind (i.e., facing the flow of air) versus downwind (i.e., having one’s back to the flow of air) increases consumers’ psychological energy and that this boost in psychological energy has positive consequences for creative performance.

Conceptual Model

Creativity, defined as the production of novel ideas or solutions to problems (Amabile 1983; Moreau and Engeset 2016), not only impacts consumer’s purchase behavior in numerous product categories, but is also highly valued in corporate environments. But despite emerging research that has identified aspects of the physical environment that impact creativity (Mehta, Zhu, and Cheema 2012; Steidle and Werth 2013), the potential link between creativity and airflow (from natural drafts and breezes to ventilation systems and fans) in modern day consumption, shopping, and workplace environments has remained unexplored and is worthy of investigation.

Airflow (i.e., the movement of air in an environment) has three key facets: speed, temperature, and direction. Our research focuses on the last facet—the direction of airflow (upwind vs. downwind)—in consumption spaces. Although the relationship between different facets of airflow and air quality has been studied in building design (Chung and Hsu 2001; Imbabi 2006; Yu et al. 2009), the possible psychological impact of airflow has rarely been explored. The present research aims to extend the extant literature by testing the prediction that facing upwind boosts creativity by enhancing people’s psychological energy.

Psychological energy (i.e., the perceived energy available to the self) is reflected in feelings of aliveness and vitality (Ryan and Deci 2008; Thayer 1989) and depends upon both psychosocial and physical factors (Ryan and Frederick 1997). Given that airflow is an environmental factor people experience physiologically, the literature on physical antecedents of psychological energy is particularly germane to our research. Notably, prior research on environmental factors suggests that experiences that are more sensorially invigorating

can positively influence people’s perceived psychological resources and vitality (Cheema and Patrick 2012). In the present research, we similarly argue that a sensorial and physiologically energizing experience—in this case, the experience of facing upwind—positively affects psychological energy. Namely, due to differences in the density and type of touch receptors present in the skin over various portions of the human body, humans have greater tactile sensitivity on the front-facing (vs. rear-facing) half of their body (Weber 1978). Therefore, we hypothesize that facing upwind (vs. downwind) will amplify one’s psychological energy (as measured by energetic activation, felt vitality, and willingness to expend energy). Moreover, since prior research has shown that increased psychological energy is associated with cognitive flexibility, improved brain functioning, and thus creativity (De Dreu, Baas, and Nijstad 2008; Deci and Ryan 2000), we predict a similar, mediating role of psychological energy in explaining the positive effect of facing upwind (vs. downwind) on creative performance.

Methodology and Results

Five studies tested the prediction that, by enhancing psychological energy, the experience of facing upwind (vs. downwind) would increase people’s creativity. Study 1 provided initial evidence for our conceptual framework, in a field setting (a public park during a kite festival where a natural breeze was present), by examining whether facing upwind (vs. downwind) increased people’s creativity when naming their dream travel destination and increased their likelihood of choosing to undertake a more difficult, energy-taxing task (an indicator of greater psychological energy; Choi and Fishbach 2011; Inoue 2007). Unbeknownst to participants, they were made to stand either upwind or downwind while taking a short survey. As predicted, the results revealed that participants in the upwind (vs. downwind) condition generated more creative travel destinations and exhibited greater psychological energy (i.e., they were significantly more likely to choose to take home instructions for a difficult vs. easy do-it-yourself kite). Moreover, the effect of airflow direction on creativity was mediated by psychological energy.

Studies 2a and 2b were conducted in the lab. For these studies, all participants were placed in identical rooms (with identical layouts and temperature). The only difference was that the fan in each room was positioned to either blow air towards participants or at their backs (the fans, speed of the airflow, and distance from the fans to participants were identical). Study 2a conceptually replicated the prior energy findings: Participants facing upwind (vs. downwind) exhibited greater psychological energy, as they were significantly more likely to choose to perform a more challenging task for an ostensibly upcoming university-organized conference. Building upon these results, study 2b added a “no wind” control condition (wherein a fan was in the room, but blowing toward the wall) and ruled out several alternative explanations. Namely, that our airflow conditions were also manipulating tense arousal (e.g., anxiety) and hedonic tone (e.g., happiness)—constructs that are distinct from psychological energy (Nix et al. 1999; Ryan and Bernstein 2004). Study 2b revealed that although the experience of facing upwind (vs. downwind or no wind) made people feel significantly more psychologically energized, participants in all three conditions reported having an equally positive mood and feeling equally tense. Thus, hedonic tone and tense arousal could not account for our observed effects.

In study 3 (online), participants imagined a scenario where a fan is blowing at their face (vs. back or no fan) and subsequently completed a remote associates task (RAT) to assess their creativity. Results revealed that participants in the upwind (vs. downwind or control) conditions correctly solved more RAT items. Study 4 tested

the full conceptual model (in lab). The results revealed that, as predicted, participants in the upwind (vs. downwind or no wind) condition produced significantly more creative drawings of alien animals and felt significantly more vital and energized. Further supporting our theory, mediation analyses revealed that the creativity exhibited by participants in the upwind (vs. downwind or no wind) conditions was significantly mediated by their feelings of psychological energy.

Can Conspicuous Consumption Experience Affect Consumer Creativity?

EXTENDED ABSTRACT

In the United States alone, consumers spend as much as \$525 billion per year on luxury products (Bev and Zolenski 2011). It has been argued that consumers seek luxury products to signal status and prestige (Han, Nunes, and Dreze 2010). Such frivolous behavior to publicly display one's economic wealth and status is called conspicuous consumption (Veblen 1899). Although previous research has extensively examined consumers' motivation to engage in conspicuous consumption (Rucker, Galensky, and Dubois 2012; Griskevicius et al. 2007), little research has explored the downstream consequences of engaging in such behavior. The current work aims to extend this line of research by examining the effect of conspicuous consumption on consumer creativity. Specifically, we propose that engaging in conspicuous consumption will activate a differentiation mindset, which in turn will lead to higher creativity.

It has been argued that consumption behaviors and products can have ascribed meanings that are generally agreed upon by the members of social groups and general population (Richins 1994). These consumption behaviors then can act as signs, that are interpreted by observers in a given context, to signal consumers' identity and status (Richins 1994). Conspicuous products are costly items that are exhibited publically to impress upon others that one possesses wealth or status (Sundie et al. 2010). Consumption of such conspicuous products provides individuals a means to dissociate themselves from others (Han et al. 2010). For example, the classic monogram pattern or the popular Damier canvas pattern of the luxury brand Louis Vuitton is synonymous with conspicuousness as these well recognized patterns send a clear signal of one's wealth and that such product is beyond the reach of the ordinary (Han et al. 2010).

Extending this line of argument, we suggest that a simple consumption experience of such conspicuous products, that provides consumers a means to dissociate themselves from others, will induce a heightened feeling of distinctiveness or being different from others and activate a unique cognitive process that manifests as a differentiation mindset. We further propose that such differentiation mindset will positively influence consumer creativity. It has been argued that differentiation mindset increases non-conformity and heightens the desire to stand out from others. This in turn enables people to break habitual mental set and think outside of the box leading to higher creativity (IJzerman, Leung, and Ong 2014).

In the first experiment, we aimed to test our focal hypothesis that engaging in conspicuous consumption leads to higher creativity. This experiment manipulated conspicuous consumption through a real conspicuous consumption in which participants were provided with either a Prada or a similar non-branded handbag and were asked to put their belongings in the handbag and walked around with the handbag in a public setting. Then they went back to the lab and completed a creativity task (Torrance 1966). As hypothesized, we observed a main effect of conspicuous consumption experience on originality of the generated ideas ($F(1, 67) = 4.49, p = .038$), such that the ideas generated by the participants in the conspicuous condi-

tion ($M = 3.47, SD = .73$) were judged to be significantly more original than those in the neutral condition ($M = 3.06, SD = .83$).

In the second experiment, we intended to examine our proposed process. Thus, this experiment employed a 2(Consumption experience: conspicuous vs. neutral) x 2(Differentiation mindset: activated vs. control) between-subject design. In this experiment, we manipulated conspicuous consumption through an imagination task and asked participants to imagine using either luxury or neutral products in a public setting. To manipulate differentiation mindset, participants were asked to think about several ways in which they thought they were different from others and then write down how/why they thought so (Kim et al. 2013). In the control condition, participants were simply asked to describe the room they were working in. To measure creativity, participants were asked to come up with a creative idea for a new mattress (Mehta, Zhu, and Cheema 2012). A two-way ANOVA returned a significant interaction between consumption experience and mindset for originality of the generated ideas ($F(1, 190) = 4.39, p = .037$). Under the control condition, we found that conspicuous consumption enhanced originality ($M_{\text{conspicuous}} = 3.56, SD = .70; M_{\text{control}} = 3.17, SD = .83; t(190) = 2.56, p = .011$). However, no difference was observed between conspicuous consumption ($M = 3.46, SD = .78$) and neutral experience conditions ($M = 3.53, SD = .70; t(190) < 1$) when differentiation mindset was induced.

In the third experiment, we examined a key boundary condition. We argue that if conspicuous consumption takes place in a private setting, then the differentiation mindset should not be activated and thus the effect will be attenuated. We employed a 2 (Consumption experience: conspicuous vs. neutral) x 2 (Setting: public vs. private) between-subjects design, in which the participants actually experienced a conspicuous (or neutral) consumption episode, either in a public or a private setting. In the public settings, the manipulation for conspicuous experience was very similar to experiment 1 besides that rather than wearing a Prada bag, participants wore either a Chanel brooch pearl necklace or a pearl necklace without the Chanel brooch. In the private settings, participants stayed in a private room where they could not be observed by anyone. To measure creativity, participants were asked to come up with new ice-cream flavors for Baskin Robbins. A two-way ANOVA returned a significant interaction between consumption experience and setting type ($F(1, 96) = 4.72, p = .032$). Under the public setting, conspicuous consumption enhanced the originality of ice-cream ideas ($M_{\text{conspicuous}} = 4.27, SD = 1.03; M_{\text{control}} = 3.56, SD = 1.16; t(96) = 2.25, p = .027$). However, under the private condition, no difference was observed in the originality score ($M_{\text{conspicuous}} = 3.51, SD = 1.08$) and neutral experience condition ($M_{\text{control}} = 3.81, SD = 1.29; t(96) < 1$).

REFERENCES

- Agerström, Jens (2014), "Why does Height Matter in Hiring?," *Journal of Behavioral and Experimental Economics*, 52, 35-38.
- Amabile, Teresa M. (1983), "The Social Psychology of Creativity: A Componential Conceptualization," *Journal of Personality and Social Psychology*, 45 (2), 357-76.
- Andreoletti, Carrie, Leslie A. Zebrowitz, and Margie E. Lachman (2001), "Physical Appearance and Control Beliefs in Young, Middle-Aged, and Older Adults," *Personality and Social Psychology Bulletin*, 27(8), 969-981.
- Bellezza, Silvia, Anat Keinan, and Neeru Paharia (2017), "Conspicuous consumption of time: When busyness and lack of leisure time become a status symbol," *Journal of Consumer Research*, Forthcoming.

- Burroughs, James E and David Glen Mick (2004), "Exploring Antecedents and Consequences of Consumer Creativity in a Problem-Solving Context," *Journal of Consumer Research*, 31 (2), 402-11.
- Burroughs, James E, C Page Moreau, and David Glen Mick (2008), "Toward a Psychology of Consumer Creativity," in *Handbook of Consumer Psychology*, Curtis P. Haughtvedt, Paul M. Herr, and Frank R. Kardes eds. Mahwah, NJ: Erlbaum, 1011-38.
- Cheema, Amar and Vanessa M. Patrick (2012), "Influence of Warm Versus Cool Temperatures on Consumer Choice: A Resource Depletion Account," *Journal of Marketing Research*, 49 (6), 984-95.
- Choi, Jinhee and Ayelet Fishbach (2011), "Choice as an End Versus a Means," *Journal of Marketing Research*, 48 (3), 544-54.
- Chung, Kee-Chiang and Shou-Ping Hsu (2001), "Effect of Ventilation Pattern on Room Air and Contaminant Distribution," *Building and Environment*, 36 (9), 989-98.
- Dahl, Darren W., and Page Moreau (2002), "The Influence and Value of Analogical Thinking During New Product Ideation," *Journal of Marketing Research*, 39 (1), 47-60.
- De Dreu, Carsten K.W., Matthijs Baas, and Bernard A Nijstad (2008), "Hedonic Tone and Activation Level in the Mood-Creativity Link: Toward a Dual Pathway to Creativity Model," *Journal of Personality and Social Psychology*, 94 (5), 739-56.
- Deci, Edward L. and Richard M. Ryan (2000), "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior," *Psychological Inquiry*, 11 (4), 227-68.
- Diamond, Adele (2013), "Executive Functions," In S. T. Fiske (Ed.), *Annual Review of Psychology* (Vol. 64, pp. 135-168). Palo Alto, CA: Annual Reviews.
- Fishbach, Ayelet, Ronald S. Friedman, and Arie W. Kruglanski (2003), "Leading Us Not into Temptation: Momentary Allurements Elicit Overriding Goal Activation," *Journal of Personality and Social Psychology*, 84 (February), 296-309.
- Förster Jens, Liberman Nira (2007), "Contrast Effects in Knowledge Activation: The Case of Inhibition Effects Due to Competing Constructs or Goal Fulfillment," in *Assimilation and Contrast in Social Psychology*, ed. Stapel Diederik A., Suls Jerry, New York: Psychology, 269-87.
- Gawley, Tim, Thomas Perks, and James Curtis (2009), "Height, Gender, and Authority Status at Work: Analyses for a National Sample of Canadian Workers," *Sex Roles*, 60(3-4), 208-222.
- Gershuny, Jonathan (2005), "Busyness as the badge of honor for the new superordinate working class," *Social Research*, 287-314.
- Griskevicius, V., Tybur, J. M., Sundie, J. M., Cialdini, R. B., Miller, G. F., & Kenrick, D. T. (2007). Blatant benevolence and conspicuous consumption: when romantic motives elicit strategic costly signals. *Journal of Personality and Social Psychology*, 93(1), 85.
- Han, Y.J., Nunes, J.C. and Drèze, X., (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4): 15-30.
- Higham, Philip A., and D. William Carment (1992), "The Rise and Fall of Politicians: The Judged Heights of Broadbent, Mulroney and Turner Before and After the 1988 Canadian Federal Election," *Canadian Journal of Behavioral Science*, 24(3), 404-409.
- Hsee Christopher K., Yang Adelle X., Wang Liangyan (2010), "Idleness Aversion and the Need for Justifiable Busyness," *Psychological Science*, 21 (July), 926-30.
- Izerman, H., Leung, A.K.Y. and Ong, L.S., (2014). Perceptual symbols of creativity: Coldness elicits referential, warmth elicits relational creativity. *Acta Psychologica*, 148: 136-147.
- Imbabi, M.S. (2006), "Full-Scale Evaluation of Energy Use and Emissions Reduction of a Dynamic Breathing Building," Proceedings of WREC-IX, Florence, 19-25 August.
- Inoue, Noriyuki (2007), "Why Face a Challenge? The Reason Behind Intrinsically Motivated Students' Spontaneous Choice of Challenging Tasks," *Learning and Individual Differences*, 17 (3), 251-59.
- Jackson, Linda A., and Kelly S. Ervin (1992), "Height Stereotypes of Women and Men: The Liabilities of Shortness for both Sexes," *The Journal of Social Psychology*, 132(4), 433-445.
- Judge, Timothy A., and Daniel M. Cable (2004), "The Effect of Physical Height on Workplace Success and Income: Preliminary Test of a Theoretical Model," *Journal of Applied Psychology*, 89(3), 428-441.
- Kim, S.H., Vincent, L.C. and Goncalo, J.A., (2013). Outside advantage: Can social rejection fuel creative thought?. *Journal of Experimental Psychology: General*, 142(3): 605.
- Mehta, R., Zhu, R.J. and Cheema, A., (2012). Is noise always bad? Exploring the effects of ambient noise on creative cognition. *Journal of Consumer Research*, 39(4): 784-799.
- Mittal, Chiraag, Vladas Griskevicius, Jeffrey A. Simpson, Sooyeon Sung, and Ethan S. Young (2015), "Cognitive Adaptations to Stressful Environments: When Childhood Adversity Enhances Adult Executive Function," *Journal of Personality and Social Psychology*, 109(4), 604-621.
- Moreau, C. Page and Marit Gundersen Engeset (2016), "The Downstream Consequences of Problem-Solving Mindsets: How Playing with Lego Influences Creativity," *Journal of Marketing Research*, *Journal of Marketing Research*, 53 (1), 18-30.
- Nix, Glen A, Richard M. Ryan, John B. Manly, and Edward L. Deci (1999), "Revitalization through Self-Regulation: The Effects of Autonomous and Controlled Motivation on Happiness and Vitality," *Journal of Experimental Social Psychology*, 35 (3), 266-84.
- Richins, M.L., (1994.) Special possessions and the expression of material values. *Journal of Consumer Research*, 21(3): 522-533.
- Rucker, D. D., Galinsky, A. D., & Dubois, D. (2012). Power and consumer behavior: How power shapes who and what consumers value. *Journal of Consumer Psychology*, 22(3), 352-368.
- Ryan, Richard M. and Edward L. Deci (2008), "From Ego Depletion to Vitality: Theory and Findings Concerning the Facilitation of Energy Available to the Self," *Social and Personality Psychology Compass*, 2 (2), 702-17.
- Ryan, Richard M. and Christina Frederick (1997), "On Energy, Personality, and Health: Subjective Vitality as a Dynamic Reflection of Well-Being," *Journal of Personality*, 65 (3), 529-65.
- Ryan, Richard M. and J. Bernstein (2004), "Vitality [Zest, Enthusiasm, Vigor, Energy]," in *Character Strengths and Virtues: A Handbook and Classification*, ed. Christopher Peterson and Martin E. P. Seligman, New York, NY: Oxford University Press, 273-89.
- Shah James Y., Ron S. Friedman, Arie W. Kruglanski, (2002), "Forgetting All Else: On the Antecedents and Consequences of Goal Shielding," *Journal of Personality and Social Psychology*, 83 (December), 1261-80.

- Steidle, Anna and Lioba Werth (2013), "Freedom from Constraints: Darkness and Dim Illumination Promote Creativity," *Journal of Environmental Psychology*, 35 (September), 67-80.
- Sundie, J.M., Kenrick, D.T., Griskevicius, V., Tybur, J.M., Vohs, K.D. and Beal, D.J., (2011). Peacocks, Porsches, and Thorstein Veblen: conspicuous consumption as a sexual signaling system. *Journal of Personality and Social Psychology*, 100(4): 664.
- Swami, Viren, Adrian Furnham, Nereshnee Balakumar, Candy Williams, Kate Canaway, and Debbi Stanistreet (2008), "Factors Influencing Preferences for Height: A Replication and Extension," *Personality and Individual Differences*, 45(5), 395-400.
- Thayer, Robert E. (1989), *The Biopsychology of Mood and Arousal*, New York, NY: Oxford University Press.
- Torrance, E.P., (1966). Torrance tests of creativity.
- Veblen, T., (1899). *The theory of the leisure class*. New York: The New American Library.
- Weber, Ernst H. (1978), *The Sense of Touch*, New York, NY: Academic Press.
- Yu, BF, ZB Hu, M Liu, HL Yang, QX Kong, and YH Liu (2009), "Review of Research on Air-Conditioning Systems and Indoor Air Quality Control for Human Health," *International Journal of Refrigeration*, 32 (1), 3-20

360 Degrees of Social Influence:

How Others' Presence, Attitudes, and Behaviors Change the Way We Think and Behave

Chairs: Rachel Meng, Columbia University, USA

Youjung Jun, Columbia University, USA

Paper #1: Perceived Social Presence Reduces Fact-Checking

Youjung Jun, Columbia University, USA

Rachel Meng, Columbia University, USA

Gita V. Johar, Columbia University, USA

Paper #2: Seeing the World Through Others' Lens: When Shared Experience Boosts Novelty

Yanping Tu, University of Florida, USA

Yang Yang, University of Florida, USA

Ayelet Fishbach, University of Chicago, USA

Paper #3: When Moderation Fosters Persuasion: The Persuasive Power of Deviatory Reviews

Daniella Kupor, Boston University, USA

Zakary Tormala, Stanford University, USA

Paper #4: Social Influence, Habits, and Disrupted Performance Environments

Dean Eckles, Massachusetts Institute of Technology, USA

Christos Nicolaides, Massachusetts Institute of Technology, USA

Sinan Aral, Massachusetts Institute of Technology, USA

SESSION OVERVIEW

The company of others often shapes how we process information and act accordingly. In an increasingly connected world, a fundamental question is to understand the varied instantiations of social influence and their accompanying consequences for reasoning and behavior. This session discusses how individual judgment and decisions change as a function of others' presence (Papers 1-2), their attitudes (Paper 3), and their behaviors (Paper 4). Collectively, the selected research illuminate contexts under which social influence can aid as well as harm well-being, while featuring a broad array of human cognition and behavior: reacting to information (Papers 1 and 3), changing experiences (Paper 2) and attitudes (Paper 3), and engaging in repeated actions (Papers 2 and 4).

Jun, Meng, and Johar (Paper 1) begin by examining the effect of evaluating information in a social context on fact-checking. Across a series of incentivized tasks, people fact-checked statements less frequently when they perceived the presence of others (e.g., in group settings or on social media) than when they evaluated the same statements alone. Next, Tu, Yang, and Fishbach (Paper 2) expand on the effects of social presence and highlight one benefit of interpersonal involvement in the form of combating satiation. Specifically, re-consuming familiar activities with those new to that stimuli can restore novelty to otherwise mundane experiences. Kupor and Tormala (Paper 3) turn to the role of others' attitudes by identifying when information is more persuasive in a consumer recommendation context. When the perceived default evaluation is extremely positive, people tend to be more persuaded by moderately positive reviews that deviate from that default. Finally, using large-scale observational data on running activity, Eckles, Nicolaides, and Aral (Paper 4) bring the forces of social influence to the behavioral sphere with an analysis of how habits and disruptions to a performance environment moderate susceptibility to peer effects.

In concert, the above papers call attention to the far-reaching effects of social influence on how people process information, form

attitudes, and change behavior. These consequences may manifest themselves in ways both beneficial and detrimental. On one hand, individuals may derive considerable utility from others' company, as when they re-consume experiences with friends who have not done so (Tu, Yang, and Fishbach) and use peers' behavior to reinforce their own habits (Eckles, Nicolaides, and Aral). On the other hand, the presence of others can suppress willingness to verify information (Jun, Meng, and Johar). People may become swayed by extreme or moderate reviews simply based on the perceived default (Kupor and Tormala).

Bridging insights from different methodological techniques that span various consumption domains (media, product recommendations, experiential activities, exercise habits), this session brings together the latest work on social influence and its consequences for judgment and behavior. With the ease and rapidity of information transmission through social networks, a closer inspection of when people are more susceptible to peer effects can help improve individuals' decisions and experiences. We believe the substantive issues raised here would be especially useful for those interested in social influence, persuasion, information processing, and habits.

Perceived Social Presence Reduces Fact-Checking

EXTENDED ABSTRACT

A recent concern, intensified in the wake of the 2016 U.S. Presidential election, surrounds the circulation of "fake" news and other unverified digital content. As people have grown to rely on social media as an important news source (Pew Research Center 2016), a relevant question is how we scrutinize information in such settings. Across several experiments, people fact-checked less often when they evaluated claims in a (perceived) collective setting (e.g., in a group or on social media) than when they did so alone. Inducing vigilance immediately prior to evaluation increased rates of fact-checking under social contexts.

In Experiment 1 (N=175), MTurk participants logged onto a simulated news website where they evaluated 36 statements described as headlines published by a U.S. media organization. These claims were pretested to be relatively ambiguous, evenly divided in their veracity, and spanned a diverse set of topics. Participants could identify each statement as true, false, or raise a fact-checking "flag" allowing them to learn its veracity. We specified a bonus reward such that individuals received 1/-1/0 points for every correct/incorrect/flagged statement, respectively (e.g., with each point awarding 5 cents). Throughout the task, some participants saw their username displayed by itself (Alone), while others saw 102 other "currently online" participants beneath their own (Group). Respondents flagged (fact-checked) a fewer proportion of statements in the Group compared to Alone condition [$M_{\text{Alone}} = 17\%$; $M_{\text{Group}} = 11\%$].

The incentive structure above implies that an expected-value maximizer would be indifferent between flagging and not flagging. To test whether people are more likely to fact-check in others' presence when doing so is strictly dominant, Experiment 2 (N=215) imposed a reward (+0.25 point) for flagging and featured 37 statements of varying ambiguity. Although overall flagging rates increased, people again fact-checked less in the presence of others [$M_{\text{Alone}} = 26\%$; $M_{\text{Group}} = 20\%$] across all levels of ambiguity.

Experiment 3 investigated whether diffusion of responsibility (Latané et al., 1979) may account for suppressed fact-checking. We presented respondents ($N=165$) with 38 statements about U.S. congressmen/women and introduced a third condition (Group-Distinct) that differentiated participants from others logged onto the forum by displaying their own name in red text alongside 30 others in black (van Bommel et al. 2012). If social presence blunts fact-checking because individuals free-ride on others' efforts, then this behavior should diminish when they feel more personally responsible within a collective setting. Although heightening individual distinctiveness indeed increased felt responsibility for uncovering the truth, this did not prompt greater fact-checking: Those in the Alone condition [$M = 13%$] flagged more than those in both Group conditions [$M_{\text{Group}} = 6%$; $M_{\text{Group-Distinct}} = 7%$].

Experiment 4 ($N=371$) tested whether evaluating information in a social context where others' presence is cued indirectly can impede fact-checking. Participants evaluated the 36 headlines from Experiment 1 in an Alone or Group condition (102 others). We introduced a second factor of platform type: Those in the Traditional News condition completed the task on the simulated forum as done previously, while those in the Social Media condition viewed the same headlines framed as Facebook posts from the focal media organization. Replicating prior results, people flagged less when they saw others (vs. only themselves) on the traditional media site [$M_{\text{Alone}} = 6.4%$; $M_{\text{Group}} = 3.5%$]. On the social media platform, however, this difference disappeared [$M_{\text{Alone}} = 4.4%$; $M_{\text{Group}} = 4.4%$]. So, browsing information in an inherently social context seemed to make participants behave as if they were in a group.

Experiment 5 ($N=308$) found that people need not be co-attending to the same stimuli to be susceptible to the social presence effects observed so far. Regardless of whether other respondents were described as "currently online" (completing the same task) or "previously online" (had already completed it), participants fact-checked less in the company of others [$M_{\text{Current}} = 15%$; $M_{\text{Past}} = 18%$] than when were alone [$M = 24%$].

Might the reluctance to fact-check be compounded by a motive to corroborate one's own beliefs? Participants in Experiment 6 ($N=287$) read 50 (purported) campaign statements from two U.S. politicians. Candidate A's statements reflected a more conservative view, while candidate B's a more liberal one. We further varied the number of others (30 vs. 102 others) to examine the role of group size. Participants flagged less in the presence of others regardless of group size [$M_{\text{Alone}} = 12%$; $M_{\text{Group-Small}} = 8%$; $M_{\text{Group-Large}} = 6%$]. Although people were more likely to accept a statement as true when its view accorded with their own party, political alignment did not affect flagging rates (which instead depended only on social presence), suggesting that the tendency to exercise motivated reasoning may operate independently.

One reason why collective settings suppress fact-checking is that being around others may automatically lower our guards, impairing vigilance more generally. Three pieces of evidence lend some credence to this possibility. First, respondents in a separate study who scored high on chronic prevention (but not promotion) focus—a trait associated with being habitually cautious (Higgins et al. 2001)—appeared less vulnerable to the effect of social presence. Second, people in a group (vs. individual) environment performed worse on a proofreading task. Finally, the last experiment ($N=385$) tested whether promoting a vigilance mindset can increase fact-checking under social settings. Before evaluating statements in either an Alone or Group condition, respondents either were or were not exposed to a vigilance induction shown to increase prevention focus (Higgins et al. 1994). Control participants flagged fewer state-

ments in the presence of others [$M_{\text{Alone}} = 20%$; $M_{\text{Group}} = 12%$]. However, this difference disappeared among those given the vigilance exercises [$M_{\text{Alone}} = 21%$; $M_{\text{Group}} = 23%$], with participants in the Group condition electing to fact-check nearly twice as often.

The experiments above furnish evidence that perceiving the presence of others may reduce people's willingness to fact-check information. Further, these data suggest that others' presence may lower our guards in an almost instinctual fashion, consistent with a "safety in numbers" heuristic (Roberts 1996). Continuing to devise interventions that encourage greater informational scrutiny poses an important challenge towards inspiring a well-informed populace.

Seeing the World Through Others' Lens: When Shared Experience Boosts Novelty

EXTENDED ABSTRACT

Mundane life is filled with repeated activities. Very often consumers take the same route to work, stop by the same coffee shop and interact with the same group of people. Almost by definition, repetition results in a decrease in experienced novelty—people satiate (Coombs and Avrunin 1977). To counteract unwanted satiation, prior research has identified a few intra-personal strategies, such as consuming later and consuming something different. We propose an interpersonal strategy: consume with others who are new to the experience.

Due to our social instinct, we automatically synchronize our behaviors and experiences with other people. When seeing others yawn, we also start yawning (Platek et al. 2003); when witnessing a person being socially rejected, we feel lonely too (Wesselmann, Bagg, and Williams 2009); when reading emotionally laden posts on Facebook, without face-to-face interaction, we can feel how others feel and converge with our friends' emotions (Kramer, Guillory, and Hancock 2014). Building on this line of research, we predict that *when experiencing old stimuli with another person who is new to the experience, people adopt his/her novel perspective, resulting in a more refreshing experience for the self*. This effect is driven by neither the mere presence of others nor the change in experience type (i.e., solo experience vs. joint experience). Hence, controlling for the presence of others, we predict that *people find their experience more novel when experiencing it with another person who has had the experience fewer times*. Importantly, because the degree to which people adopt another person's fresh pair of eyes depends on interpersonal closeness, we predict that *the proposed effect only occurs between close others*. Four studies tested our proposed framework.

Study 1 surveyed people's movie re-consumption experience. Participants recalled the last time they re-watched a movie, rated the novelty of their experience, and indicated whether they re-watched it by themselves or with other person(s). Those who watched with other(s) further rated whether other(s)' have watched the movie more or fewer times than they did (1 = fewer times, 7 = more times). We also collected background variables such as participants' and other(s)' overall liking of the movie. In support of our hypothesis, those who re-watched the movie with others (vs. alone) rated the movie more novel ($M = 5.00$, $SD = 1.22$ vs. $M = 4.57$, $SD = 1.09$; $t(256) = 2.50$, $p = .013$). This is driven by the lower consumption frequency of others relative to self ($M = 2.93$, $SD = 2.05$, $t(196) = 7.34$, $p < .001$; one-sample t -test against 4). Further, controlling for other people's liking of the movie, the fewer times other(s) watched the movie relative to participants themselves, the more novel participants rated their experience ($\beta = .17$, $p = .02$).

Study 2 tested the effect in the Magic Kingdom in Disney World using real-time measures. We surveyed visitors who were with fami-

ly and friends. Participants first evaluated novelty of their experience on that day, and then indicated whether they were a first-time visitor or not. Non-first-timers also rated to what extent it felt like first time. Next, participants indicated 1) how likely they would come back and 2) how soon they would come back. Finally, they answered other questions about the visit, including 1) the (average) frequency of other person(s)' visit, 2) frequency of their own visit, 3) time elapsed since their last visit, 4) time in Magic Kingdom on that day, and 5) group size. Controlling for items 2)-4), the frequency of other(s) visit negatively predicted novelty ($\beta = -.19, p = .02$), likelihood of coming back ($\beta = -.24, p < .001$), how soon people would like to come back ($\beta = -.24, p < .001$), and for non-first-timers, whether it felt like first time ($\beta = -.42, p < .001$).

Study 3 was conducted in the lab for higher internal validity. We presented undergraduate participants with six pictures of their familiar campus scenes and asked them to imagine visiting these places with a group of freshmen (their in-group members) who have "never been to these places before" or "been to these places many times". Participants in the former condition rated the scenes more novel ($M = 4.61, SD = 1.29$ vs. $M = 3.97, SD = 1.01$; $F(1, 130) = 9.95, p = .002$).

Study 4 further tested the process by manipulating closeness, using a 2 (Other's status: without-prior-experience vs. with-prior-experience) \times 2 (Closeness: close vs. distant) between-participants design. Participants first answered a few attitude questions as a part of the closeness manipulation. Next, they watched a short video clip four times, and then watched it one more time with another person who "has not yet watched the video" or "has watched this video for the same number of times." They also learned that this person's answers to the attitude questions overlapped 80% (in close conditions) or 20% (in distant conditions) with theirs. Finally, participants rated the novelty of the last iteration. An Other's Status \times Closeness ANOVA on novelty yielded the predicted interaction ($F(1, 79) = 6.25, p = .014$); participants found the video clip more novel when the other person had no prior experience ($M = 4.52, SD = 2.09$ vs. $M = 3.19, SD = 2.11$; $t(40) = 2.06, p = .046$) only when they felt close to the other person.

Satiation occurs all too often as consumers usually need to experience stimuli repeatedly by themselves. We propose and find support for a social approach to combat satiation—that is, consumers can regain novelty by re-experiencing with a close other who has a fresh pair of eyes. Among other benefits of a social relationship, such as emotional and financial support, friends can enhance our experiences.

When Moderation Fosters Persuasion: The Persuasive Power of Deviatory Reviews

EXTENDED ABSTRACT

When people seek to persuade others to purchase a product, they often review it extremely favorably. Despite the intuitive appeal of this approach, we find that a moderately positive review can sometimes be more persuasive. In particular, when the perceived default evaluation in a given context is extremely positive, moderately positive reviews that deviate from that default can become more persuasive.

Defaults can be created by factors both endogenous (e.g., pre-selected options; Johnson and Goldstein 2003) and exogenous (descriptive norms; Miller and Prentice 1996) to a review context. These defaults often emerge on review platforms, and frequently they are extremely positive. For example, numerous review portals feature pre-selected 5-star ratings (e.g., Merchantcircle.com 2016).

Similarly, perhaps because consumers frequently give services the highest possible rating on many platforms (e.g., Uber, Lyft, etc.), consumers regularly assume that the default review on those platforms is extremely positive (Kane 2014; Quora 2013). We propose that just as people more frequently deviate from a default when they have carefully deliberated about their choice (Huh, Vosgerau, and Morewedge 2014), they may believe that others are more likely to have deviated from a default when those others have carefully deliberated about *their* choice. Furthermore, because greater deliberation increases perceived accuracy (Barden and Petty 2008), people may infer that a deviatory assessment is more accurate, which may thus increase its persuasiveness. This proposed deviation effect suggests that when the default evaluation is believed to be extremely positive, a moderately positive review might be more persuasive (e.g., increase consumers' desire to purchase the reviewed product) than an extremely positive review. We outline four studies below that test this theorizing.

In Study 1, participants imagined that they viewed a 4-star or 5-star rating of a phone on a review platform on which the majority of reviews had 5 stars. Participants perceived the review to be more accurate when the reviewer gave it 4 stars (i.e., when the review was deviatory; $M = 5.14, SD = 1.19$) versus 5 stars (i.e., when the review was not deviatory; $M = 4.55, SD = 1.33$), $t(199) = 3.34, p < .001$. Participants were also more likely to buy the phone when the reviewer rated it 4 stars ($M = 3.52, SD = 1.84$) rather than 5 stars ($M = 2.91, SD = 1.63$), $t(199) = 2.41, p = .017$. Perceived accuracy mediated participants' purchase decisions (95% CI: .12 to .55).

Study 2 examined whether the deviation effect occurs even when the default is not explicit. After a pretest revealed that the majority of MTurkers perceive that the default ride-sharing review is 5 out of 5 stars, a separate sample of MTurkers imagined that they viewed a 4-star or 5-star ride-sharing review. Participants perceived the 4-star (vs. 5-star) review to be more accurate ($M_{4\text{-Stars}} = 5.09, SD_{4\text{-Stars}} = .96$; $M_{5\text{-Stars}} = 4.63, SD_{5\text{-Stars}} = 1.26$; $t(197) = 2.88, p = .004$), and the 4-star review prompted a greater desire to use the ride-sharing service ($M_{4\text{-Stars}} = 5.16, SD_{4\text{-Stars}} = 1.11$; $M_{5\text{-Stars}} = 4.63, SD_{5\text{-Stars}} = 1.35$; $t(199) = 2.65, p = .009$). As further predicted, perceived accuracy mediated participants' behavioral intentions (95% CI: .11 to .60).

Study 3 tested the robustness of the deviation effect with a different manipulation of deviance—deviation from a pre-selected star rating. Study 3 also tested our theorizing that people not only perceive a moderately positive review to be more accurate when the default is extremely positive, but that they also perceive an extremely positive review to be more accurate when the default is moderately positive. Thus, participants read about a reviewer who rated a restaurant 4 (or 5) stars in a review portal that pre-selects a default rating of 4 (or 5) stars. In other words, participants were assigned to one cell in a 2 (Default: Moderate vs. Extreme) \times 2 (Reviewer Evaluation: Moderate vs. Extreme) design. Separate 2 \times 2 ANOVAs revealed interactions on perceived thoughtfulness, perceived accuracy, and desire to try the restaurant ($F_s(1, 396) = 58.75, p_s < .001$): When the default was 5 stars, participants perceived the 4-star (vs. 5-star) review to be more thoughtful, accurate, and persuasive ($F_s(1, 396) = 31.79, p_s < .001$). In contrast, when the default was 4 stars, participants perceived the 5-star (vs. 4-star) review to be more thoughtful, accurate, and persuasive ($F_s(1, 396) = 21.84, p_s < .001$). Moreover, a serial mediated moderation model (Hayes 2013) revealed that the interaction on behavioral intentions occurred because the deviation boosted perceived thoughtfulness, which in turn boosted perceived accuracy (95% CI: -1.80, -.96). These results are consistent with our

theorizing and inconsistent with a variety of potentially competing accounts, which we discuss.

Study 4 further tested the proposed theorizing: If the deviation effect occurs because deviation signals thoughtfulness, then evidence that a reviewer thought carefully about his/her recommendation should moderate the effect. To test this possibility, we presented participants with an 8-star (or 10-star) restaurant review on a website which had a 10-star evaluative default. Participants either read no further information, or read that the reviewer thought deeply about his rating. Separate 2 (Reviewer Evaluation: Moderate vs. Extreme) \times 2 (Thoughtfulness: High Thought vs. Control) ANOVAs revealed interactions on perceived thoughtfulness, accuracy, and desire to try the restaurant ($F_s(1, 396) > 22.53, p_s < .001$): In the control condition, participants perceived the 8-star review to be more thoughtful, accurate, and persuasive ($F_s(1, 396) = 13.37, p_s < .001$). In contrast, when participants learned that the reviewer devoted substantial thought to his review, participants perceived the review equivalently regardless of its deviance ($F_s(1, 396) > .40, p_s > .528$).

Taken together, these results reveal that the perceived default in a review context can play an important role in shaping people's willingness to be influenced by an extreme or moderate review.

Social Influence, Habits, and Disrupted Performance Environments

EXTENDED ABSTRACT

Sedentary lifestyle and the lack of physical activity are leading causes of preventable death globally (Lopez et al. 2001), triggering chronic diseases like obesity, type-2 diabetics and other cardiovascular conditions whose prevalence has become a major health policy challenge. For many people, failure to exercise is unlikely to be due to ignorance or lack of interest. While individuals are frequently motivated to start exercising in order to reduce and reverse different health risks, they often encounter difficulties in forming a sustained behavioral change.

In this research we analyze a unique, granular dataset of individual-level exercise data (primarily running) from millions of users worldwide to (a) measure the regularity of exercise behavior, (b) identify factors that predict a behavior continuing, (c) compare social influence in running for individuals with and without running habits, and (d) estimate the consequences of common disruptions to circumstances cues for habitual behaviors. This work thus uses a large, networked data set and modern causal inference techniques to address central questions in the psychology of habits with applications to interventions—especially social interventions—to influence exercise behavior and adoption of consumer exercise products.

We develop measures of regularity and predictability of behaviors suited to measuring habits in such large observational data sets. Much of the prior work on habits has relied on self-reported frequency and perceived automaticity (Hagger et al. 2015). Prior work on human mobility has measured predictability using discrete time, matrix factorization methods, and entropy of discrete variables (Eagle and Pentland 2009) that are not suited to studying the onset of particular behaviors marked by a time and other, often continuous-valued, contextual variables (e.g., location). For each individual, we fit a Gaussian mixture to the variables describing their behaviors and use the differential entropy of the resulting density as a measure of regularity and predictability of the context for exercise behaviors. This habit measure predicts future exercise behaviors better than mere frequency of prior exercise behaviors: more habitual users are more likely to persist in exercising (and tracking this) in the future.

We additionally compare this measure with other measures from prior work.

We study how individuals with different levels of measured exercise habits respond to disruptions to the performance environment for their behavior. In particular, we use the exogenous shock to the setting for running caused by the end of daylight savings time (DST), the timing and implementation of which varies within our data set (i.e., some countries and states in the U.S. do not observe DST, some locations observe it at different times). Among people who run in the same range of times in the afternoon, people with higher exercise habit measures are more affected by this disruption: they show a larger decrease in average running frequency.

We then estimate peer effects in exercise behavior. We use multiple specifications to increase the credibility of this estimation, including using individual fixed effect to control for time-invariant confounding, using random shocks to peers' running behavior caused by weather (for peers in different cities), and using variations in settings on users' mobile phones that determine their exposure to notifications about peer running. Consistent with prior work (Aral and Nicolaides 2017), we find substantial peer effects in this behavior: peers running causes increases in ego running on that and the subsequent day.

A novel substantive contribution of this work is to examine how peer effects are moderated by habits and the disruption of the performance context for the behavior. Based on prior work, we may expect sudden changes to the everyday environment that disrupt habits to sometimes lead to behaviors that more closely match people's goals. For example, Larcom, Rauch, and Willems (2015) find that a public transport strike caused many commuters to find new routes that were preferable to their old routes. Wood, Tam and Witt (2005) present evidence that disruptions to the performance context for a behavior can cause that behavior to become more consistent with a person's goals. Prior work (e.g., Verplanken and Roy 2015) has found increased effectiveness of interventions following such disruption (e.g., moving). If peer effects occur in part through changes in goals or other attitudes, we should expect that periods of disruption may increase susceptibility to this social influence. Thus, we combine the analyses described above to estimate differences in peer effects on egos with and without strong exercise habits and before and after disruptions. We find, in this work in progress, that these peer effects are moderated by these habit measures and exogenous disruptions.

In summary, this work contributes to understanding habits and when social influence is likely to occur. This has implications for psychological theory and for the design and targeting of interventions (e.g., when to present social information so as to change behavior).

REFERENCES

- Aral, Sinan and Christos Nicolaides (forthcoming), "Is Exercise Contagious? Peer Effects in a Global Health Behavior," *Nature Communications*.
- Barden, Jamie and Richard E. Petty (2008), "The Mere Perception of Elaboration Creates Attitude Certainty: Exploring the Thoughtfulness Heuristic," *Journal of Personality and Social Psychology*, 95 (3), 489–509.
- Coombs, Clyde H. and George S. Avrunin (1977), "Single-peaked Functions and the Theory of Preference," *Psychological Review*, 84 (2), 216–30.
- Eagle, Nathan and Alex Sandy Pentland (2009), "Eigenbehaviors: Identifying Structure in Routine," *Behavioral Ecology and Sociobiology*, 63 (7), 1057–66.

- Hagger, Martin S., Amanda L. Rebar, Barbara Mullan, Ottmar V. Lipp, and Nikos L. D. Chatzisarantis (2015), "The Subjective Experience of Habit Captured by Self-Report Indexes May Lead to Inaccuracies in the Measurement of Habitual Action," *Health Psychology Review*, 9 (3), 296-302.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis*, New York, NY: Guilford Press.
- Higgins, E. Tory, Ronald S. Friedman, Robert E. Harlow, Lorraine Chen Idson, Ozlem N. Ayduk, and Amy Taylor (2001), "Achievement Orientations From Subjective Histories of Success: Promotion Pride Versus Prevention Pride," *European Journal of Social Psychology*, 31 (1), 3-23.
- Higgins, E. Tory, Christopher J. R. Roney, Ellen Crowe, and Charles Hymes (1994), "Ideal Versus Ought Predilections for Approach and Avoidance Distinct Self-Regulatory Systems," *Journal of Personality and Social Psychology*, 66 (2), 276-86.
- Huh, Young Eun, Joachim Vosgerau, and Carey K. Morewedge (2014), "Social Defaults: Observed Choices Become Choice Defaults," *Journal of Consumer Research*, 41 (3), 746-60.
- Johnson, Eric J. and Daniel Goldstein (2003), "Do Defaults Save Lives?," *Science*, 302 (5649), 1338-9.
- Kane, Kat (2015), "The Big Hidden Problem With Uber? Insincere 5-Star Ratings," <https://www.wired.com/2015/03/bogus-uber-reviews/>.
- Kramer, Adam D. I., Jamie E. Guillory, and Jeffrey T. Hancock (2014), "Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks," *Proceedings of the National Academy of Sciences*, 111 (24), 8788-90.
- Larcom, Shaun, Ferdinand Rauch, and Tim Willems (2015), "The Benefits of Forced Experimentation: Striking Evidence From the London Underground Network," CEPR Discussion Paper No. DP10854, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2666998.
- Latané, Bibb, Kipling Williams, and Stephen Harkins (1979), "Many Hands Make Light the Work: The Causes and Consequences of Social Loafing," *Journal of Personality and Social Psychology*, 37 (6), 822-32.
- Lopez, Alan D., Colin D. Mathers, Majid Ezzati, Dean T. Jamison, and Christopher J. L. Murray (2006), "Global and Regional Burden of Disease and Risk Factors, 2001: Systematic Analysis of Population Health Data," *The Lancet*, 367 (9524), 1747-57.
- Merchantcircle.com (2016), "M D Script," <http://www.merchantcircle.com/m-d-script-fall-city-wa>.
- Miller, Dale T. and Deborah A. Prentice (1996), "The Construction of Social Norms and Standards," in *Social Psychology: Handbook of Basic Principles*, eds. E. Tory Higgins and Arie W. Kruglanski, New York, NY: Guilford, 799-829.
- Pew Research Center (2016), "News Use Across Social Media Platforms 2016," <http://www.journalism.org/2016/05/26/news-use-across-social-media-platforms-2016/>.
- Platek, Steven M., Samuel R. Critton, Thomas E. Myers, and Gordon G. Gallup (2003), "Contagious Yawning: The Role of Self-Awareness and Mental State Attribution," *Cognitive Brain Research*, 17 (2), 223-7.
- Quora (2013), "Lyft (Company): How Critical Are You as a Passenger When Rating a Ridesharing Driver?," <https://www.quora.com/Lyft-company-How-critical-are-you-as-a-passenger-when-rating-a-ridesharing-driver>
- Roberts, Gilbert (1996), "Why Individual Vigilance Declines as Group Size Increases," *Animal Behaviour*, 51 (5), 1077-86.
- van Bommel, Marco, Jan-Willem van Prooijen, Henk Elffers, and Paul A. M. Van Lange (2012), "Be Aware to Care: Public Self-Awareness Leads to a Reversal of the Bystander Effect," *Journal of Experimental Social Psychology*, 48 (4), 926-30.
- Verplanken, Bas and Deborah Roy (2015), "Empowering Interventions to Promote Sustainable Lifestyles: Testing the Habit Discontinuity Hypothesis in a Field Experiment," *Journal of Environmental Psychology*, 166 (2), 303-19.
- Wesselmann, Eric D., Danielle Bagg, and Kipling D. Williams (2009), "'I Feel Your Pain': The Effects of Observing Ostracism on the Ostracism Detection System," *Journal of Experimental Social Psychology*, 45 (6), 1308-11.
- Wood, Wendy, Leona Tam, and Melissa Guerrero Witt (2005), "Changing Circumstances, Disrupting Habits," *Journal of Personality and Social Psychology*, 88 (6), 918-33.

Temporal Dynamics of Consumption Experiences

Chairs: Sarah Wei, University of Alberta, Canada
Masha Ksendzova, Boston University, USA

Paper #1: The Primacy of Experience: Comparing the Contributions of Anticipation, Experience, and Memory to Total Utility

Masha Ksendzova, Boston University, USA
Michael I. Norton, Harvard University, USA
Carey K. Morewedge, Boston University, USA

Paper #2: Consuming Regardless of Quality: Consumers Overestimate the Impact of Quality Differences on the Amount Consumed

Tom Meyvis, New York University, USA
Heeyoung Yoon, New York University, USA

Paper #3: The Imminent-End Effect: How the Approaching End of an Experience Affects Enjoyment

Sarah Wei, University of Alberta, Canada
Gerald Häubl, University of Alberta, Canada

Paper #4: The Role of Holistic Processing on Enjoyment During Simultaneous Consumption

Robert Smith, Ohio State University, USA
Joseph P. Redden, University of Minnesota, USA

SESSION OVERVIEW

"If you come at four in the afternoon, I'll begin to be happy by three." - Antoine de Saint-Exupery, The Little Prince.

Hedonic experiences are multi-faceted and often consist of a consumption timeline, rather than isolated events. This timeline entails anticipation, the experience itself, and the memories left behind. Consumers also make forecasts about their experiences and relevant features, such as mindfulness and consumption norms. Even within one phase of a hedonic experience, consumers encounter meaningful changes. Further, hedonic experiences do not always occur independently, and the nature of their overlap can affect the overall pleasure consumers derive from the combined engagements.

Thus, timelines of a consumption experience help shape its hedonic value. In this session, we ask, how do consumers evaluate their experiences at different stages on the consumption timeline, and what role do these evaluations play in the total hedonic value of their consumption experiences? Four papers examine how consumers ascribe value to features of the timeline, as well as the psychological processes by which such evaluations affect their hedonic experiences.

The first two papers speak to how consumers value different features of consumption experiences before, during, and after consumption. First, Ksendzova, Norton, and Morewedge examine how consumers view the relative contributions of anticipation, experience itself, and memory to total utility. They uncover a perceived primacy of experience – a belief that experience, regardless of its duration, contributes most to total utility.

Second, when anticipating an experience, consumers forecast their behavior. However, they cannot always properly anticipate key features of an experience. Meyvis and Yoon demonstrate that consumers overestimate the extent to which product quality affects their consumption amount. Specifically, consumers overestimate their mindfulness and the influence of consumption norms, while underestimating the role of visceral factors specific to the experience.

The following two papers zoom into the timeline within an experience itself. Wei and Häubl examine how knowing a pleasurable experience is approaching its end influences the enjoyment of it. Specifically, when consumers perceive low control over the hedonic quality, the passive contemplation of the imminent end reduces the enjoyment of it; however, when consumers perceive high control, it enhances the hedonic enjoyment through motivating consumers to make better usage of their time.

Further, timelines of hedonic consumption may overlap. Focusing on simultaneous consumption of multiple experiences, Smith and Redden demonstrate that holistic processing (vs. analytical processing) enhances the enjoyment of a combined experience, by increasing the perceived complementary and coherence of it.

Taken together, these papers contribute to a better understanding of how consumers evaluate a consumption experience and associated features while moving along its timeline. We approach this topic by discussing different phases of a consumption experience (Ksendzova et al.; Meyvis and Yoon), the time progression within an experience itself (Wei and Häubl), and combined timelines of multiple experiences (Smith and Redden). This session provides insights into the temporal dynamics of consumption experiences and guidance for marketers on optimizing consumers' hedonic consumption.

The Primacy of Experience: Comparing the Contributions of Anticipation, Experience, and Memory to Total Utility

EXTENDED ABSTRACT

In his conceptualization of the total utility provided by an event - the total pleasure or pain it afforded across its anticipation, experience, and recollection, Bentham (1789) envisioned a duration-weighted approach. In his view, the assessment of total utility should account for the intensity of pleasure or pain an event incurred at each moment in time by the amount of time pleasure or pain was incurred, irrespective of phase. Current proposals echo this suggestion, assuming that duration weighting is the optimal way to aggregate the total utility of events – the utility provided by their anticipation, experience, and recollection (Kahneman 1999). These models assume that people perceive utility derived from phases of experiences to carry the same weight, an assumption we test in our studies: do people believe that anticipation, experience, and memory contribute equally to total utility, or are some kinds of utility more impactful than other kinds?

In Study 1a ($N = 99$), we prompted participants to generate examples of three pleasant and three unpleasant experiences lasting five, twenty, or sixty minutes. For each experience, participants then rated the relative contribution of anticipation, experience itself, and recollection (between 0% and 100%) to the total utility provided by that event. A duration-weighting approach would suggest that the utility of experience should contribute less for shorter than longer events. Regardless of event duration, however, participants reported that experience contributes more to total dis(utility) than do anticipation and memory. Additionally, in Study 1b ($N = 100$), we examined events lasting seconds, minutes, hours, and days, and again found participants rated utility from experience to be the primary contributor, regardless of event duration.

Consuming Regardless of Quality: Consumers Overestimate the Impact of Quality Differences on the Amount Consumed

EXTENDED ABSTRACT

Consumers like quality. They often exert substantial effort to identify the highest quality product, and may pay a hefty premium to acquire it. This behavior is often justified as higher quality products result in more enjoyable experiences and increased satisfaction. Naturally, one would assume that this more *enjoyable* consumption would translate into an increased *amount* of consumption. The current research measures people's intuitions about this relationship between quality and consumption amount, and tests how these intuitions compare to the actual impact of quality differences on consumption.

We propose that people tend to overestimate the impact of quality differences on the amount that they consume. Specifically, we suggest that consumers overestimate the mindfulness of their repeated consumption decisions, which in turn leads them to underestimate the influence of visceral factors such as hunger and boredom (Loewenstein, Prelec, and Shatto 1998) and overestimate the influence of consumption norms (e.g., one should [not] consume high [low] quality products) (Kivetz and Tyler 2006). We tested this conjecture in four studies.

In study 1, participants ($N=156$) were given two cups with 31 jellybeans each. They tasted one jellybean of each of the two flavors, after which they indicated how much they liked each flavor and selected the flavor they preferred. Participants then predicted how many of the remaining jellybeans of each flavor they would eat during the rest of the session. They then proceeded with other, unrelated studies. At the end of the session, we measured the number of jellybeans each participant had consumed. As hypothesized, participants predicted that the quality difference would have a greater influence on their consumption ($M_{\text{Preferred}} = 13.4$, $M_{\text{Not Preferred}} = 8.1$) than it actually had ($M_{\text{Preferred}} = 14.0$, $M_{\text{Not Preferred}} = 10.3$; $F_{\text{Interaction}}(1,155) = 5.36$, $p < .05$). Although this suggests that actual consumption was less mindful and discerning than participants anticipated, it is also possible that participants underestimated their desire to seek variety. To rule out this possibility, the next studies varied quality between subjects, which meant that participants only consumed a single jellybean flavor.

In study 2, participants ($N=59$) again tasted one jellybean of two flavors and rated each flavor. They then indicated which flavor they preferred and predicted how many of each flavor they would eat if they were given a cup of 50 jellybeans. After that, they randomly received one of the two flavors to consume during the remaining time in the session. At the end of the session, we measured the number of jellybeans each participant had actually consumed. Participants again overestimated the impact of quality on their consumption; they predicted they would eat significantly more high-quality than low-quality jellybeans ($M_{\text{Preferred}} = 18.9$, $M_{\text{Not Preferred}} = 11.5$), but ended up eating slightly more of the low-quality jellybeans ($M_{\text{Preferred}} = 19.7$, $M_{\text{Not Preferred}} = 22.9$; $F_{\text{Interaction}}(1,57) = 10.75$, $p < .01$).

In study 3 ($N=110$), we extended our investigation to the consumption of cartoons that differed in entertainment value. Participants first saw five cartoons that were randomly drawn from one of two sets of 80 cartoons each. One set of cartoons were pretested to be high-quality (funny), while the other cartoons were pretested to be low-quality (not so funny). To view each cartoon, participants had to enter a short captcha, thus imposing a small cost. Participants next predicted how many of those cartoons they would select to watch (by entering the corresponding captcha) during the next 5 minutes. We

In addition to the perceived contributions of each phase, we examined people's choice between phases of an event in Study 2 ($N=200$). To do so, we first asked participants to generate examples of positive or negative events lasting seconds, minutes, hours, and days. For all listed events, participants then engaged in a thought experiment. Some imagined, for positive events, that they were able to feel pleasure during only one phase of their choosing. Others imagined, for negative events, that they were able to block negative feelings during one phase of their choosing. People more often chose to preserve positive experience and block negative experience, compared to anticipation and memory. Contrary to the duration-weighting approach, the choice of experience did not decrease among shorter events.

Then, in Study 3, we investigated whether people believe that a unit of experience, compared to equal units of anticipation or memory, has greater impact on total utility. We asked participants ($N=100$) to imagine going on an enjoyable date – a date which they hypothetically anticipate, experience, and recall each for three hours. Thus, duration of each phase was held constant. Next, participants imagined that one minute was randomly selected from the three hours of each phase and rated the intensity of that minute. For each phase (in random order), they also rated the intensity of five, fifteen, thirty, and sixty minutes. Although people perceived longer time segments as more desirable than shorter time segments, they rated segments of experience as more desirable than equal segments of anticipation and memory.

Considering that people may think of experience-centric events when judging the utility of phases, we also employed more conservative tests. In Study 4a, we asked one group of participants to name events for which a) anticipation, b) the experience itself, or c) its recollection defines the nature of that event. This procedure yielded a list of 270 events that varied on valence (pleasant and unpleasant) and their defining feature (anticipation, experience, or recollection). We then recruited an independent sample ($N=135$) and randomly assigned each person to evaluate a unique pair of pleasant and unpleasant events with emphasis on one of the three phases. For each event, participants rated the contribution of each phase as a percentage of an event's total utility. They perceived experience to contribute more to total utility than anticipation or memory for most events, and to be at least as important as anticipation and memory for events defined by anticipatory or memory-based components (e.g., giving a speech or a honeymoon). We conceptually replicated these findings in Study 4b ($N=100$), even though participants in this study rated events they themselves generated.

Next, we again examined weighting by choice. In Study 5 ($N=100$), participants generated three pleasant and three unpleasant events defined by anticipation, experience, or recollection. For each example, participants then engaged in a thought experiment. Some imagined (for positive events) that they were able to feel pleasure during only one phase of their choosing. Others imagined (for negative events) that they were able to block negative feelings during one phase of their choosing. For all positive and negative events, participants were in no cases more likely to preserve or block a phase other than experience. Participants chose to preserve positive experience and block negative experience for events defined by their experiential components. More surprisingly, they were also as likely to choose experience as they were to choose anticipation for anticipation-defined events or memory for memory-defined events.

Together, our findings shed light on a lay belief that experienced utility is the primary contributor to total utility, which contradicts the duration-weighted assumptions of class proposals of total utility.

then observed how many cartoons they actually watched from the remaining set of 80 low (or high) quality cartoons. The results replicated the jellybean findings. While participants expected to watch about 11 more cartoons when they were given a high-quality (vs. low-quality) set ($M_{\text{High-quality}} = 31.7$, $M_{\text{Low-quality}} = 20.8$), the number of cartoons they actually watched did not differ between two conditions ($M_{\text{High-quality}} = 27.3$, $M_{\text{Low-quality}} = 28.3$; $F_{\text{Interaction}}(1,109) = 7.14$, $p < .01$).

We have proposed that consumers overestimate the mindfulness of their consumption decisions and underestimate the impact of their visceral states (e.g., hunger and boredom) which are less discerning to the quality of the object being consumed. However, it is also possible that the overestimation of the impact of quality is instead being driven by participants' inadequate accounting for the effects of satiation. While the difference between the two jellybean flavors may be quite apparent initially, this difference may reduce over time as participants get satiated to the flavor they're consuming (DePaoli and Khan 2014). If participants do not take this into account, they may overestimate the impact of quality, especially with prolonged consumption. To test between these two accounts, study 4 measured how predictions and behaviors diverged over time.

In study 4 ($N=141$), rather than asking participants to make a single prediction, we now asked participants to predict about how much they thought they would eat in the first 5 minutes, 10 minutes, 15 minutes, and 20 minutes of the session. Likewise, the actual consumption was also measured four times. Consistent with underestimating the (non-discerning) impact of hunger, but inconsistent with underestimation of satiation, the overestimation of the impact of quality was most pronounced for the *initial* consumption phase. During the first five minutes of consumption, quality had less impact on behavior than participants predicted ($M_{\text{Preferred}} = 5.2$, $M_{\text{Not Preferred}} = 3.5$ vs. behavior: $M_{\text{Preferred}} = 3.7$, $M_{\text{Not Preferred}} = 3.1$; $F_{\text{interaction}}(1,136) = 3.73$, $p = .056$) but this was not the case during the last 15 minutes of consumption (prediction: $M_{\text{Preferred}} = 8.5$, $M_{\text{Not Preferred}} = 6.6$ vs. behavior: $M_{\text{Preferred}} = 5.6$, $M_{\text{Not Preferred}} = 3.8$; $F_{\text{interaction}} < 1$).

Together, these studies indicate that consumers tend to overestimate the impact of quality differences on their consumption amount, an effect that seems to be driven by consumers' underestimation of the impact of (non-discerning) visceral motivations.

The Imminent-End Effect: How the Approaching End of an Experience Affects Enjoyment

EXTENDED ABSTRACT

How does knowing a pleasurable experience is coming to an end influence its enjoyment? The answer was discussed with consumption experiences that entail repeated episodes of a homogenous nature: consumers enjoy a consumption episode more when they know that it is the last one (O'Brien and Ellsworth 2012; Tsai and Zhao 2016). However, the answer is not clear when an experience is non-repetitive and heterogeneous in nature (e.g., vacations, movies, musical performances, and games). Common intuition suggests that the imminent end of a pleasurable experience can have a detrimental effect on enjoyment, particularly. For example, consumers often dread the end of a vacation and feel sad on the last day. The current research introduces a theoretical framework for how and why the imminent end of a heterogeneous experience impacts consumers' enjoyment of it.

We propose that a key factor that governs this "imminent-end" effect is the extent to which consumers feel that they can control the hedonic quality of a consumption experience. This subjective judgment of perceived control is influenced by the nature of the experience and by situational factors. We hypothesize that when perceived

control over the hedonic quality of an experience is low, consumers' enjoyment of it depends on the allocation of undivided attention to the specifics of the experience. This is because, when consumers know that a pleasurable experience is approaching its end, the frequent contemplation of the imminent end interferes with them devoting their undivided attention to the experience, thus reducing their enjoyment. By contrast, when perceived control is high, the imminent end increases the perceived scarcity of the experience, thus motivating consumers to make better use of their time, ultimately enhancing their enjoyment of it (Kurtz 2008). Four experiments provide evidence for these predictions.

Experiment 1 demonstrates the hypothesized interaction between imminent end (yes vs. no) and perceived control (high vs. low) in a 2 x 2 between-subjects design. The imminent end was manipulated through progress bars of different lengths: for the same experience, participants saw a progress bar either progressed to its end (imminent end condition) or progressed to its midpoint (no imminent end condition). The perceived control was manipulated through experiences types: in the low perceived control condition, participants watched an enjoyable video; and in the high perceived control condition, participant played a Tetris game that was pretested to be equally enjoyable. We sampled participants' enjoyment every 30 seconds on an 11-point scale (0-not at all; 10-very much), the *last* measure of which served as the key dependent variable. Results show that the imminent end reduced enjoyment when perceived control was low ($M_{\text{End}}=7.61$ vs. $M_{\text{NoEnd}}=8.14$; $t(359)=-2.13$, $p=.035$), and increased enjoyment when perceived control was high ($M_{\text{End}}=7.51$ vs. $M_{\text{NoEnd}}=6.88$; $t(359)=-2.16$, $p=.032$).

Experiment 2a examines the psychological process underlying the negative effect of the imminent end. To do so, we introduced experience discretization as a moderator. As we predict that an imminent end reduces consumption enjoyment by interfering with consumers' undivided attention, partitioning an experience into discrete segments should facilitate consumers' concentration on the ongoing segment, instead of the distracting information of the imminent end. Experiment 2 employed a 2 (imminent end: yes vs. no) by 2 (experience framing: discretization vs. continuous) between-subjects design, in which all the participants viewed a funny video. In the discretization condition, we partitioned the same video into 30-second segments and told participants to expect to view 5 (imminent end) or 10 (no imminent end) separate videos. When the video-watching experience was framed continuously as a whole, replicating Experiment 1, the imminent end reduced the enjoyment of this video-watching experience ($M_{\text{End}}=7.15$ vs. $M_{\text{NoEnd}}=7.93$; $t(302)=-2.05$, $p=.041$). When the same experience was framed as discrete segments, the imminent end no longer influenced enjoyment of the video-watching experience ($M_{\text{End}}=7.98$ vs. $M_{\text{NoEnd}}=7.37$; $t(302)=1.53$, $p=.13$).

Moreover, a bootstrap analysis ($N=5,000$) found that discretization interacted with imminent end to influence the level of distraction participants had in the video-watching experience ($b=1.39$, $p=.03$), which reduced enjoyment of the video ($b=-.13$, $p=.02$). We also found evidence of distraction in a separate follow-up experiment (2b) with video-watching, such that participants needed to click a button to check how much time left. Participants in the imminent end condition checked the progress bar more often than those in the no imminent end condition ($M_{\text{End}}=7.17$ vs. $M_{\text{NoEnd}}=7.78$; $t(221)=-2.01$, $p=.045$), and enjoyed the experience less ($M_{\text{End}}=5.21$ vs. $M_{\text{NoEnd}}=3.61$; $t(221)=-2.16$, $p=.032$).

Experiment 3 extends this imminent end effect into a new domain—food consumption—and shows how an imminent end can enhance enjoyment, using a 2 (imminent end: yes vs. no) by 2 (se-

lection: yes vs. no) between-subjects design. Participants were asked to sample 5 (imminent end) or 10 (no imminent end) different snacks from a list of 15. In the selection condition, participants chose their preferred snacks and the order to sample them, whereas in the no selection condition, participants sampled a randomly selected set of snacks. The key dependent variable was the enjoyment of the 5th snack. Consistent with results in Experiment 2, when the snack-sampling experience was passive and consisted of discrete segments, the imminent end had no influence on its enjoyment ($M_{\text{End}}=7.41$ vs. $M_{\text{No-End}}=8.18$; $t(158)=-1.68$, $p=.095$). When participants could choose what to consume, the imminent end motivated participants to save the best for the last, thus enhancing the enjoyment of the snack-sampling experience ($M_{\text{End}}=8.88$ vs. $M_{\text{NoEnd}}=8.12$; $t(158)=2.16$, $p=.033$).

To summarize, this research sheds light on how an imminent end influences the hedonic enjoyment of a consumption experience. Evidence from 4 experiments shows that the imminent end reduces enjoyment when perceived control over the hedonic quality of the experience is low, and that the imminent end can increase enjoyment when perceived control is high. These findings add to our understanding of how imminent end shape consumption experiences and can guide managers in creating more enjoyable experiences for consumers.

The Role of Holistic Processing on Enjoyment During Simultaneous Consumption

EXTENDED ABSTRACT

People frequently consume multiple things simultaneously, from eating chips while watching television to listening to classical music while strolling through an art museum. This multi-tasking or multi-consuming is increasing (Nielsen 2010), to the point where 77% of the time spent watching television now also involves the use of another screen (Google 2012). Some samples report 46% of their meals are consumed while watching television (Gore et al. 2003), and television watching while snacking is even more prevalent (French, Story, & Jeffery 2001). Although joint consumption experiences are quite common, little research has explored the calculus for how two separate experiences combine to create overall enjoyment. We draw on research on holistic versus analytic processing styles to propose that enjoyment depends on whether the combined experience is processed in a holistic fashion or an analytic fashion.

Holistic processing involves focusing on the relationship between an object and its field or between components of an object. Analytic processing involves a detachment of an object from its context and the construal of components as independent entities (Nisbett et al. 2001). Interestingly, past research generates conflicting predictions for whether people would enjoy a simultaneous consumption experience more when processing holistically or analytically. On one hand, research on mental accounting suggests that two distinct positive experiences have more hedonic impact than a single one combining them (Thaler 1985; Thaler 1999). This would seemingly predict that expected and realized enjoyment would increase with analytic processing that highlights each contribution to enjoyment. On the other hand, holistic thinkers focus on relationships between objects and are more sensitive to interdependence (Chiu 1972; Masuda and Nisbett 2001), which, for example, results in increased perceptions of fit for brand extensions, especially those with low fit (Monga and John 2007). If these same mental processes increase the perceived complementarity of the multiple consumption objects, or the coherence of the whole experience, holistic thinking may be expected to enhance enjoyment.

We explored these questions in two studies that involved simultaneous consumption of multiple stimuli. We found that people enjoyed and desired simultaneous consumption more when they viewed the experience holistically as an integrated experience (versus analytically processed as multiple distinct components). This holistic approach, and the resulting increased enjoyment, can be encouraged through processing style primes or individual trait differences. We develop process evidence showing that these effects for enjoyment are driven by joint categorization into a single integrated experience, which then makes the components seem more related and hence more enjoyable together.

In study 1, 201 MTurk workers began with a Navon task that primes holistic versus analytic processing (Navon 1977). On the computer, participants were presented with a series of “global” letters made up of smaller “local” letters (e.g., a ‘V’ shape made out of ‘D’s). Over 44 trials, participants were asked to report as quickly as possible whether the stimulus contained either of two focal letters. These target letters were always the global letter (e.g. ‘V’) for participants in the holistic processing condition, and always the local letter (e.g., ‘D’) for participants in the analytic processing condition. Participants then spent two minutes simultaneously watching a montage of Monet paintings and listening to classical music. As expected, participants who were primed to process the combined experience holistically enjoyed it significantly more ($M=75.3$) than participants who were primed to process it analytically ($M=61.72$, $t(96)=3.03$, $p=.003$). They also rated the experience as more of a single coherent experience ($p=.024$), and reported focusing marginally more on the overall experience versus individual parts ($p=.097$). These variables both significantly mediated the increased enjoyment, whether analyzed together, independently, or serially.

In study 2, 179 undergraduate participants watched a video of surfing footage and listened to upbeat instrumental rock music for two minutes. They then rated their enjoyment, several process measures, and then completed the “locus of attention” subscale of the Analysis-Holism Scale (AHS; Choi, Koo, and Choi 2003), which measures tendencies toward analytic versus holistic thinking. It includes items such as “it is more important to pay attention to the whole than its parts” (1 = strongly disagree, 7 = strongly agree). The tendency to focus on stimuli in a holistic way, as indicated by higher scores on the AHS, was associated with more enjoyment of the combined experience ($r=.24$, $p=.001$), more construal of the combined experience as a single coherent experience ($r=.34$, $p<.001$), and more focus on the overall experience versus the individual parts ($r=.34$, $p<.001$). This pattern conceptually replicated the results of study 1. Additional measures revealed that higher scores on the AHS were also associated with an increased perception of complementarity between the two stimuli (measured by three items: complementarity, whether the stimuli made each other better, and whether they belong together; $\alpha=.92$; $r=.33$, $p<.001$), and the perception that attention was paid to both stimuli simultaneously as measured by summing the amount of attention paid to each stimuli ($r=.17$, $p=.02$). A variety of mediation models suggest that holistic processing enhances enjoyment of combined stimuli by increasing the perceived complementarity of the multiple stimuli and coherence of the combined experience.

Holistic processing involves focusing on the relationship between objects (Nisbett et al. 2001), and we show it enhances enjoyment of combined experiences by increasing the perceived coherence between the multiple stimuli. This finding is consistent with research highlighting the benefits of perceived coherence between consumption objects (Rahinel and Redden 2013). However, it is somewhat surprising that enjoyment of combined experiences is higher when

they are construed as a single coherent experience (versus multiple distinct experiences occurring simultaneously) based on mental accounting research suggesting that pleasant experiences should be mentally segregated (Thaler 1999). From a theoretical standpoint, this research brings holistic processing theories to bear on multi-tasking and consumption enjoyment. It also carries implications for both marketers and consumers seeking to maximize enjoyment. Additional studies will be conducted before the conference to examine both the effect of holistic processing on enjoyment for singular experiences, and the potential moderating role of whether the combined stimuli are seen *a priori* as complementary.

REFERENCES

- Bentham, Jeremy (1789). *An Introduction to the Principles of Morals and Legislations*, Oxford, UK: Blackwell.
- Chiu, Lian-Hwang (1972), "A Cross-Cultural Comparison of Cognitive Styles in Chinese and American Children," *International Journal of Psychology*, 7 (4), 235–42.
- Choi, Incheol, Minkyung Koo, and Jong An Choi (2007), "Individual Differences in Analytic Versus Holistic Thinking," *Personality and Social Psychology Bulletin*, 33 (5), 691–705.
- DePaoli, Alexander, and Uzma Khan (2014), "Favorites Fall Faster: Greater Liking Leads to Greater Satiation," in *NA-Advances in Consumer Research*, Vol. 42, eds. June Cotte and Stacy Wood, Duluth, MN: Association for Consumer Research, Pages: 220–24.
- French, Simone A., Mary Story, and Robert W. Jeffery (2001), "Environmental Influences On Eating and Physical Activity," *Annual Review of Public Health*, 22 (1), 309–35.
- Google (2012), "The New Multi-Screen World Study," <https://www.thinkwithgoogle.com/research-studies/the-new-multi-screen-world-study.html>.
- Gore, Stacy A., Jill A. Foster, Vicki G. DiLillo, Kathy Kirk, and Delia Smith West (2003), "Television Viewing and Snacking," *Eating Behaviors*, 4 (4), 399–405.
- Kahneman, Daniel (1999), "Objective Happiness," In *Well-Being: The Foundations of Hedonic Psychology*, eds. Daniel Kahneman, Edward Diener, and Norbert Schwartz, New York, NY: Russell Sage, 3–26.
- Kivetz, Yifat and Tom R. Tyler (2006), "Tomorrow I'll Be Me: The Effect of Time Perspective on the Activation of Idealistic Versus Pragmatic Selves," *Organizational Behavior and Human Decision Processes*, 102 (2), 193–211.
- Kurtz, Jaime L. (2008), "Looking to the Future to Appreciate the Present the Benefits of Perceived Temporal Scarcity," *Psychological Science*, 19 (12), 1238–241.
- Loewenstein, George, Drazen Prelec, and Catherine Shatto (1998), "Hot/Cold Intrapersonal Empathy Gaps and the Under-Prediction of Curiosity," unpublished manuscript, Carnegie Mellon University, Pittsburgh, PA.
- Masuda, Takahiko, and Richard E. Nisbett (2001), "Attending Holistically Versus Analytically: Comparing the Context Sensitivity of Japanese and Americans," *Journal of Personality and Social Psychology*, 81 (5), 922–34.
- Monga, Alokparna Basu, and Deborah Roedder John (2007), "Cultural Differences in Brand Extension Evaluation: The Influence of Analytic Versus Holistic Thinking," *Journal of Consumer Research*, 33 (4), 529–36.
- Navon, David (1977), "Forest Before Trees: The Precedence of Global Features in Visual Perception," *Cognitive Psychology*, 9 (3), 353–83.
- Nielsen (2010), "Americans Using TV and Internet Together 35% More than A Year Ago," <http://www.nielsen.com/us/en/insights/news/2010/three-screen-report-q409.html>.
- Nisbett, Richard E., Kaiping Peng, Incheol Choi, and Ara Norenzayan (2001), "Culture and Systems of Thought: Holistic Versus Analytic Cognition," *Psychological Review*, 108 (2), 291–310.
- O'Brien, Ed, and Phoebe C. Ellsworth (2012), "Saving the Last for Best: A Positivity Bias for End Experiences," *Psychological Science*, 23 (2), 163–65.
- Rahinel, Ryan, and Joseph P. Redden (2013), "Brands as Product Coordinators: Matching Brands Make Joint Consumption Experiences More Enjoyable," *Journal of Consumer Research*, 39 (6), 1290–299.
- Thaler, Richard (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4 (3) 199–214.
- Thaler, Richard (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 12 (3), 183–206.
- Tsai, Claire I., and Min Zhao (2016), "The Intensification Effect of Quantity Specificity on Consumption Experience over Time," working paper, University of Toronto, Toronto, ON.

Prosociality With Impact: Examining and Overcoming Roadblocks to Effective Altruism

Chairs: Masha Ksendzova, Boston University, USA
Grant E. Donnelly, Harvard University, USA

Paper #1: “My Donation is More Helpful if I Benefit”: Personal Gains Signal Impact of Prosocial Spending

Masha Ksendzova, Boston University, USA
Remi Trudel, Boston University, USA

Paper #2: Narrow Bracketing in Ethical Trade-Offs

Christopher Olivola, Carnegie Mellon University, USA
Silvia Saccardo, Carnegie Mellon University, USA

Paper #3: Overcoming Overhead Aversion with Choice

Elizabeth A. Keenan, Harvard University, USA
Silvia Saccardo, Carnegie Mellon University, USA
Ayelet Gneezy, University of California San Diego, USA

Paper #4: Giving to Receive: Moral Self-Regard and Positive Affect Increase when Giving Time but not Money

Grant E. Donnelly, Harvard University, USA
Oliver Hauser, Harvard University, USA
Francesca Gino, Harvard University, USA

SESSION OVERVIEW

Consumers regularly engage in prosocial actions. For example, 62.8 million Americans volunteered 8 billion hours, and over half the population donated at least \$25 to charity in 2014 (Corporation for Community Service, 2015). One important influence on consumers' decisions to give and continue giving is their perceived social impact. People's motivation to help increases when they feel effective in helping others (e.g., Grant et al. 2007); on the other hand, prosocial efforts decrease when consumers believe their help is not (or will not be) effective (e.g., Gneezy, Keenan and Gneezy 2014). However, relatively little is known about how consumers form judgments about the (in)effectiveness of their helpful behavior. In this symposium, we ask, what are some psychological processes by which people evaluate their helping effectiveness? If such judgments of impact are misguided, how can we overcome them?

The first two papers focus on psychological processes in evaluating helpfulness. Ksendzova and Trudel examine how bundling charitable donations with personal benefits affects consumers' judgments of helpfulness. For instance, charities can reward donors with tangible thank-you gifts. These gifts are costly to the charity, but such benefits serve as tokens of prosocial impact – consumers perceive donations paired with personal gains as more helpful than solitary donations of equal or greater value. In the second paper, Olivola and Saccardo find evidence that consumers evaluate helpful actions in isolation rather than by their cumulative benefits. This narrow bracketing leads consumers to more positively evaluate people who are less impactful in their giving. For instance, people judge benefactors more positively when they first allocate more money to a privileged peer but subsequently donate less money to charity, compared to benefactors who give more to charity by withholding money from the privileged peer.

The last two papers provide strategies for overcoming psychological roadblocks to prosociality. For instance, even though charities' overhead costs are not antithetical to their impact, consumers are generally reluctant to cover overhead. Keenan and colleagues find that giving consumers a choice to support overhead helps mitigate this aversion. The option to earmark a portion of their donation toward overhead costs increases not only the amount given toward overhead, but overall giving, suggesting that consumers may feel

more supportive of funding overhead when it is an active choice. Finally, Donnelly and colleagues demonstrate that giving time, compared to giving money, better fosters a feeling of impact when affirming cues are absent. When consumers give time, vividness of the cause and emotional engagement strengthen and, in turn, so does perceived impact. Giving money does not engage the self, making consumers sensitive to vivid markers of impact (e.g., having contact with beneficiaries); in contrast, givers of time can sustain prosocial motivation without such markers.

Together these papers identify factors that influence perceived impact: some misguide consumers' judgment (i.e., donation-benefit bundling and narrow bracketing), but others overturn concerns of low impact and ultimately increase prosociality (i.e., overhead choice and giving time). The findings have important implications for improving prosocial efficacy, and the session should appeal to scholars interested in decision-making, prosocial behavior, and their overlap.

“My Donation is More Helpful if I Benefit”: Personal Gains Signal Impact of Prosocial Spending

EXTENDED ABSTRACT

People want their altruism to be effective - to maximize the prosocial impact of their actions. In turn, perceived helpfulness serves as an important reinforcer of prosocial behavior (Grant et al. 2007), but impact is often difficult to assess (Caviola, Faulmüller, Everett, Savluescu, and Kahane 2014). Instead, consumers rely on various proxies of impact. For instance, information that cues efficient use of resources, such as charities' overhead expenses, can guide donation decisions (Gneezy, Keenan, and Gneezy 2014). Secondly, psychological rewards, such as expressions of gratitude, can affirm helpfulness and fuel prosocial efforts (Grant and Gino 2010).

However, affirming rewards for benefactors can sometimes entail overhead costs that detract from optimal help to the beneficiaries. In the present research, we focus on two contexts in which prosocial behavior is matched with personal benefits that can decrease its efficacy. The first is a situation in which donors receive gifts for their contributions – gifts that incur costs to the fundraising entity. The second context is the purchase of discretionary cause-marketing (CM) products, in which a portion of the price is allocated to prosocial causes. Consumers classify CM spending as prosocial, but CM options can yield lower net donations to the target charity, compared to direct-giving options (Krishna 2011). In both contexts, consumers acquire a costly reward, be it an unintended gift or an intentional purchase. When prosocial spending is bundled with the acquisition of such goods, how do consumers evaluate their helpfulness?

In Study 1, passers-by on a university campus were invited to donate \$1 to a non-profit organization training guide dogs for the blind. Donors ($N=62$) were assigned to one of two experimental conditions: some received a pen, as a thank-you gift for donating, and others did not. Important to note is that all participants were unaware of gift prior to donating. We found that participants who received a pen reported perceived the same \$1 donation as more helpful, compared to participants who did not receive a pen, even when controlling for their affective state (i.e., feeling happy, moral, proud, and compassionate).

Next, we sought to replicate the effect of gains signaling value in a larger sample and extend it to a cause-marketing context. In Study

2 ($N=166$), all participants imagined contributing to the charity UNICEF in one of three ways: donating \$10 and subsequently receiving a mug from UNICEF (gift condition), purchasing a \$10 mug of which the entire \$10 are then donated (CM condition), or simply donating \$10 (control). Despite these donation amounts and total spending being equal across conditions, participants who imagined acquiring a mug, either as a gift or a purchase, rated their contribution as more helpful than participants in the control condition.

Further, in Study 3 ($N=375$), we investigated whether perceived impact is boosted specifically by donations bundled with gains rather than generally coupled with other expenses. Thus, we assigned participants to evaluate one of five donation forms: donations paired with gains (i.e., purchases of mug or a t-shirt), paired bundled with losses (i.e., parking tickets or library fines), or unassociated with either. Again, we held total donation amounts and total spending constant at \$10. As before, participants perceived donations matched with gains as more helpful to the recipient charity than stand-alone donations of the same value. However, donations matched with losses were similar to direct donations in terms of perceived helpfulness.

Subsequently, the aim of Study 4 ($N=402$) was twofold. One purpose was generalizing the effect to another CM purchase frame, in which a portion of sales (rather than a portion of the price paid by an individual consumer) is donated to the target charity. The second was to examine if people may evaluate smaller donations bundled with personal gains as more helpful than larger donations without an associated gain. Participants imagined donating to UNICEF in one of four ways. Some imagined (a) simply donating \$1 and others considered buying a \$10 mug, from which either (b) 10% of the mug price, (c) 10% of all mug sales, or (d) 5% of all mug sales were donated to UNICEF. In all three CM conditions, the prosocial initiative applied to 1,000 mugs and, thus, participants would have contributed (b) \$1, (c) \$1, or (d) \$0.50, respectively. Compared to participants in the direct \$1 donation condition, those for whom the donation was bundled with gaining a mug rated their donations as more helpful – even participants donating \$0.50. Thus, if donations are matched with personal gains, people may feel more helpful while behaving in an objectively less-helpful fashion.

Further, we asked, do gains serve as value reflectors or value tokens? In other words, does perceived utility for others increase alongside utility for the self, or does the mere presence of a personal gain affirm consumers' sense of impact? In Study 5 ($N=283$), we assigned participants to one of three scenarios with a \$5 donation to a local school: simply donating \$5 (control), donating \$5 and receiving 1 chocolate as a gift (smaller benefit), or donating \$5 and receiving 5 chocolates (larger benefit). Participants judged donations bundled with chocolate as more helpful than stand-alone donations but were insensitive to chocolate quantity. Thus, these results support a value-token account.

In conclusion, these findings suggest that personal gains can falsely signal prosocial impact to benefactors, counter to the goal of effective altruism. Investigation of this phenomenon contributes to the body of research examining the cues people rely on to judge prosocial efficacy, as well as biases in prosocial decision-making. Moreover, an open question remains: despite their suboptimal efficacy in the short-term, may such practices help sustain recurring prosocial spending among consumers who, otherwise, would not give directly? Taken together, this research stream has valuable implications for marketing tactics aimed at prosocial engagement, valuation of prosocially-linked products, and the intersection of the two.

Narrow Bracketing in Ethical Trade-Offs

EXTENDED ABSTRACT

Prior research shows that consumers tend to approach purchasing and consumption decisions in isolation (narrow bracketing) rather than as part of a larger set of choices (broad bracketing) (Read, Loewenstein, & Rabin, 1999). Here, we demonstrate that narrow bracketing also affects ethical tradeoffs. Specifically, we show that consumers evaluate decision makers faced with ethical tradeoffs in terms of their isolated outcomes, rather than their aggregate impact. However, when the same ethical tradeoffs are presented in a broad bracketing frame, these consumers indicate a strong preference for maximizing total welfare, contradicting their earlier evaluations based on narrow bracketing.

In our studies, we compare and contrast the moral evaluations of consumers who make decisions that appear unethical in isolation but maximize total welfare, with those of consumers who make decisions that appear ethical in isolation but ultimately produce lower welfare gains.

In Study 1 ($N = 283$), participants read about an individual (the protagonist) from a relatively privileged community who faces two ethical tradeoffs: first, a constrained allocation decision in a laboratory 'dictator game' (DG) study, in which the protagonist decides how much of a starting bonus (i.e., a windfall gain) to send to an anonymous other person from the same privileged community; second, an unconstrained allocation decision, in which the protagonist decides how to spend the money that was earned in the DG study. We independently varied both the first and second allocation decisions, using a fully-between-subjects design. For the first allocation decision in the DG, we varied whether the protagonist decides to keep the entire bonus, share half of it, or send all of it to the anonymous other person. For the second allocation decision, we varied whether the protagonist spends all his/her DG earnings on him/herself OR donates all his/her DG earnings to charity.

After reading one these (randomly assigned) scenarios, participants were asked to evaluate the protagonist on 16 dimensions (using a -5 to +5 rating scale), such as morality, warmth, cooperativeness, likability, etc. These ratings were highly correlated (Conbrach's $\alpha = .99$) and formed a single factor (99% of eigenvalues), so we averaged them to produce a single measure of 'positivity-negativity'. Later in the study (after completing several unrelated questionnaires), participants were asked how they would choose to allocate a sum of money equal to the DG bonus between (i) an anonymous other person from the same relatively privileged community and (ii) charity.

If participants consider the protagonist's two actions in isolation, we would expect their evaluations to 'penalize' an initial decision to keep money in the DG and 'reward' a later decision to donate the money earned in the DG to charity. As a result, protagonists who shared or gave away their DG bonus, then later donated their remaining earnings to charity, would be perceived as having made two ethical decisions, and thus evaluated very positively, despite giving relatively little to charity. By contrast, protagonists who kept all the DG bonus money, but then donated it all to charity, would be perceived as having made an unethical decision followed by a (separate) ethical decision, and therefore not evaluated as positively. If, instead, participants evaluated the protagonist's actions from a broad bracketing perspective, they would realize that the protagonist who keeps the DG bonus money and donates it all to charity ends up having a larger positive impact on total welfare than one who cooperates in the DG then donates the smaller resulting earnings to charity.

We found that protagonists who gave half or all of their bonus in the DG then donated their (smaller) earnings to charity (ethical +

ethical) were evaluated more positively than those who gave nothing in the DG but then donated more to charity (unethical + ethical) ($M = 3.64$ vs. 0.82 , $t(132) = 7.59$, $p < .001$), indicating that participants evaluated these outcomes from a narrow bracketing perspective. Even protagonists who acted altruistically in the DG but then spent their DG earnings (ethical + neutral) were evaluated more positively ($M = 3.18$) than keep-donate protagonists ($p < .001$). However, when the decision problem was presented as a single, aggregate choice (broad bracketing), these same participants overwhelmingly revealed a strong preference for prioritizing charity over the anonymous recipient: 75% indicated that most of the money should go to charity.

In Study 2 ($N = 254$), we replicated this pattern with a 'trust game' (TG) scenario: protagonists who cooperated in the TG (returning half or all of the tripled sum they were sent) then donated their (smaller) earnings (ethical + ethical) were evaluated more positively than defectors who donated more to charity (unethical + ethical) ($M = 3.72$ vs. 0.13 , $t(130) = 10.38$, $p < .001$). Protagonists who cooperated but spent their TG earnings (ethical + neutral) were also evaluated more positively ($M = 3.32$, $p < .001$). Again, presenting the decision problem as a single, aggregate choice led participants to prefer a very different allocation: 79% indicated that most of the money should go to charity.

In Study 3 ($N = 152$), we show that protagonists who share half the bonus in the DG then spend their remaining earnings (ethical + neutral) are evaluated more positively than those who keep the DG bonus money but then anonymously give it all away (plus their show-up fee) to an individual randomly drawn from the same community as the other DG player (unethical + ethical) ($M = 3.39$ vs. 1.20 , $t(101) = 6.04$, $p < .001$), but no more positively than protagonists who earn money from an unspecified lab-study and anonymously give it all away (neutral + ethical) ($M = 3.39$ vs. 3.15 , $t(101) < .6$).

In sum, we find that consumers tend to evaluate ethical tradeoffs using a narrow bracketing frame (by tallying the number of ethical vs. unethical outcomes), which leads them to penalize welfare improving actions that consist of smaller decisions that appear unethical in isolation. When consumers are presented with a broad bracketing version of these same ethical tradeoffs, however, they indicate a strong preference for the welfare maximizing option.

Overcoming Overhead Aversion with Choice

EXTENDED ABSTRACT

Individuals are averse to overhead such that donations decrease as overhead increases, though only when donors' personal contributions are used to cover overhead (Gneezy, Keenan, and Gneezy, 2014). Gneezy et al. (2014) suggest donors are motivated to give based on the impact they feel when they know they are helping the cause directly. As a result, informing donors that an initial large donation has been used to cover overhead costs, making their potential donation "overhead-free", significantly increases giving compared to traditional fundraising techniques. While effective, the "overhead-free" approach simply bypasses individuals' reluctance to donate due to overhead-related concerns rather than targeting the aversion itself.

The current research aims to explore ways to overcome overhead aversion while simultaneously conveying the message that allocating money to overhead is important. Making donations overhead-free attracts a substantially higher fraction of donors compared to a standard solicitation as well as other traditional fundraising techniques (2014). This suggests that in addition to donors that choose to donate despite overhead, there are donors that would donate in the absence of overhead or would donate if they had the option to

direct their entire donation to cause specific programming rather than overhead. In this project, we test whether offering donors the choice to support overhead is an effective tool for overcoming donors' aversion to overhead and ultimately increasing donations.

We posit that offering donors the choice of whether and how to allocate a donation to overhead would be successful for three reasons. First, offering donors the choice to allocate money to overhead allows the option of making the donation overhead-free, thereby attracting donors who are particularly averse to overhead expenses. Second, offering choice will likely capture a subset of individuals who are conscious about the importance of overhead, but have preferences as to the relative magnitude of this type of expenditure. These donors may opt to allocate at least a portion of their donation to overhead, making this strategy overall more successful than the less sustainable strategy of making the donation overhead-free. Third, similar to other consumer contexts where choice has been observed to increase intrinsic motivation, perceived control, and satisfaction (Deci, 1975; Deci and Ryan, 1985), giving donors agency could generally increase donations (see Eckel, Herberich and Meer, 2016).

In Experiment 1 we investigated individuals' beliefs regarding the likelihood that the average donor would donate and how impactful donors would feel if they could choose whether and how to allocate a donation to overhead. In an incentive compatible, within-subjects design participants ($N=56$) read three scenarios regarding an opportunity to donate to the Make-a-Wish Foundation (MAW) in which a) the donation's overhead allocation was fixed (i.e., Control), b) the donation was overhead free (i.e., OH Free), and c) the donor could choose how much of their donation to allocate to overhead (i.e., Choice). Participants were then asked (1) how likely they thought the average individual would be to donate to the MAW and (2) how impactful they thought the average individual would feel if they decided to make a donation, using 5-pt scales for each. We incentivized participants to report beliefs about how an average donor would behave by paying them a bonus if their responses matched the responses given by the majority of other participants in the study.

Results show participants believed donors would be significantly more likely to give in the OH Free ($M=4.35$) and Choice ($M=4.16$) conditions compared to the Control ($M=3.66$; both $p < .001$). The difference between OH Free and Choice was also significant, $p=.04$. Likewise, participants believed donors would feel more impactful in the OH Free and Choice conditions compared to the Control (both $p < .001$).

In Experiment 2 we explored the effect of offering potential donors the choice of how to allocate their donation to a hypothetical charity. This was a 2x2 between-subjects design in which we manipulated overhead level (low OH-5%, high OH-55%) as well as the opportunity for participants to choose how much of their donation they would like to put toward overhead expenses (no option, option) vs. programmatic expenses. Participants ($N=401$) were randomly assigned to read one of four different donation solicitations from Fight Hunger, a hypothetical hunger charity. Participants were then asked if they would donate, (if yes) how much they would donate, and (if in the option conditions) the percentage of their donation that they chose to be used to cover overhead.

Among those that choose to donate, we find main effects of choice—participants donated more on average if they could choose their overhead level ($M_{choice} = 24.11$ vs. $M_{nochoice} = 16.89$, $p=.04$), and if we break down the amount raised by type of expense, overhead vs. programmatic, more money was allocated to programmatic expenses with choice ($M_{choice} = 17.47$ vs. $M_{nochoice} = 11.76$, $p=.05$). Importantly, allowing choice did not negatively impact how much was raised for

overhead. There was no difference, for instance, in the amount raised for overhead between the high OH, no choice and high OH, choice conditions.

In Experiment 3, we tested the effect of choice using a consequential design in which participants worked on a bonus task and had a real opportunity to donate \$3 of their \$10 earnings to MAW. All participants (N=916) were randomly assigned to one of three conditions, similar to Experiment 1 – Control, OH Free, and Choice. Among those that passed a manipulation check, we find a marginal effect of Choice donation likelihood. Participants were more likely to donate \$3 in the Choice (62%) than in the Control condition (54%; $p=.08$). There were no differences between OH Free (61%) and Choice or Control (p 's=.82 and .14, respectively). The average allocated to overhead in the Choice condition was 20% compared to MAW's actual overhead of 21%.

The results of these three experiments suggest that offering choice may be one way to increase the likelihood that donors, who are deterred by OH expenses, will give and how much they give. We aim to bring this intervention to the field to test choice with real donors.

Giving to Receive: Moral Self-Regard and Positive Affect Increase when Giving Time but not Money

EXTENDED ABSTRACT

While consumers devote a considerable amount of their resources toward non-profit helping, they also spend money and time on other people, such as purchasing gifts for family, friends and acquaintances (Gino and Flynn, 2011), and through random acts of kindness (Lyubomirsky et al. 2005).

What, however, does the act of giving time and money say about ourselves? How do consumers view their own prosocial actions in light of their moral identity? And what difference does it make to give money or time to someone in need? In this paper we investigate the effects of giving both money and time on moral identity and positive affect. Our main result is that giving time and money are not perceived as equally moral: consumers experience more moral self-regard, and as a result, more positive affect when they give time than when they give money. Building on previous research, we suggest that giving time leads consumers to reflect on who they are, which impacts their view of their moral self and increases positive affect.

While previous work has provided evidence that moral identity is related to prosocial behaviors (e.g., Aquino et al. 2009), and concepts of time are more closely related to morality (Gino and Mogilner 2014), we extend this work by evaluating how the experience of giving money and time affects moral self-regard. We propose that the process of giving time activates moral self-regard more than giving money, and as a result leads to greater positive affect.

In Study 1 (N=299) participants were asked to reflect on a recent experience where they gave (received) money (time). Participants in the giving conditions were asked to write about a time when they gave some time (money) to someone else. In the receiving conditions participants were asked to reflect on an experience where they received some time (money) from someone else. Following the reflection task participants indicated to what extent the event they described made them feel moral self-regard ($\alpha=.95$; Gino, Kouchaki, and Galinsky, 2015) and to the extent they experienced positive affect ($\alpha=.91$; Gino, Kouchaki, and Galinsky, 2015). We observed a significant interaction between resource and action. Receiving felt equally moral in regards to time and money, but givers felt more moral when giving time than money. With happiness, receivers felt equally happy with time or money, but givers of time were signifi-

cantly happier than givers of money, and this effect was mediated by the increased experience of moral self-regard.

In Study 2 (N=244), participants made a voluntary contribution to a student applying for college and needed assistance with college application essays. Participants were randomly assigned to give money (\$3) to help hire a copy editor who would edit and provide feedback on their statement of purpose, while participants in the giving time condition were asked to donate 10 minute of their time to edit the statement themselves. Givers of time felt more moral self-regard following their donation than those in the money condition, and also experienced greater positive affect. As in Study 1, we find that moral self-regard mediated the differences in positive affect between the giving conditions. One shortcoming of Study 2 is that the giving time condition might be seen as a more direct form of giving relative to the money condition. Given that recent research suggests consumers prefer to give directly to a cause (Gneezy, Keenan and Gneezy, 2014), we sought to tease apart the effect of direct giving in our next experiment.

In Study 3 (N=234), participants were given an opportunity to make a voluntary donation to a local hospital. Based on a pretest, participants in the direct money giving condition were asked to give a dollar to direct service care for patients of the hospital, while those in the indirect money giving condition were asked to give a dollar to overhead costs associated with direct service care for patients of the hospital. In the direct giving of time condition participants were asked to write get well post cards to patients of the hospital, and those in the indirect giving condition were asked to address the get well postcards to patients of the hospital. Impressions of moral self-regard were higher for time participants than money participants, but there was no main effect on directness of giving. With happiness, participants who gave time were happier than money, but there was a significant interaction by directness of giving. While participants were equally happy giving time directly or indirectly, with money, participants were much more happy giving money directly than indirectly. To understand the underlying mechanism as to why participants experience more moral self-regard giving time relative to money, we conducted a mediation and found that giving time is a much more vivid process than giving money, and also engenders more sympathy and greater impressions of making a significant impact to the cause. However, making an impact was significantly related to moral self-regard while vividness and sympathy were not. This suggests that the process of giving time feels more impactful, which in turn make consumers feel moral, making them less sensitive to certain details of the giving process such as contributing to direct service versus indirect service tasks. In turn, we find that impressions of moral self-regard mediate the positive boost experienced by the giving time conditions.

Across three studies we find evidence that giving money and time are experienced differently by consumers, with time engendering much more moral self-regard than money. In turn, consumers feel happier giving their time in part because the process of giving time feels more impactful than giving money.

REFERENCES

- Aquino, Karl, and Americus Reed II (2002), "The Self-Importance of Moral Identity," *Journal of Personality and Social Psychology*, 83 (6), 1423-440.
- Caviola, Lucius, Nadira Faulmüller, Jim A.C. Everett, Julian Savulescu, and Guy Kahane (2014), "The Evaluability Bias in Charitable Giving: Saving Administration Costs or Saving Lives?" *Judgment and Decision Making*, 9 (4), 303-15.
- Deci, Edward (1975). *Intrinsic Motivation*, New York, NY: Plenum.

- Deci, Edward L., and Richard M. Ryan (1985), "The General Causality Orientations Scale: Self-Determination in Personality," *Journal of Research in Personality*, 19 (2), 109-34.
- Eckel, C. C., Herberich, D. H., & Meer, J. (2016), "A field experiment on directed giving at a public university," *Journal of Behavioral and Experimental Economics*, 66, 66-71.
- Gino, Francesca, and Francis J. Flynn (2011), "Give them what they Want: The Benefits of Explicitness in Gift Exchange," *Journal of Experimental Social Psychology*, 47(5), 915-22.
- Gino, Francesca, and Cassie Mogilner (2014), "Time, Money, and Morality," *Psychological Science*, 25 (2), 414-21.
- Gino, Francesca, Maryam Kouchaki, and Adam D. Galinsky (2015), "The Moral Virtue of Authenticity How Inauthenticity Produces Feelings of Immorality and Impurity," *Psychological Science*, 26 (7), 983-96.
- Gneezy, Uri, Elizabeth A. Keenan, and Ayelet Gneezy (2014), "Avoiding Overhead Aversion in Charity," *Science*, 346 (6209), 632-35.
- Grant, Adam M., Elizabeth M. Campbell, Grace Chen, Keenan Cottone, David Lapedis, and Karen Lee (2007), "Impact and the Art of Motivation Maintenance: The Effects of Contact with Beneficiaries on Persistence Behavior," *Organizational Behavior and Human Decision Processes*, 103 (1), 53-67.
- Grant, Adam M., and Francesca Gino (2010), "A Little Thanks Goes a Long Way: Explaining why Gratitude Expressions Motivate Prosocial Behavior," *Journal of Personality and Social Psychology*, 98 (6), 946-55.
- Krishna, Aradhna (2011), "Can Supporting a Cause Decrease Donations and Happiness? The Cause Marketing Paradox," *Journal of Consumer Psychology*, 21 (3), 338-45.
- Lyubomirsky, Sonja, Kennon M. Sheldon, and David Schkade (2005), "Pursuing Happiness: The Architecture of Sustainable Change," *Review of General Psychology*, 9(2), 111-58.
- Read, Daniel, George Loewenstein, and Matthew Rabin (1999), "Choice Bracketing," *Journal of Risk and Uncertainty*, 19 (1), 171-97.

The Curious Case of Risk and Uncertainty

Chairs: Luxi Shen, Chinese University of Hong Kong, Hong Kong
Kristen Duke, University of California, San Diego, USA

Paper #1: Risks, Interrupted: The Effect of an Interruption on Decisions of Risk

Daniella Kupor, Boston University, USA
Wendy Liu, University of California, San Diego, USA
On Amir, University of California, San Diego, USA

Paper #2: Changing How Probability is Represented Attenuates the Reflection Effect

Kristen Duke, University of California, San Diego, USA
Daniel Mochon, Tulane University, USA
On Amir, University of California, San Diego, USA

Paper #3: Not All Money is Created Equal: Neural Signature of Mental Accounting

Feng Sheng, University of Pennsylvania, USA
Ming Hsu, University of California, Berkeley, USA
Baba Shiv, Stanford University, USA

Paper #4: Field Experiments on the Effectiveness of Uncertain Incentives

Luxi Shen, Chinese University of Hong Kong, Hong Kong
Christopher K. Hsee, University of Chicago, USA
Joachim Tsaloni, Carnegie Mellon University, USA

SESSION OVERVIEW

Life is rife with risk and uncertainty. No one knows what will happen tomorrow; it could be a peace treaty or a declaration of war, and it may bring sun or rain. Despite decades of decision research exploring how consumers contend with risk and uncertainty (e.g., Loewenstein et al. 2001; Gonzalez and Wu 1999; Gneezy, List, and Wu 2006; Kahneman and Tversky 1979; Thaler and Johnson 1990; Tversky and Kahneman 1992; Weber, Blais, and Betz 2002), some fundamental questions remain open: What are “risk” and “uncertainty” in people’s minds? And, how do people learn to make decisions under risk and uncertainty repeatedly?

Papers in this session seek to shed lights on these core questions. The contribution of this session is threefold: Theoretically, we aim to reveal the unexplored drivers of risk-taking behaviors and enrich the literature on consumer decision making under uncertainty. Methodologically, we employ a combination of experimental design, empirical modeling, and neural examination to forge a more nuanced understanding. Practically, we aim to provide data-driven recommendations and advice for marketers and policymakers to better understand and utilize risk and uncertainty.

How do people “feel” about risk? The first paper, by **Kupor, Liu, and Amir**, demonstrates that although risk and uncertainty elicit fear, interruptions (e.g., a phone call) during the decision-making process allow for mere exposure processes to temper this apprehension, consequently increasing individuals’ willingness to take risks.

What do people “think” about risk? The second paper, by **Duke, Mochon, and Amir**, investigates the mental representation of risk and uncertainty. They find that merely introducing probabilities in more conversational, easier-to-visualize formats (e.g., a coin toss) can mitigate both risk aversion in gains and risk seeking in losses.

What does risk look like in the brain? The third paper, by **Sheng, Hsu, and Shiv**, points out that, in the brain, mental accounting matters for risky choices. They find differential loss aversion with endowed versus earned money, and trace neurological activation that may underlie these differences.

How do people work under uncertain incentives? The last paper, by **Shen, Hsee, and Talloen**, examines the effectiveness of uncertain incentives in a field experiment, and models repeated decisions under uncertainty across time.

This session presents four high-quality research papers centered around one important topic: risk and uncertainty in consumer behavior. Each asks interesting questions, takes unique approaches, and provides exciting findings. This session should appeal to a wide audience who are interested in judgment and decision making in general, and risk and uncertainty in particular. Data collection in all papers is complete and all participants have agreed to present, should the session be accepted.

Risks, Interrupted: The Effect of an Interruption on Decisions of Risk

EXTENDED ABSTRACT

Individuals are constantly interrupted. Consider a consumer who is deciding whether to invest her money in a novel risky asset. While she deliberates, she is interrupted by a phone call. When she returns to the decision, will she make a different investment decision than if she had not been interrupted?

When choosing whether to take a risk, consumers do not simply engage in a cold calculus of the probability and severity of the potential outcomes of the risk; rather, fear leads to risk-averse choices. People are most gripped by fear when they face a novel risk (e.g., Loewenstein et al. 2001). We theorize that an interruption in a risky decision can increase risk-taking by reducing the experience of sensory novelty engendered by the decision stimuli. We propose that this occurs because an inherent consequence of an interruption to a risky decision is the introduction of a second exposure to the decision situation, which results in the stimuli appearing less novel and hence less threatening (e.g., Zajonc 1968), and which thereby reduces apprehension and increases risk taking. We test these predictions across six studies, and also differentiate this interruption effect from that of other forms of disruptors and previous effects of interruptions.

Study 1 tests the basic effect. Participants were given \$1.50 (real money), and had the option to invest any portion of this amount in a risk that had a 50% chance of yielding 2.5 times the amount invested, and a 50% chance of a loss of the invested amount. Participants could keep the money they chose not to invest. Participants who were interrupted during the decision invested more money (\$.80) than participants who were not interrupted (\$.67), $t(199) = 2.10, p = .037$.

Study 2 examines the possibility that the observed results may instead be due to degraded processing due to the interruption. To this end, we compare an interruption to cognitive load and time pressure. Further, we compare expected versus unexpected interruptions. If cognitive interference underlies the effect, then an unexpected interruption may exacerbate it by causing more interference; however, our theorizing suggests that it is the repeated exposure inherent in an introduction—regardless of whether that repeated exposure is expected or unexpected—that underlies the current results. Participants chose between a sure \$5, or a risky option that had a 50% chance of \$12 and a 50% chance of \$0. Participants were randomly assigned to one of the above 5 conditions. Condition impacted participants’ choices, $\chi^2(df=4, N=741) = 12.66, p = .013$: Participants in the unexpected (28.8%) and the expected (26.7%) interruption conditions

were equally likely to take the risk ($\chi^2 = .19, p = .663$), were more likely to take the risk than uninterrupted participants (15.4%; χ^2 's > 6.11, $ps < .013$), and trended toward being more likely to take the risk than participants under load (18.0%) and time pressure (18.3; χ^2 's > 2.79, $ps < .095$).

Study 3 tests whether the current effect is due to elongated decision making. Participants decided how much money to invest in a risk that offered a 10% chance of 20 times the amount invested, and a 90% chance of a loss. Participants were randomly assigned to an uninterrupted, interrupted, or elongated duration condition (i.e., 60 seconds, which was the cumulative duration that interrupted participants in a pre-test devoted to making this decision). Condition significantly impacted average investment amount, $F(2, 597) = 4.86, p = .002$. Interrupted participants ($M = 49.56$) took greater risk than uninterrupted participants ($M = 37.65; p = .005$) as well as participants who thought for an extended duration ($M = 38.95; p = .012$), and participants in these latter two conditions took the same amount of risk ($p = .754$).

In study 4 we test the core proposition of our theory—that the interruption effect is driven by reduced sensory novelty upon resuming the decision. We did so by adding a variant of the original interruption condition where we changed the presentation format of the decision (while keeping the informational content the same) when participants resumed the decision. We predicted that this condition would reduce the subjective feeling of familiarity with the decision after the interruption, thereby eliminating the decision interruption effect. Results confirmed our hypothesis—out of a real \$1.50, condition significantly impacted investment amount ($M_{\text{No Interruption}} = .45; M_{\text{Interruption}} = .57; M_{\text{Interruption With Format Change}} = .50$), $F(2, 484) = 2.97, p = .05$.

Study 5 demonstrates that reduced apprehension mediates the interruption effect. Participants made a hypothetical choice between a sure \$50, or a risky option that had a 10% chance of \$1,000 and a 90% chance of a \$50 loss. Participants who were interrupted chose the risky option more frequently (50.6%) than participants who were not interrupted (38.6%), $\chi^2 (df = 1, N = 330) = 4.85, p = .028$. Moreover, apprehension mediated the interruption effect.

Previous research (Liu 2008) shows interruptions reduce focus on feasibility attributes (e.g., probability). Study 6 demonstrates that interruptions increase risk-taking even in contexts where all options are equally feasible (i.e., probable). In particular, participants made a choice between two risks: Option A offered a 50% chance of \$4 and a 50% chance of \$7, and Option B offered a 50% chance of \$0 and a 50% chance of \$18. Although the outcomes in each option were equally feasible (i.e., probable), a pre-test revealed that the prospect of Option B's \$0 evoked more apprehension than the prospect of accruing an amount smaller than the possible maximum. Consistent with our theorizing, interrupted participants (47.1%) chose Option B more frequently than uninterrupted participants (33.3%), $\chi^2 (df = 1, N = 302) = 5.94, p = .015$. Thus, reduced apprehension increases risk-taking even when a reduced focus on feasibility cannot.

Our research sheds light on a fundamental mechanism by which interruptions affect decisions—repeated exposure and its resulting effect on apprehension. Our findings thus have important implications for understanding the dynamic course of risky decisions.

Changing How Probability is Represented Attenuates the Reflection Effect

EXTENDED ABSTRACT

Consumers constantly engage in decisions involving risk and uncertainty, from choosing investments to trying new products. In

general, consumers tend to be risk averse among gains, but risk seeking among losses, a pattern termed the “reflection effect” (Kahneman and Tversky 1979). This asymmetry is typically attributed to diminishing marginal sensitivity—that is, to how individuals process payoffs. In four experiments, we instead focus on how individuals process probabilities, and provide evidence that small changes to how probability is represented can attenuate the reflection effect.

In particular, we contrast probabilities expressed as percentages with those represented by outcomes (e.g., the result of a coin toss) involving processes that can be easily mentally simulated (e.g., the flipping and landing of the coin). Prior research suggests that this mental simulation should make the probabilities feel more concrete and vivid (Taylor and Schneider 1989), and therefore seem more likely (Taylor et al. 1998; Johnson et al. 1993). Further, this change should have a greater influence on the perceived likelihood of low rather than high probabilities, as in our context, the options involving low probabilities also offer more extreme outcomes, which should naturally attract more attention (Bordalo et al. 2012).

Overall, we propose that changing from percentages to easy-to-simulate probability representations should increase the perceived likelihood of risky options. Accordingly, this should increase individuals' willingness to take risks with potential gains, and decrease their willingness to take risks with potential losses. Experiments 1-2 investigate our basic effect, while experiment 3 provides process evidence supporting our theoretical account. Finally, experiment 4 explores a boundary condition.

In experiment 1, participants in the gain (*loss*) conditions chose between a 75% chance of winning (*losing*) \$20, and a riskier 17% chance of winning (*losing*) \$85. The probabilities were represented either as percentages or in an easier-to-simulate format (drawing balls from an urn). Percentage condition participants showed the reflection effect: risk aversion in gains (88% chose the safe option) and risk seeking in losses (36% chose the safe option), $\chi^2(1) = 31.67, p < .001$. However, this asymmetry disappeared in the easier-to-simulate conditions (gains = 52% vs. losses = 61%), $\chi^2(1) = 0.71, p = .40$ (interaction between gain/loss domain and probability representation: $\beta = 2.96, Wald z = 4.84, p < .001$).

Experiment 2 replicates this effect with an option offering certainty. Participants in the gain (*loss*) conditions chose between winning (*losing*) \$20 and a 25% chance of winning (*losing*) \$70. Participants saw these probabilities either as percentages or in an easier-to-simulate format (tossing 2 coins). In the percentage conditions, 90% of gains participants chose the safe option, compared to 21% of losses participants, $\chi^2(1) = 25.04, p < .001$. However, representing probabilities in the easier-to-simulate format again attenuated the reflection effect (gains = 72% vs. losses = 62%), $\chi^2(1) = 0.31, p = .58$ (interaction: $\beta = 3.02, Wald z = 3.19, p = .001$).

Experiment 3 tests our proposed process. Participants in the gain (*loss*) conditions chose between a 70% chance of winning (*losing*) \$8 and a 17% chance of winning (*losing*) \$37. Half of participants saw percentages, and the other half saw the easy-to-simulate probability representation from experiment 1. After choosing, participants reported their perceived likelihood of either the risky or the safe option (scale: 1 = Extremely unlikely to 7 = Extremely likely). The reflection effect again arose in the percentage conditions (81% chose the safe option in gains vs. 41% in losses), $\chi^2(1) = 99.54, p < .001$, and was again attenuated in the easier-to-simulate conditions (gains = 56% vs. losses = 51%), $\chi^2(1) = 1.14, p = .28$ (interaction: $\beta = 1.63, Wald z = 6.52, p < .001$). Furthermore, gains participants perceived the risky option to be more likely in the easier-to-simulate format ($M = 2.85$) than in the percentage format ($M = 2.31$), $t(284) = 4.12, p < .001$, as did losses participants ($M = 3.30$ vs. 2.90), $t(294) =$

2.90, $p = .004$. These shifts in judged likelihood mediated the effect of probability representation on choice in both gains (effect = .19, $SE = .09$, 95% CI : [.06 to .41]) and losses (effect = -.23, $SE = .10$, 95% CI : [-.47 to -.07]). Probability representation had no effect on the perceived likelihood of the safe outcome in losses, $t(275) = -.56$, $p = .58$, and unexpectedly decreased the perceived likelihood in gains ($M = 5.25$ vs. 4.88), $t(230) = -3.12$, $p = .002$, but this did not mediate the effect of probability representation on choice. Thus, experiments 1-3 converge to suggest that easier-to-simulate probability representations make riskier outcomes appear more likely, which promotes risk seeking in gains and risk aversion in losses.

Experiment 4 expands our investigation by identifying a boundary condition. Participants imagined choosing between two health insurance plans, one costing \$300 less/more (depending on condition) than the previous plan, and another whose costs would be determined by uncertain treatment needs (an 83.3% chance of paying \$0 less/more and a 16.7% chance of paying \$1900 less/more). The uncertain probabilities were described either in percentage terms, or based on the outcome of a die roll. Percentage condition participants were again risk averse in gains (75%) and risk seeking in losses (45%), $\chi^2(1) = 28.31$, $p < .001$, and changing the probability representation again attenuated this difference (interaction: $\beta = 1.25$, $Wald z = 3.62$, $p < .001$). However, in this context, it did so through promoting risk aversion in both gains (74%) and losses (73%), $\chi^2(1) < .001$, $p > .99$. Thus, because baseline risk aversion is high in insurance contexts (e.g., Rabin and Thaler 2001), easier-to-simulate probability representations attenuated the risk-attitude asymmetry by promoting risk aversion in *both* gains and losses.

In summary, our experiments illustrate how the renowned reflection effect is quite sensitive to a feature that is easy for marketers to modify: the representation of probability information. Importantly, these results suggest that consumers' risk preferences shift not only when reframing payoffs (e.g., Kühberger et al. 1999), but also when reframing probabilities.

Not All Money is Created Equal: Neural Signature of Mental Accounting

EXTENDED ABSTRACT

Mental accounting describes how individuals compartmentalize their financial activities by a set of mental accounts associate with different propensity of investment or expenditure (Thaler, 1985). Critically, mental accounting violates the principle of fungibility of money: despite of identical economic value, money in one mental account is not psychologically equivalent with money in another.

In so-call "income accounting", substantial evidence exists that decision-makers treat money differently depending on how money was acquired (Thaler, 1999; Levav and McGraw, 2009). For example, O'Curry (1997) found that people were less likely to make frivolous consumption with money earned by overtime work than money received as winnings from a football pool. Similarly, people were more reluctant to purchase a vacation with money earned from work than with money received as a gift (Henderson and Peterson, 1992). More generally, mental accounting has been invoked to explain a variety of behaviors ranging from consumption, to investment, to saving and to borrowing, and has been tested in the context of the laboratory, the household and the market.

Despite this wealth of evidence, a number of fundamental questions remain regarding the nature and even existence of mental accounting. In particular, it remains largely unclear whether mental accounting indeed exists as a set of cognitive processes used by the human mind to record financial transactions, or whether it is a useful

metaphor to describe dynamic changes in a decision-maker's sensitivity to gain and losses in response to past outcomes. Second, in the specific case of income accounting, it is unclear the extent to which how money was acquired affects diminishing sensitivity to gains and losses (risk aversion), or the relative weighting of gains and losses (loss aversion).

To address this question, we used a novel experimental paradigm that comprised of two phases: acquisition phase and investment phase. In the acquisition phase, participants acquired money in two purported accounts, namely, salary account and bonus account, respectively. Specifically, they earned \$20 in the salary account by completing an effortful visual search task, and received \$20 in the bonus account as an endowment effortlessly. Next, in the investment phase, participants made a series of decisions of whether to accept or reject a gamble enabling 50/50 probability of winning vs. losing with money in the two accounts.

We collected both behavioral and neural data using this paradigm, and asked (i) the extent to which how money was acquired in the acquisition phase affected behavior in the investment stage, and (ii) whether the human brain flexibly encodes and processes gains and losses in the investment stage according to how money was acquired in the acquisition phase, as predicted by mental accounting.

Behaviorally, we adopted a prospect theory approach to examine how risk and loss aversion attitudes varied with earned money and endowed money. Specifically, we found that, relative to the baseline model where risk and loss aversion were unaffected by the two accounts, a two-account model where loss aversion was affected by accounts explained choices significantly better. In contrast, this was not the case with a two-account model where risk attitude was affected by the two accounts. Thus, earned money, relative to endowed money, selectively modulated individuals' attitude toward losses as opposed to attitude toward risks.

The validity of the behavioral finding was further examined by the analysis of neural data. First, we calculated the utility of each gamble according to each of the three models and obtained three separate utility for each gamble. Next, we subtracted the utility calculated from the one-account model from the utility calculated from the two-account model with account-dependent loss aversion. Finally, and critically, we searched for neural activity tracing the differential utility independent from neural activity tracing the utility calculated from the one-account model. We found that medial prefrontal cortex, a brain region known for its role in value representation, did not only represent the utility of the one-account model, but also represented the differential utility of the two-account model relative to the one-account model. Thus the brain responds in a manner better predicted by the two-account model than the one-account model.

By employing the novel approach of brain imaging, this study shows that mental accounting is not merely a metaphor, but indeed exists as a set of the neural processes in the human brain. Thus, the concept of mental accounting is not only useful, but also valid, biologically.

Field Experiments on the Effectiveness of Uncertain Incentives

EXTENDED ABSTRACT

Many of the decisions we make are repetition decisions, choosing whether to repeat an activity or not; for example, deciding whether to order another drink at a restaurant after having just finished one, or deciding whether to return to the gym after having worked out yesterday.

Prior behavioral research has identified various determinants of behavioral repetition, such as token size and progress perception. We focus on a factor that has received less attention: incentive uncertainty, that is, whether the financial outcome of an action is certain or uncertain. For example, which pay scheme, a certain per-task pay of \$5 or an uncertain per-task pay of either \$3 or \$5 with equal chances, is more effective at motivating a research assistant to complete a task repeatedly?

We propose that uncertain incentives can lead to more repetitions than certain incentives, even if the uncertain incentive is strictly dominated by the certain incentive, which we refer to as the reinforcing-uncertainty effect. In other words, we predict a positive effect of uncertainty in repetition decisions. We conducted two natural field experiments to test the proposed reinforcing-uncertainty effect.

In one field experiment, we collaborated with a local running club in Hong Kong. Club members participated in a spring running event in which they could earn points by working out on the track. Half of them received 5 points for each lap they completed (certain), and the other half received 3 or 5 points (uncertain). All points they earned could be exchanged for the equivalent amount of Hong Kong dollars into a gift card from a café. At the end of the event, the uncertain incentive scheme made the club members run, on average, about 6.48 extra laps compared to the certain incentive scheme. This experiment shows a positive effect of uncertainty on repetition: People literally ran “the extra mile” (precisely, 1.61 more miles) for uncertainty.

In another field experiment, we replicated the reinforcing-uncertainty effect in repetition decisions with more substantial incentives. The experiment took place on a Hong Kong pay-by-task survey platform (similar to Amazon’s Mechanical Turk) affiliated with a large local public university. In the certain pay condition, for each 10-min survey they were paid HK\$40 (US\$5.13), whereas in the uncertain pay condition they were paid either HK\$20 or HK\$40 with equal chances. These incentive magnitudes were on par with about four times the standard wage of a business-school graduate student working as a research assistant in Hong Kong.

We found that: (a) in terms of “entry,” the uncertain pay did not seem attractive; workers were 20% less likely to show up and take any survey if they were promised an uncertain pay; (b) in terms of “repetition,” the uncertain pay excelled at maintaining an active worker pool; among those who showed up, an uncertain-pay worker, on average, completed 5.65 more surveys (out of 42 surveys) than a certain-pay worker. The contrast between entry and repetition indicates that uncertain dynamic incentives are more effective than certain incentives because people learn about the pleasure of uncertainty resolution through, not before, repetitions.

Together, the two field experiments showed a positive effect of uncertainty on repetition and documented the effectiveness of uncertain incentives with real consequences and in serious decision contexts.

REFERENCES

- Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer (2012), “Salience Theory of Choice Under Risk,” *Quarterly Journal of Economics*, 127(3), 1243–85.
- Gneezy, Uri, John A. List, and George Wu (2006), “The Uncertainty Effect: When A Risky Prospect is Valued Less than its Worst Possible Outcome,” *Quarterly Journal of Economics*, 121(4), 1283–1309.
- Gonzalez, Richard and George Wu (1999), “On the Shape of the Probability Weighting Function,” *Cognitive Psychology*, 38(1), 129–66.
- Henderson, Pamela W. and Robert A. Peterson (1992), “Mental Accounting and Categorization,” *Organizational Behavior and Human Decision Processes*, 51(1), 92–117.
- Johnson, Eric J., John Hershey, Jacqueline Meszaros, and Howard Kunreuther (1993), “Framing, Probability Distortions, and Insurance Decisions,” *Journal of Risk and Uncertainty*, 7, 35–51.
- Kahneman, Daniel and Amos Tversky (1979), “Prospect Theory: An Analysis of Decision under Risk,” *Econometrica*, 47(2), 263–92.
- Kühberger, Anton, Michael Schulte-Mecklenbeck, and Josef Perner (1999), “The Effects of Framing, Reflection, Probability, and Payoff on Risk Preference in Choice Tasks,” *Organizational Behavior and Human Decision Processes*, 78(3), 204–31.
- Levav, Jonathan and A. Peter McGraw (2009), “Emotional Accounting: How Feelings about Money Influence Consumer Choice,” *Journal of Marketing Research*, 46(1), 66–80.
- Liu, Wendy (2008), “Focusing on Desirability: The Effect of Decision Interruption and Suspension on Preferences,” *Journal of Consumer Research*, 35(4), 640–52.
- Loewenstein, George F., Elke U. Weber, Christopher K. Hsee, and Ned Welch (2001), “Risk as Feelings,” *Psychological Bulletin*, 127(2), 267–86.
- O’Curry, Suzanne (1997), “Income Source Effects,” working paper, DePaul University.
- Rabin, Matthew and Richard H. Thaler (2001), “Anomalies: Risk Aversion,” *Journal of Economic Perspectives*, 15(1), 219–32.
- Taylor, Shelley E. and Sherry K. Schneider (1989), “Coping and The Simulation of Events,” *Social Cognition*, 7(2), 174–94.
- Taylor, Shelley E., Lien B. Pham, Inna D. Rivkin, and David A. Armor (1998), “Harnessing the Imagination: Mental Simulation, Self-Regulation, and Coping,” *American Psychologist*, 53(4), 429–39.
- Thaler, Richard H. (1985), “Mental Accounting and Consumer Choice,” *Marketing Science*, 4(3), 199–214.
- (1999), “Mental Accounting Matters,” *Journal of Behavioral Decision Making*, 12(3), 183–206.
- Thaler, Richard H. and Eric J. Johnson (1990), “Gambling with the House Money and Trying To Break Even: The Effects of Prior Outcomes on Risky Choice,” *Management Science*, 36(6), 643–60.
- Tversky, Amos and Daniel Kahneman (1992), “Advances in Prospect Theory: Cumulative Representation of Uncertainty,” *Journal of Risk and Uncertainty*, 5(4), 297–323.
- Weber, Elke U., Ann-Renée Blais, and Nancy E. Betz (2002), “A Domain-Specific Risk-Attitude Scale: Measuring Risk Perceptions and Risk Behaviors,” *Journal of Behavioral Decision Making*, 15(4), 263–90.
- Zajonc, Robert B (1968), “Attitudinal Effects of Mere Exposure,” *Journal of Personality and Social Psychology*, 9(2), 1–27.

On the Unique Effects of Self-Connected Brands

Chairs: Kristen Lane, University of Arizona, USA

Jennifer Savary, University of Arizona, USA

Paper #1: When Ignorance is No Longer Bliss: Seeking Threatening Information About Self-Relevant Brands

Kristen Lane, University of Arizona, USA

Jennifer Savary, University of Arizona, USA

Jesper H. Nielsen, University of Arizona, USA

Paper #2: Brand Complexity's Impact on Product Liking and Consumer's Sense of Self

Maria A. Rodas, University of Minnesota, USA

Carlos J. Torelli, University of Illinois at Urbana-Champaign, USA

USA

Paper #3: The Influence of Incidental Tokenism on Attitudes Toward Stereotype-Typifying Products

Iman Paul, Georgia Institute of Technology, USA

Jeffrey R. Parker, Georgia State University, USA

Sara Loughran Dommer, Georgia Institute of Technology, USA

Paper #4: Brands as Mitigators of Physical Pain: The Mediating Role of Social Connectedness

Martin Reimann, University of Arizona, USA

Sandra Nuñez, Tecnológico de Monterrey, Mexico

Raquel Castaño, Tecnológico de Monterrey, Mexico

SESSION OVERVIEW

Consumer self-connections to brands have been the focus of extensive research over the last few decades. During this time, it has been well documented that consumers view brands that have been integrated into their self-concept (i.e. self-brand connection [SBC], Escalas and Bettman 2003) differently than well liked brands that are not identity-connected. Such brands can help consumers construct self-identities (McCracken 1989), and symbolize their values and goals (Fournier 1998). Brands that are closely linked to the self are seen as more meaningful than those without an identity-link, and consumers are more likely to form self-brand connections to brands that communicate something meaningful about the self (i.e., are symbolic) than to brands that don't (Escalas and Bettman 2005; 2009).

The current session further explores the idea that self-connected brands are different from those that are not. Each of the four papers provides a unique demonstration of a distinctive effect of self-connected brands, that would not be predicted for well-liked but identity irrelevant brands. For example, people should avoid negative information about well-liked brands, but this effect reverses for high SBC brands (paper 1). Similarly, paper 2 shows that although brand complexity is not always a positive attribute, strongly self-connected brands benefit from being complex. Moreover, brands linked to a tokenized-aspect of identity become devalued (paper 3) and high self-connected brands can actually provide pain insulation (paper 4). The intensive perspective afforded by the current session expands the investigation of identity in brand relationships by demonstrating how the presence of an identity-brand link can result in unexpected and important outcomes. This unique focus on the importance of self-connection to brands encourages interesting, in depth future research questions. For example, panelists may be inspired to ask (1) how increasing customization of products that helps to promote self-brand connections may produce similar effects as presented, and (2) what happens when there is an interaction between multiple self- and brand-identities.

Thus, a wide range of an expected outcomes – information choice, brand evaluations, and experience of pain – are demonstrated to surface when brands and identity(ies) interact. Overall, it seems that when brands are more self-connected, behavior toward the brands are more consistent with the maintenance of a positive self-concept. Whether the behavior be to seek negative, self-relevant information about the brand in order to defend against it (paper 1), to provide better evaluations of brands that enhance (paper 2) versus worse evaluations of brand that threaten (paper 3) positive aspects of the self-concept, or to use self-connected brands to construct a social self-concept as insulation from pain (paper 4), consumer interactions with self-connected brands produce a consistent pattern of self-enhancement outcomes.

Together the four papers in this session will extend and deepen our understanding of the importance of self-connected brands. A focused session such as this, where a broad range of findings support a similar research question, is one of the most effective ways of encouraging diverse thinking as a strategy to solve an interesting question from many sides.

When Ignorance is No Longer Bliss: Seeking Threatening Information About Self-Relevant Brands

EXTENDED ABSTRACT

People often choose to avoid negative information for reasons such as mood maintenance and the protection of self-beliefs, or simply to allow themselves plausible deniability (Golman, Haggmann, and Loewenstein 2016). This avoidant behavior extends to self-relevant negative or threatening information about important matters such as health, finances, and romantic partners (for review see Golman, Haggmann, and Loewenstein 2016; Sweeny et al. 2010). Theorists attribute such avoidant actions to people's desire to avoid information that may require a change in beliefs, demand an undesired action, or prompt unpleasant emotions (Sweeny et al. 2010). Consumers are especially likely to avoid negative information if it elicits negative affect (Luce, Payne, and Bettman 1999). For example, negative emotions were found to drive avoidance of product information even among people who value the information (Ehrich and Irwin 2005). Research has likewise found that consumers distance themselves from brands when they are threatened with negative information about the brand (Aaker, Fournier, and Brasel 2004).

In the current research we propose that the opposite pattern may also occur. When the negative information is about brands with which consumers have a strong self-brand connection, they tend to seek, rather than avoid, that negative information, even though the same self-protection motivations exist. This occurs because when a consumer has a high self-brand connection, the negative information about the brand becomes a potential identity threat that the individual is motivated to deal with. To develop this prediction, we build on prior literature that indicates the need to address an identity threat is more important than other considerations (Aronson 1968). Thus, people are less likely to ignore negative information about a high SBC brand, because that information may threaten their personal identity. This proposal builds on the ideas that people are highly motivated to protect the self (Greenberg, Pyszczynski, Sheldon, and Solomon 1986), but cannot choose an avoidant coping strategy because the information is widely known or available to others (Kunda

1990). Therefore, when dealing with negative brand information that may represent an identity threat, consumers are more likely to choose to try to defend their self-identity by counter arguing the information (Ahluwalia, Burnkrant, and Unnava 2000).

Consequently, we propose that when a consumer has incorporated a brand into their self-identity, resolution of the identity-threat becomes more important than protecting one's mood. Therefore, when people are strongly connected to a brand, (i.e. high SBC) they will seek out negative information about that brand, rather than avoid that negative information. This effect attenuates for low SBC brands. We test this proposal in three experiments.

Overview of experiments: In all studies participants first completed SBC scales (Escalas, 2004) for several brands. They were then presented with a set of article headlines, and told they would have to pick one of the articles to read in depth. One of the headlines always included negative information about the focal brand, and the other articles varied based on study and experimental condition. When the participant chose to read a negative article about the focal brand, we say they are seeking negative information about the focal brand. In study 1, the other articles in the choice set were also negative headlines, but about different brands. In studies 2 and 3, the other articles included a positive headline about the focal brand, and a positive, and negative headline about a neutral brand.

Study 1 investigated the proposed main effect – that degree of SBC will predict choice of negative information about a brand, compared to negative information about other brands. In this study, fifty-three MTurk workers chose one out of three articles with headlines indicating negative information about three different brands for which they had previously completed SBC measures – Nike, Apple, and Lululemon. As predicted, SBC significantly predicted information choice $\beta = .56 (.18)$, $p = .002$. When someone had a higher SBC score for a brand, they were more likely to choose to read the negative information about that brand, rather than another brand to which they were less connected.

Study 2 tested if SBC predicts negative information seeking even when people can choose to read positive information about the focal brand. Specifically, we investigated whether the choice in study 1 resulted from participants wanting to read any information about their high SBC brand, positive or negative. One hundred and sixty-eight undergraduates chose one out of four articles: two about the brand that had received their highest SBC score and two about a pre-tested neutral (high liking, low SBC) brand. Even when they had the option to read about their high SBC brand without incurring a mood cost, participants chose to read negative information about the brand for which they had the highest SBC score (high SBC, negative information = 47.85%, high SBC, positive = 33.45%, low SBC, negative = 4.45%, low SBC, positive = 14.05%). Looking only at people who read about their focal brand, participants were more likely to choose a negative, rather than a positive article, ($X^2(1, N = 117) = 3.8$, $p = .052$).

Study 3 examined our predictions using an experimental design and explored the proposed counterarguing process. 195 undergraduates were randomly assigned to see a set of headlines that included positive and negative articles about either their highest or lowest SBC brand as well as positive and negative articles about the control brand from study 2. After choosing which article to read they wrote a few sentences about their choice article. Results revealed that participants who saw their high SBC brand were more likely to choose the negative information about their target brand compared to participants who were choosing from a set that included articles about their low SBC brand. Further analyses revealed that those

who chose the negative article were more likely to counterargue the information after reading it.

In sum, these findings support the notion that resolution of the identity-threat by seeking information becomes more important than preserving mood when negative information has a self-identity component.

Brand Complexity's Impact on Product Liking and Consumer's Sense of Self

EXTENDED ABSTRACT

The marketing literature describes many ways to design strong brands (Aaker, 2012; Keller, 2001). Many brands have been designed around functional features, such as reliability and safety. But, brands are increasingly designed with more abstract and symbolic meanings. For example, brands are designed with personalities (e.g., Jeep is adventurous while BMW is upscale) and values (e.g., Patagonia is environmentally conscious while Ben & Jerry's is politically active). As a result, many brands that used to be simple in design (Coca-Cola: refreshing taste) are now more complex (Coca-Cola: refreshing, happy, exciting, cool).

The problem is that most marketing managers have been taught to design brands that are relatively simple and unidimensional in design, and that brands need a "unique selling proposition" to be successful. Brand management textbooks provide one identity or trait for which a particular brand stands when talking about successful brands (Keller, 2007). Thus, there is some resistance to building brands that are more complex and incorporate many different functional, abstract, and symbolic meanings.

This leads to our research question: Are complex brands more or less effective in the marketplace? Prior marketing theory would predict that more complex brands would be less effective. In contrast, we predict that more complex brands are more effective. We propose that consumers evaluate complex brands more favorably, and we find that this is because they are particularly good at helping consumers expand their identity.

The objective of study 1 was to explore whether there is a relationship between brand complexity and brand liking. To do so, we selected 2 brands from 3 categories which were similar in most domains (e.g., type of product, price level, country of origin, familiarity), but which differed in their level of liking, using Brand Asset Value (BAV, as measured by Y&R) as a proxy. We measured brand complexity by asking participants to select all of the brand traits and valued that applied to the brand in question, so that the more items selected, the more complex the brand. We also measured brand liking. Separate regression analyses with BAV and brand liking as the dependent measures revealed brand complexity as a significant predictor ($b's > .2$, $p's < .001$).

Past research has shown that brands serve as a way for consumers to construct, clarify, and/or project their identity or self-concept (Ball & Tasaki, 1992; Belk, 1988; Carroll & Ahuvia, 2006). As such, we propose that complex brands are especially helpful in this regard, given the multiple traits and values they embody, from which consumers can draw from in order to build their self-concept. One way in which the process of building one's identity manifest itself is by the expansion of one's concept of self (Aron, Lewandowski Jr, Mashek, & Aron, 2013), so we specifically predict that complex brands will lead to a greater expansion of the self-concept than less complex ones.

In order to test our predictions, we conducted two additional studies with participants recruited from Amazon's Mechanical Turk. In both studies we manipulated the perceptions of brand complex-

ity by presenting all participants with a list of eight brand traits and values, and asked them to pick four, elaborating why they did so. In the control condition the traits and values belonged to one dimension (e.g., excitement), whereas in the experimental condition they belonged to multiple dimensions (e.g., excitement, sincere, environmental concern).

In study 2, participants evaluated a familiar car brand (Toyota). We found a positive effect of brand complexity on brand evaluation, $F(1,64) = 4.0, p = .05$. Additionally, we measured participants' self-expansion with a widely used measure, where participants are asked "Who are you today?" and the number of descriptors they write is used as a measure of self-expansion (Aron et al., 2013). We found that participants in the complex condition had a more expanded self and that this self-expansion mediates the effect of brand complexity on brand liking (mediated effect = .16, $SE = .1, 95\% CI = .02$ to .43).

Recent research has found that experiencing lower self-concept clarity (SCC) predicts less interest in self-expansion (Emery, Walsh, & Slotter, 2015). If too many traits are added to the self-concept too quickly, people's understanding of the self could become unstable. Thus, people with low SCC will be less likely to self-expand, because they risk exhausting an already limited supply of self-clarity. Thus, study 3's objective was to explore SCC as a moderator of the effect of brand complexity on brand liking. To do so, we asked participants to evaluate a familiar soft drink brand (Fanta) and we measured their SCC (i.e., their need to expand their self-concept) as an individual difference. We again found a positive effect of brand complexity on brand evaluation, $F(1,99) = 4.58, p = .04$. Furthermore, we found a significant interaction between SCC and brand complexity ($b = .56, p = .02$). The effect of brand complexity is stronger for those individuals with a higher SCC (+1SD) who thus have a greater need to expand their self-concept (moderating effect = .1.04, $t = 3.26, p < .005$).

From a theoretical standpoint, this research makes significant contributions to the extant body of literature that examines how consumers use brands to help build their identity. Past research suggests that consumers form relationships with brands in order to satisfy their identity needs (e.g., Fournier, 1998). In our research, we uncover a novel brand building tactic that best serves this consumer need, while strengthening the brand. Specifically, we find evidence that, contrary to marketers' wisdom, designing a brand to be multifaceted and thus more complex is particularly helpful in aiding consumers build their identity. This is due to the multiple symbolic meanings, such as traits and values, consumers can draw from when forming connections to these brands. While there is limited research that explores the brand characteristics that are conducive to consumers using brands to help build their identities, none of this past research explores specific actions marketers can take to best serve this purpose.

The Influence of Incidental Tokenism on Attitudes Toward Stereotype-Typifying Products

EXTENDED ABSTRACT

Kanter's (1977) theory of tokenism suggests that individuals whose social identity represents less than 15% of the overall number of people in a group will face negative experiences such as increased visibility and social isolation, which can reduce motivation and performance on tasks. The negative effects of tokenism have been primarily studied in the context of formal organizations where the inclusion of a token may be attributed to higher level symbolic gestures or social pressures (King et al. 2009). However, consumers often find themselves as a token in incidental consumer groups (e.g., the one woman in a group of mostly men in a restaurant). Being

an incidental token in such transient consumer groups cannot be attributed to any kind of intentional planning from a higher authority.

The current research extends tokenism to these less formal and less intentional (i.e., incidental) group contexts, which we refer to as *incidental tokenism*. We propose that being an incidental token makes salient to the consumer the negative stereotypes chronically associated with the tokenized social identity. Since one's own correspondence with negative stereotypes can engender negative affect (Fiske 1982), tokens are expected to report less favorable attitudes toward products that typify negative stereotypes of their tokenized identity in an attempt to avoid conforming to those negative stereotypes.

In study 1, MTurk participants indicated their gender and read that they would be placed into an online group with other MTurk workers. In the token condition all other members of the 10-person group were of the opposite gender of the participant. In the nontoken condition eight members were of the same gender and one was of the opposite gender. In actuality there were no other group members and we displayed fictitious responses to various "getting to know you" questions for each group member. Participants then read brief descriptions of two novels (which were pretested to ensure they corresponded with negative female-gender stereotypes) and subsequently evaluated the books. Participants were explicitly told that these ratings would be confidential and anonymous. As expected, female participants evaluated the romance novels significantly less positively when they believed themselves to be a token versus nontoken group member ($M_{\text{token}} = 3.35$ vs. $M_{\text{nontoken}} = 4.23; F(1, 104) = 8.11, p < .005$). No effect was found for males, as should be the case since the novels did not correspond with negative stereotypes of their male identity.

Study 2 used the same token and nontoken manipulations, but with age (40+ vs. under-40) as the primary identity. Participation was restricted to individuals 40 years of age or older. After the token/nontoken manipulation, participants evaluated the *Buick Lucerne* automobile, which a pretest found to be strongly associated with the negative stereotypes of older individuals. As expected, 40+ year old participants evaluated the *Buick Lucerne* significantly less positively when they believed themselves to be a token versus nontoken ($M_{\text{token}} = 5.49$ vs. $M_{\text{nontoken}} = 6.54; F(1, 54) = 8.35, p < .02$).

Study 3 served two purposes. First, we sought evidence of negative stereotype activation as the process for our effect. Second, we wanted to rule out the possibility that our results could be due to the token identity increasing in salience as a result of being a token. Study 3 used a 3 (Group: gender prime vs. token vs. negative stereotype activation) x 2 (Product: identity vs. non-identity relevant) between-subjects design. Only female participants were used in this study. Gender-prime participants were asked to write about how their gender influenced their decision making and interpersonal relationships. Negative-stereotype participants were asked to describe negative stereotypes associated with their gender. The token manipulation was identical that in studies 1 and 2. Participants then evaluated either one of the books used in study 1 (identity product condition) or a book that was not linked to the female identity (non-identity product). An ANOVA revealed a main effect of product ($p < .001$) and a significant interaction between group and product ($p < .02$). Planned contrasts revealed that participants in the token ($M_{\text{token}} = 3.37$ vs. $M_{\text{gender prime}} = 4.57; F(1, 108) = 11.04, p < .01$) and negative-stereotype ($M_{\text{negative stereotype}} = 3.59$ vs. $M_{\text{gender prime}} = 4.57; F(1, 119) = 7.51, p < .007$) conditions rated the identity-relevant book significantly less favorably than those in the gender-prime condition. There was no significant difference between the token condition and negative-stereotype activation condition ($F(1, 101) = .59; p > .05$). No significant differences were found for the non-identity linked book, as expected.

Study 4 examined the moderating role of self-affirmation. Consistent with research showing that individuals overcome stereotype threats when self-affirmed (Aronson, Fried & Good, 2002), self-affirmation moderated the effect of tokenism on product attitudes. Planned comparisons revealed that in the *no affirmation* condition, token participants evaluated the *Buick Lucerne* significantly less favorable ($M_{\text{token}} = 6.07$ vs. $M_{\text{nontoken}} = 6.80$; $F(1,104) = 4.09$, $p < .04$). Most importantly, in the *affirmation* condition, there was no significant difference between the token vs. nontoken condition ($M_{\text{token}} = 6.68$ vs. $M_{\text{nontoken}} = 6.10$; $F(1, 93) = 2.27$, $p > .05$).

Study 5 found that incidental tokenism on has a negative impact on product evaluations for products that typify the negative stereotypes of the identity as opposed to all identity-related products. Token (nontoken) participants were asked evaluate two identity-linked books—one that typified the negative stereotypes of the identity and one which did not. Results revealed that token participants evaluated the first negative-stereotype-typifying book significantly less favorably than nontoken participants ($M_{\text{token}} = 3.89$ vs. $M_{\text{nontoken}} = 4.59$; $F(1, 270) = 10.45$, $p < .001$). There was no effect for the book that did not typify negative stereotypes.

In sum, across multiple identities and multiple goods, we find that incidental tokens report less favorable attitudes toward products that typify negative stereotypes of their tokenized identity. This decrease in attitudes does not extend to products unassociated with one's identity or identity-linked products that do not correspond to negative stereotypes, and is eliminated when consumers are offered an opportunity to affirm the self prior to giving their attitudes.

Brands as Mitigators of Physical Pain: The Mediating Role of Social Connectedness

EXTENDED ABSTRACT

Why can loved brands mitigate physical pain consumers experience in the lives? Using an experimental-causal-chain design in two separate experiments, this work highlights that feelings of social connectedness explain why loved brands help consumers cope with pain.

Experiment 1

The goal of Experiment 1 was to manipulate close brand relationships and observe the effect on a measure of feelings of social connectedness, attempting to provide the first link of the experimental-causal chain (Spencer, Zanna, and Fong 2005). Participants were randomly assigned to one of two conditions. Participants in the *close brand relationship condition* were asked to self-generate and write about a brand that they loved. Participants in the *control condition* were given a filler task in which they were asked to solve one-digit addition and subtraction problems. Then, participants were exposed to a psychological pain scenario (loss of a loved one) and reported their overall pain on an established six-point scale (Hicks et al. 2001). In between pain measurements, participants were shown their loved brand (or not) and then rated their pain again. To measure feelings of social connectedness, we utilized an established 20-item scale (Russell 1996). A repeated-measures analysis of variance with condition (close brand relationship, control) as between-subjects independent variable, time (T1, T2) as within-subjects independent variable, and pain as dependent variable found a significant interaction effect between time and condition on pain, $F(1, 709) = 80.78$, $p < .001$, $\eta_p^2 = .10$. Both the direct effect of time on pain, $F(1, 709) = 611.74$, $p < .001$, $\eta_p^2 = .46$, and the direct effect of condition on pain, $F(1, 709) = 48.82$, $p < .001$, $\eta_p^2 = .06$, were significant. Independent-samples *t*-tests revealed that participants in the close brand relationship con-

dition exhibited a significantly greater decrease in pain between T1 and T2 ($\Delta = -2.29$) than did participants in the control condition ($\Delta = -1.06$; $p < .001$, $d = -.68$).

Experiment 2

The goal of Experiment 2 was to manipulate feelings of social connectedness and observe the effect on pain, attempting to provide the second link of the experimental-causal chain (mediator \rightarrow dependent variable) (Spencer et al. 2005). We applied an established self-construal manipulation in which the self is defined in terms of social connectedness after either being or not being interdependently construed (Cross, Morris, and Gore 2002). We thus follow extant research that defines the self as an affectively-charged mental representation (Higgins et al. 1986; Markus 1977; Mikulincer 1995), which is why we expected the self-construal manipulation to be a valid proxy for manipulating feelings of social connectedness. Prior to participants' arrival at the lab, we set up the cold pressor apparatus and a laptop with the experimental stimuli. The cold pressor apparatus consisted of a small ice chest filled with water, a small pond pump for water circulation, and two thermometers. The water temperature was monitored constantly and was kept at $6 \pm .5^\circ \text{C}$ by regularly refilling the ice chest with ice cubes. Upon arrival at the lab, participants were randomly assigned to either the interdependent or the independent self-construal condition. We followed pertinent instructions on two self-construal manipulations established in social psychology (Brewer and Gardner 1996; Trafimow, Triandis, and Goto 1991) and widely applied in consumer research (e.g., Loveland, Smeesters, and Mandel 2010; Mandel 2003). We used both manipulations in sequence, as has been done previously (Krishna, Zhou, and Zhang 2008). In the *interdependent self-construal* condition, participants read the story about the Sumerian warrior Sostoras, whose choice would bring *prestige to his family* (cf. Trafimow et al. 1991), and were then asked whether they admired Sostoras (yes, no, not sure). Participants then proofread someone's travel report to France in which all pronouns were plural (e.g., *we, our*) and were asked to count the pronouns (adapted from Brewer and Gardner 1996). Participants then proceeded to the cold pressor task. Participants were then asked to place their left hand in the water for one minute and to keep their eyes on the screen for the duration of the experiment. Immediately after taking their hand out of the water, they were asked to rate their overall pain as was described under Experiment 1. In between pain measurements, participants read the sentence "*We had a great time in France!*" on the laptop screen in front of them. In the *independent self-construal* condition, participants followed the same procedure, except that Sostoras' choice would bring *prestige to himself* and all pronouns in the travel report were singular (e.g., *I, my*). In between pain measurements, participants instead read the sentence "*I had a great time in France!*" A repeated-measures analysis of variance with self-construal (interdependent, dependent) as between-subjects variable, time (T1, T2) as within-subjects independent variable and pain as dependent variable found a significant interaction effect between time and condition on pain, $F(1, 116) = 5.27$, $p < .05$, $\eta_p^2 = .04$. The direct effect of time on pain was significant, $F(1, 116) = 161.76$, $p < .001$, $\eta_p^2 = .58$, while the direct effect of condition on pain was nonsignificant ($p = .931$). Independent-samples *t*-tests revealed that participants in the interdependent self-construal condition exhibited a significantly greater decrease in pain between T1 and T2 ($\Delta = -1.90$) than did participants in the independent self-construal condition ($\Delta = -1.32$; $p = .024$, $d = -.42$).

Discussion

This work contributes to work on the association between *self-brand connections and social inclusion*. In a two-study, multi-

method approach, we reveal that close brand relationships lead to feelings of social connectedness, which in turn provide pain insulation. This finding contributes to and extends prior research arguing that consumers are more likely to develop self-brand connections if strong associations exist between the brand, a reference group, and the consumer's self-concept (Escalas and Bettman 2003). We also expand on work that revealed that lonely consumers establish a goal to belong (Loveland et al. 2010) and magnify research showing that socially isolated consumers (vs. control) are more likely to purchase products symbolic of group membership (Mead et al. 2011).

REFERENCES

- Aaker, D. A. (2012). *Building Strong Brands*. New York: Simon and Schuster.
- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. *Journal of Consumer research*, 31(1), 1-16.
- Ahluwalia, R., Burnkrant, R. E., & Unnava, H. R. (2000). Consumer response to negative publicity: The moderating role of commitment. *Journal of marketing research*, 37(2), 203-214.
- Aron, A., Lewandowski Jr, G. W., Mashek, D., & Aron, E. N. (2013). The self-expansion model of motivation and cognition in close relationships. In J. A. Simpson & L. Campbell (Eds.), *The Oxford Handbook of Close Relationships* (pp. 90-115): Oxford University Press.
- Aronson, Joshua, Carrie B. Fried, and Catherine Good (2002), "Reducing The Effects Of Stereotype Threat on African American College Students by Shaping Theories of Intelligence," *Journal of Experimental Social Psychology*, 38 (2), 113-25.
- Aronson, E. (1968). Dissonance theory: Progress and problems.
- Ball, A. D., & Tasaki, L. H. (1992). The role and measurement of attachment in consumer behavior. *Journal of Consumer Psychology*, 1(2), 155-172.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168.
- Brewer, Marilyn B. and Wendi Gardner (1996), "Who Is This 'We'?" Levels of Collective Identity and Self Representations," *Journal of Personality and Social Psychology*, 71 (1), 83-93.
- Carroll, B. A., & Ahuvia, A. C. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, 17(2), 79-89.
- Christianson, Sven-Åke, Elizabeth F Loftus, Hunter Hoffman, and Geoffrey R Loftus (1991), "Eye Fixations and Memory for Emotional Events," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 17 (4), 693.
- Cross, Susan E., Michael L. Morris, and Jonathan S. Gore (2002), "Thinking About Oneself and Others: The Relational-Interdependent Self-Construal and Social Cognition," *Journal of Personality and Social Psychology*, 82 (3), 399-418.
- Ehrich, K. R., & Irwin, J. R. (2005). Willful ignorance in the request for product attribute information. *Journal of Marketing Research*, 42(3), 266-277.
- Escalas, Jennifer Edson and James R. Bettman (2003), "You Are What They Eat: The Influence of Reference Groups on Consumers' Connections to Brands," *Journal of Consumer Psychology*, 13 (3), 339-48.
- Escalas, J. E. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14(1-2), 168-180.
- Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of consumer research*, 32(3), 378-389.
- Escalas, J. E., & Bettman, J. R. (2009). Connecting with celebrities: Celebrity endorsement, brand meaning, and self-brand connections. *Journal of Marketing Research*, 1-35.
- Emery, L. F., Walsh, C., & Slotter, E. B. (2015). Knowing who you are and adding to it: Reduced self-concept clarity predicts reduced self-expansion. *Social Psychological and Personality Science*, 6(3), 259-266.
- Fiske, Susan T. (1982), "Schema-Triggered Affect: Applications to Social Perception," in *Affect and Cognition: 17th Annual Carnegie Mellon Symposium on Cognition*, ed. Margaret S. Clark and Susan T. Fiske, Hillsdale, NJ: Erlbaum, 55-78.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343-53.
- Golman, R., Hagmann, D., & Loewenstein, G. (2016). Information avoidance.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In *Public self and private self* (pp. 189-212). Springer New York.
- Hayes, Andrew F. (2008), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*: Guilford Press.
- Hicks, Carrie L., Carl L. von Baeyer, Pamela A. Spafford, Inez van Korlaar, and Belinda Goodenough (2001), "The Faces Pain Scale-Revised: Toward a Common Metric in Pediatric Pain Measurement," *Pain*, 93 (2), 173-83.
- Higgins, E. Tory, Ronald N. Bond, Ruth Klein, and Timothy Strauman (1986), "Self-Discrepancies and Emotional Vulnerability: How Magnitude, Accessibility, and Type of Discrepancy Influence Affect," *Journal of Personality and Social Psychology*, 51 (1), 5-15.
- Hong, Jiewen and Hannah H. Chang (2015), "'I' Follow My Heart and 'We' Rely on Reasons: The Impact of Self-Construal on Reliance on Feelings Versus Reasons in Decision Making," *Journal of Consumer Research*, 41 (6), 1392-411.
- Kanter, Rosabeth Moss (1977), "Some Effects of Proportions on Group Life: Skewed Sex Ratios and Responses to Token Women," *American Journal of Sociology*, 82(5), 965-90.
- Keller, K. L. (2001). Building customer-based brand equity. *Marketing Management*, 10(2), 14-19.
- Keller, K. L. (2007). *Building, Measuring, and Managing Brand Equity* (3rd. ed.). New Jersey: Prentice Hall.
- King, Eden B., Michelle R. Hebl, Jennifer M. George, and Sharon F. Matusik (2009), "Understanding Tokenism: Antecedents and Consequences of a Psychological Climate of Gender Inequity," *Journal of Management*, 36(2), 482-510.
- Krishna, Aradhna, Rongrong Zhou, and Shi Zhang (2008), "The Effect of Self-Construal on Spatial Judgments," *Journal of Consumer Research*, 35 (2), 337-48.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological bulletin*, 108(3), 480.
- Loveland, Katherine E., Dirk Smeesters, and Naomi Mandel (2010), "Still Preoccupied with 1995: The Need to Belong and Preference for Nostalgic Products," *Journal of Consumer Research*, 37 (3), 393-408.
- Luce, M. F., Payne, J. W., & Bettman, J. R. (1999). Emotional trade-off difficulty and choice. *Journal of Marketing Research*, 143-159.
- Mandel, Naomi (2003), "Shifting Selves and Decision Making: The Effects of Self-Construal Priming on Consumer Risk-Taking," *Journal of Consumer Research*, 30 (1), 30-40.

- Markus, Hazel (1977), "Self-Schemata and Processing Information About the Self," *Journal of Personality and Social Psychology*, 35 (2), 63-78.
- McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of consumer research*, 16(3), 310-321.
- Mead, Nicole L., Roy F. Baumeister, Tyler F. Stillman, Catherine D. Rawn, and Kathleen D. Vohs (2011), "Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation," *Journal of Consumer Research*, 37 (5), 902-19.
- Mikulincer, Mario (1995), "Attachment Style and the Mental Representation of the Self," *Journal of Personality and Social Psychology*, 69 (6), 1203-15.
- Mitchell, Laura A., Raymond A.R. MacDonald, and Eric E. Brodie (2004), "Temperature and the Cold Pressor Test," *Journal of Pain*, 5 (4), 233-37.
- Russell, Dan, Letitia A. Peplau, and Carolyn E. Cutrona (1980), "The Revised UCLA Loneliness Scale: Concurrent and Discriminant Validity Evidence," *Journal of Personality and Social Psychology*, 39 (3), 472-80.
- Russell, Daniel W. (1996), "Ucla Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure," *Journal of Personality Assessment*, 66 (1), 20-40.
- Spencer, Steven J, Mark P Zanna, and Geoffrey T Fong (2005), "Establishing a Causal Chain: Why Experiments Are Often More Effective Than Mediational Analyses in Examining Psychological Processes," *Journal of Personality and Social Psychology*, 89 (6), 845-51.
- Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information avoidance: Who, what, when, and why. *Review of general psychology*, 14(4), 340.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-55.
- von Baeyer, Carl L., Tiina Piira, Christine T. Chambers, Manuela Trapanotto, and Lonnie K. Zeltzer (2005), "Guidelines for the Cold Pressor Task as an Experimental Pain Stimulus for Use with Children," *Journal of Pain*, 6 (4), 218-27.

The Effect of Morality in the Marketplace

Chairs: Corinne Kelley, Florida State University, USA

Sara Baskentli, Baruch College, the City University of New York, USA

Paper #1: Reducing Peak-Hour Subway Crowding: Investigating the Effectiveness of Financial Disincentives

Leonard Lee, National University of Singapore, Singapore
Xiuping Li, National University of Singapore, Singapore
Catherine Yeung, Chinese University of Hong Kong, China

Paper #2: The Ambassador Effect: A Pre-Commitment Technique to Increase Consumer Prosocial Behavior and Loyalty

Corinne Kelley, Florida State University, USA
Maura L. Scott, Florida State University, USA
Martin Mende, Florida State University, USA

Paper #3: Consumer Reactions to CSR: Morality Based Differences

Sara Baskentli, Baruch College, the City University of New York, USA
Shuili Du, University of New Hampshire, USA
Sankar Sen, Baruch College, the City University of New York, USA
CB Bhattacharya, European School of Management and Technology, Germany

Paper #4: How Beliefs about the Universal Potential for Ideal Body Weight Influence Fairness Perceptions of Price Discrimination

Shaobo Li, Nanyang Technological University, Singapore
Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria
Krishna Savani, Nanyang Technological University, Singapore

SESSION OVERVIEW

The theme of this special session relates to the various effects of morality in the marketplace. Expanding on prior research (Gino et al. 2010; Kidwell et al. 2013), the collection of papers identifies novel external and internal factors pertaining to morality—that relate to the consumer and/or the firm—and examines how they influence consumer evaluations/behavior.

In the first paper, Lee, Li and Yeung investigate morality as an external influencer—outside of consumers' internal beliefs—to be utilized by the firm. They test morality as a framing tool, meant to enhance consumer response to public policies. The authors investigate how framing a penalty based incentive (e.g., surcharge) as a moral behavior (e.g., donation) might attenuate negative sentiments associated with the penalty. Counterintuitively, they find morality can backfire as a framing instrument, working against firm policy.

The second paper also looks at morality external to a consumer's inherent beliefs, but researches morality from a more traditional perspective, with the goal of understanding how to enhance moral behaviors. Kelley, Mende and Scott examine how a unique, social influence based, pre-commitment tool and retail policy—that promotes financial incentives—operate as external cues to alter consumers' moral behavior as it relates to engaging in a prosocial cause. This work is significant in that it identifies three external factors—pre-commitment, social influence, and policy—that impact moral behavior.

The third paper by Baskentli, Sen, and Bhattacharya investigates morality from an internal perspective. The authors test how variations in consumers' moral concerns interact with a company's CSR record (strengths vs. concerns) in seven key CSR domains

(Corporate Governance, Diversity, Employee Relations, Community, Environment, Human Rights, and Product Safety) to affect company evaluations. Their central premise is that since CSR actions are inherently moral acts, consumer reactions to the domain of such actions should vary across the different morality clusters.

Finally, Li, Kokkoris and Savani also investigate how consumers' moral beliefs impact attitudes and preferences. Uniquely, they study the impact of internal morality on evaluations of a firm's discriminatory practices (also a moral issue), proposing that some moral ideals are applied to others universally, where everyone is expected to meet the same standard of virtuous behavior. This paper addresses how consumers' morality, as it relates to universal expectations of self-control and obesity, influence consumers' response to pricing policies deemed unfair. The final two papers make important contributions by demonstrating how consumers' internal morality influence firm evaluations among in-domain variables.

Collectively, the four papers raise the key question: What critical factors influence moral evaluations/behaviors in the marketplace? This is important as consumers are often faced with notions of “right” and “wrong.” With reoccurring debates of morality, it is not surprising that consumers struggle to balance their will-power and desires when faced with marketplace decisions. Thus, this special session brings together leading scholars to enhance understanding of (im) moral behaviors, while using diverse methods (e.g., field and lab experiments). We expect this session to encourage broader discussion of morality, expanding researchers' assumptions of what dictates morality in the marketplace.

Reducing Peak-Hour Subway Crowding: Investigating the Effectiveness of Financial Disincentives

EXTENDED ABSTRACT

Subway systems in urban cities are often heavily congested during peak hours. At times, trains are over-crowded to the extent that commuters cannot board them. Many cities adopt travel demand management measures such as time-based pricing to shift demand from peak- to off-peak periods. The most common approach is to offer discounted fares during off-peak periods and position the discount as a reward for early birds. An alternative solution to reducing peak-hour crowding is to impose a peak-hour surcharge and position the differential fare as a loss. Given that people are in general more motivated to avoid losses than to acquire gains (Tversky and Kahneman 1991), a peak-hour surcharge may be more effective than off-peak discounts in shifting demand from peak to off-peak periods. Nonetheless, commuters may display strong opposition to the surcharge policy, making it challenging to implement such a policy. These negative reactions may be explained by either commuters' aversion to heavier financial burdens resulting from peak-hour travel, or their psychological defense against the lack of freedom to choose their own travel time.

The objectives of this research are to examine the effectiveness of a surcharge policy at shifting travel from peak to off-peak periods as well as assess commuters' perception of the surcharge policy. In addition, we aim to develop and test different potential solutions to increase commuters' receptivity toward peak-hour surcharge. Specifically, in our study, we investigated the behavioral and psychological impact of framing the surcharge as a moral behavior by donating the

collected surcharge to charity—varying the proportion of the surcharge donated (50% vs. 100% of the surcharge collected) and the degree of autonomy commuters had in deciding the benefactor of the donation (commuters made their own choice of benefactor vs. the subway company predetermined a specific benefactor). We expected these features of the surcharge donation to reduce opposition in two ways. First, if commuters indeed perceive peak-hour surcharge as unfair to them, such that the surcharge exploits their need to travel to work to obtain financial gains (Nagle et al. 2016), donating the surcharge should negate this perception. Further, having 100% of the surcharge donated may reduce commuter opposition to a greater degree than having only 50% donated. Second, restrictive policies such as surcharge are often perceived as a control over people's choice availability and a threat to their autonomy (Laurin 2012; Laurin et al. 2013). Accordingly, introducing a procedure that could help reaffirm commuters' sense of autonomy (i.e., allowing commuters to choose their donation benefactor) may reduce their opposition to the surcharge policy (Kivetz 2005).

While these two factors—donation and restoration of autonomy—could reduce reactance against peak-hour surcharge, they may paradoxically reduce the effectiveness of the surcharge as a deterrent. In particular, knowing that the surcharge will be donated, commuters may find new meanings in the surcharge and consider the discouraged behavior a socially responsible act. As a result, they may not decrease their frequency of peak-hour travel and may even increase it. Our empirical study also examines this possibility.

We conducted a national randomized controlled trial (RCT) with more than 1,000 commuters across Singapore, randomly assigning these participating commuters to one of six conditions in a 2 (amount of donation: 50% vs. 100%) x 2 (benefactor: self-chosen vs. pre-assigned) + 2 (no-donation + no-surcharge control) between-subjects design. With the commuters' consent, we tracked their travel histories before, during, and after a 6-week intervention period as recorded on their chip travel card. We also captured their attitudes toward the surcharge policy at different points in time during the experiment.

The results of the field experiment demonstrated that peak-hour surcharge effectively reduced the volume of peak-hour travel. However, donation of the surcharge to charity *reduced* the effectiveness of the surcharge in smoothing the peak-hour crowd. Moreover, the donation also failed to reduce attitudinal opposition to the surcharge policy. This result held regardless of how much of the collected surcharge was donated and who had selected the benefactor. A closer examination of the travel patterns in the donation conditions revealed that participants who had revealed less flexibility (vs. those with more flexibility) in their pre-trial travel times were particularly inclined to continue traveling during peak periods, suggesting that these participants were using the charity donation as a justification to retain their status-quo travel patterns. By contrast, travel-time flexibility did not influence commuters' response to the peak-hour surcharge when the surcharge was not donated to charity; that is, how flexible commuters' travel times were did *not* affect commuters' propensity to shift their subway travel to off-peak periods in the no-charity condition.

In summary, our findings indicated that the "pure form" of surcharge (i.e., with the subway company retaining 100% of the collected surcharge) would yield the most promising result from a policy standpoint. Furthermore, besides traveling less during peak hours, commuters in this condition showed a moderate degree of adaptation to the surcharge policy—their attitude towards the surcharge became less negative by the end of the intervention period.

The Ambassador Effect: A Pre-Commitment Technique to Increase Consumer Prosocial Behavior and Loyalty

EXTENDED ABSTRACT

Although incentivizing consumers to engage in sustainable, prosocial behaviors is a moral initiative (Baca-Motes et al. 2013; Goldstein et al. 2008; Smith 2016), altering such behavior is no simple task. Recognizing the positive environmental, monetary, and reputational impact of such an effort, many state legislatures (NCSL 2016) and retailers (Parker 2016; Smith 2016; Target Brands, Inc. 2016) are instituting retail policies meant to encourage reusable bag use and reduce the use of disposable bags. These policies either utilize reward based incentives (e.g., discounts for bringing reusable bags) or penalty based incentives (e.g., plastic bag bans or fees).

Still, it is not clear how consumers might respond to such policies. Thus, we need to understand if consumers are most responsive to reward or penalty based policies, and what can be done to improve the effectiveness of these policies. Expanding work on social influence, sustainability (e.g., Goldstein et al. 2008), and behavioral reinforcement theory (Andreasen 2002; Bickel and Vuchinich 2000; Rothschild 1999), the present research seeks to understand how social influence impacts financial incentives' ability to encourage prosocial behavior. We propose a novel, pre-commitment tool, referred to as the "ambassador effect," that suggests consumers are more likely to engage in subsequent prosocial behaviors if asked to involve another person in the initiative. Even more importantly, we demonstrate that this ambassador effect can enhance the success of penalty based retail policies.

Our proposed ambassador effect emerges in light of extant research on social influence and pre-commitment. Prior work relies on social norms to push prosocial behavior (Goldstein et al. 2008; Schultz et al. 2008), whereas we argue involving another person in a prosocial action leverages anticipated social interaction as a pre-commitment tool. Work on commitment demonstrates engaging in small behaviors aligned with a larger obligation is effective at influencing subsequent behavior (Cialdini 2007; Freedman and Fraser 1966). Pre-commitment's influence on behavior is supported by cognitive dissonance theory's principle of consistency, which suggests that individuals are driven to keep their attitudes/beliefs harmoniously aligned with their current state (Festinger 1957). In our research, we propose that when a consumer agrees (pre-commits) to involve another person in a prosocial action, the social aspect of the pre-commitment causes the consumer to take on an ambassador like role, where they feel obligated to represent and promote the prosocial cause. Due to the consistency principle, the consumer will be motivated to align their subsequent behavior with the ambassador role, increasing prosocial behavior.

We test this hypothesis in the field and lab. In study 1, participants outside of a grocery store completed a short survey in exchange for a free reusable bag. Upon completion, participants in the baseline condition were given one bag, whereas participants in the ambassador condition were given one bag to keep and a second bag to give to another person. Findings show that consumers primed with an ambassador role are more likely to use reusable bags in the future, compared to consumers who were not primed.

An alternative explanation is that these findings are the result of those in the ambassador condition receiving two bags, whereas those in the baseline condition only received one bag. In study 2, we replicate our findings, and rule out the alternative explanation of bag quantity. We add a third condition to the bags factor in which lab participants are told they received two free bags for personal use. We compare the 1 bag and 2 bags condition to the ambassador condition,

finding that the ambassador condition results in greater future reusable bag use relative to both other conditions.

Finally, this paper suggests that the ambassador effect moderates the success of retail policy incentives. In general, we suggest penalty based policies are inferior to reward based policies as reward based policies have no obvious drawback (the individual, retailer, and society all benefit). However, penalty based policies can cultivate consumer opposition as consumers have become accustomed to receiving disposable bags, free of charge, and are likely distressed when fined for a traditionally free service. Moreover, prior research has highlighted several adverse side effects of negative reinforcement such as aggression toward and avoidance of the penalizing entity (Balsam and Bondy 1983). These undesirable effects occur with low intensity penalties as they tend to be less effective (Gneezy et al. 2011; Solomon 1964). Thus, when applying a low intensity loss (e.g., five cent fee), we predict consumers will oppose penalty based policies more than reward based policies.

However, we hypothesize that our ambassador effect will mitigate this opposition to penalty based reinforcement. When the ambassador effect is activated, the need to align a pre-commitment with consistent behavior will attenuate the consumer's rebellion. In addition, the social aspect of the ambassador effect (involving another person) should cause compliance with a prosocial policy to appear more public. Thus, the ambassador effect should enhance receptivity to a penalty based policy as penalty based incentives are more effective when prompting public compliance over private acceptance (Allen 1965; Festinger 1953). Finally, we expect the same moderating effect to spillover onto loyalty toward the retailer employing the policy.

We test our theorizing in study 3, where lab participants were given information about a retail policy stating that, "... retail customers will be [charged/offered] a 5-cent [fee/discount] for each [plastic/reusable] bag they use during check-out." Next, participants were randomly assigned to the baseline or ambassador condition. Findings indicate consumers report high commitment to *reward based policies*, for both the baseline and ambassador conditions. Contrastingly, for *penalty based policies*, participants in the baseline condition revealed relatively low commitment to the policy. Importantly, this low commitment is raised to the level of a reward based policy when a consumer is primed with an ambassador role, attenuating negative effects of the penalty. The same moderating pattern appeared for store loyalty. Moreover, commitment to the policy was found to mediate this change in loyalty.

Altogether, our findings indicate priming a prosocial ambassador is an effective pre-commitment technique that enhances prosocial (moral) behavior, and improves the success of negatively reinforced retail policies.

Consumer Reactions to CSR: Morality Based Differences

EXTENDED ABSTRACT

The CSR actions of a company have been shown to enhance consumers' attitudes, increase purchase likelihood, and improve the company's long-term reputation (Du, Bhattacharya, and Sen 2010). Notably, these CSR actions can fit in one or more of several different CSR domains. Yet, little is known about consumer preferences for specific domains. Prior research points to the importance of domain-specific characteristics in driving consumer response to a company's CSR actions (Kidwell et al. 2013), underscoring the need for a systematic investigation of the role of CSR domains in consumer reactions to a company's CSR record.

In this research, we draw upon moral foundations theory (MFT) to investigate how variations in consumers' moral concerns interact with a company's CSR record in different CSR domains to affect their company evaluations. MFT focuses on the psychological basis of morality (Winterich, Zhang, and Mittal 2012) to identify five moral foundations among which moral behavior varies: 1) harm (minimizing harm to others), 2) fairness (maximizing fairness to all), 3) loyalty (the importance of the in-group), 4) authority (respect for status and hierarchy), and 5) purity (avoiding impure or disgusting acts/entities) (Haidt and Graham 2009). Past research has collapsed these foundations into two superordinate factors; *individualizing*, comprising fairness and harm, and *binding*, comprising loyalty, tradition, and purity (Graham, Haidt, and Nosek 2009). The individualizing dimension is concerned with protecting individual's rights and treating them fairly whereas the binding foundation pertains to preserving the group as a whole (Haidt and Graham 2007). Consumers can be high or low on each of these dimensions, falling thus into four moral concerns clusters: Low Individualizing, Low Binding (LI-LB); Low Individualizing, High Binding (LI-HB); High Individualizing, Low Binding (HI-LB); High Individualizing, High Binding (HI-HB). Our central premise is that since CSR actions are inherently moral acts, consumer reactions to the domain of such actions should vary across the different morality clusters.

We focused on seven CSR domains (Corporate Governance, Diversity, Employee Relations, Community, Environment, Human Rights, and Product Safety) by modifying the generic descriptions of each domain provided by the KLD Indices—the most widely used and comprehensive information source for corporate social performance research (Chen and Delmas 2011). Thus, our study used a 7 (CSR domains; between subjects) \times 2 (CSR record: concerns vs. strengths; within subjects) \times 4 (moral concerns clusters; measured) design. Two hundred nine Amazon Mechanical Turk workers (44.5% female, $M_{age} = 35.32$ SD = 11.52) located in the U.S. participated in this study in exchange for monetary compensation. Participants were randomly assigned to evaluate seven different companies (one for each CSR domain), each with a name that belongs to a South American company, unfamiliar to the U.S. sample. For each company, participants were exposed to a brief description about the company's record on a specific CSR dimension. Over the seven different companies, participants were exposed to all seven CSR domains, with either strengths in four domains and weaknesses in three other domains or, alternately, strengths in three domains and concerns in four other domains. This design allowed us to expose each participant to all seven CSR domains without ever having him/her evaluate the same company on both concerns and strengths in the same CSR domain. After reading each company description, respondents evaluated the company (7-point scale; 1 = very unlikable, 7 = very likable). After evaluating all seven companies, participants completed the 30-item moral foundations questionnaire (MFQ; Graham et al. 2011).

The four moral concerns clusters were created by collapsing five core foundations into two factors; individualizing (the aggregate score on harm and fairness; $\alpha = 0.79$) and binding (the aggregate score on authority, in-group loyalty, and purity; $\alpha = 0.87$). Then, following prior research, we added participants' scores on the individualizing foundations, and performed a median split on our data using these scores. Similarly, we added participants' scores on binding foundations, and performed another median split (Kim et al. 2014). So, participants were divided into four moral concern clusters (LI-LB), (LB-HI), (HI-HB) and (LI-HB) around the respective median values for these measures.

We used a linear mixed-effects model to investigate the differences in company evaluations based on participants' moral concerns cluster, the CSR domain, and companies' record in each domain (i.e., concerns or strengths). We found a significant three-way interaction of CSR domain \times CSR record \times Moral Concerns Cluster ($p < .001$), indicating that participants who belong to different moral concerns clusters react uniquely to a company's CSR record in different CSR domains. To further investigate this three-way interaction, we analyzed the data separately for the two CSR records (concerns vs. strengths). When reacting to concerns, our results reveal that the *Low Binding – High Individualizing* moral concerns cluster dislikes the company more compared to the *Low Binding – Low Individualizing* cluster ($M_{LBHI} = 1.55$ vs. $M_{LBI} = 2.65$; $p = .001$), and compared to the *Low Individualizing – High Binding* cluster ($M_{LBHI} = 1.55$ vs. $M_{LIHB} = 2.34$; $p = .014$) in the Corporate Governance, Diversity, Environment, Human Rights and Product Safety domains. There were no significant differences in the other two domains. Interestingly, we do not obtain similar results in the strengths condition. Our results revealed that the *High Binding – High Individualizing* cluster likes the company more compared to the *Low Binding – Low Individualizing* cluster ($M_{HBHI} = 6.50$ vs. $M_{LILB} = 5.92$; $p = .025$) in the Product Safety and Environment domains ($M_{HBHI} = 6.65$ vs. $M_{LILB} = 5.65$; $p < .001$).

Overall, we find that when people evaluate CSR strengths, those who are high on both individualizing and binding foundations show greater liking towards the company compared to those who are low on both foundations. Interestingly, we do not obtain similar results when individuals evaluate the records of CSR concerns. We find that the *High Individualizing–Low Binding* cluster shows greater dislike towards the company compared to the *Low Individualizing–High Binding* cluster.

How Beliefs about the Universal Potential for Ideal Body Weight Influence Fairness Perceptions of Price Discrimination

EXTENDED ABSTRACT

A newly emerged pricing policy advocates discriminating prices for the same service based on consumers' characteristics; a practice some might deem unfair or immoral. For example, Samoa Air implements a "pay-as-you-weigh" policy, charging its passengers based on their body weight. Such pricing policies, where firms charge different prices to different customer segments, have been called third-degree price discrimination or variable consumer pricing (Kuo et al. 2016). Prior research on price discrimination and fairness has examined the factors that influence consumers' fairness perception (e.g., Kuo et al. 2016; Xia et al. 2004, Wu et al. 2012) and the negative consequences of price discrimination (e.g., Bolton et al. 2010; Campbell 1999; Ferguson et al. 2013). In this research, we investigate how consumers' lay beliefs about body weight affect their attitudes towards price discrimination.

Specifically, we investigate how the belief that only some people versus everyone can achieve an ideal body weight influences consumers' attitude towards price discrimination. This is based on prior research examining people's beliefs that ideal levels of certain traits are found limited only to some people or across all people (non-universal-universal beliefs). For example, Rattan et al. (2012) showed that universal (vs. non-universal) beliefs of intelligence predict increased support for policies that distribute resources more equally across advantaged and disadvantaged social groups. Lay beliefs about the universality of potential have been shown to be conceptually and empirically distinct from lay theories about the malleability or stability of individual traits (fixed-growth beliefs; Murphy

and Dweck 2016), as well as have distinct consequences (Rattan et al. 2012).

We hypothesize that universal (vs. non-universal) beliefs enhance fairness perceptions of discriminating pricing policies (Study 1) via highlighting the benefits for the individual rather than for the company (Study 2). Further, we predict that this effect only occurs when the source of the discrimination is related to body weight and not other types of pricing discrimination, such as discrimination based on the financial situation (Study 3). Finally, drawing upon research showing that people with growth (vs. fixed) beliefs have greater openness to personal improvement (Chiu et al. 1997; Erdley and Dweck 1993; Plaks et al. 2001), we predict that growth belief, as compared to fixed belief, will increase consumers' acceptance of price the discrimination policy among consumers with non-universal beliefs, but not among those with universal beliefs (Study 4).

In Study 1, participants first completed an 8-item measure of non-universal-universal lay beliefs of body weight ($\alpha = .91$). Then, they read a news article about the "pay-as-you-weigh" pricing policy of Samoa Air and indicated their overall acceptance of the policy (fair, acceptable, reasonable; $\alpha = .96$). Results showed that the universal (vs. non-universal) belief was positively related to consumers' overall acceptance of the pricing policy, $\beta = .30$, $t(408) = 6.26$, $p < .001$.

Study 2 replicated the result of Study 1 by manipulating participants' non-universal vs. universal beliefs. Results indicated that participants in the universal condition ($M = 4.03$) had higher acceptance of the policy than those in the non-universal condition ($M = 3.68$), $F(1, 493) = 4.04$, $p = .05$. Moreover, in the universal (vs. non-universal) condition, this effect was mediated by a greater focus on benefits of the policy for the individual rather than for the company (95% CI = .01 to .39).

Study 3 extends the previous studies in three ways. First, we examined the moderating role of the source of discrimination by showing that the above effects do not hold when the discrimination is not related to body weight (e.g., financial situation). Second, we explored downstream consequences in terms of behavioral intentions and word of mouth. Third, we utilized another discrimination context (an insurance company charging premiums based on customers' BMI) to generalize the effect of Study 1 and Study 2. We manipulated the source of discrimination (body weight vs. financial situation) in an insurance scenario and measured non-universal-universal beliefs about weight. Results showed a significant interaction between source of discrimination and beliefs on the overall attitude towards this policy, $\beta = -.39$, $t(168) = -3.37$, $p < .001$. Specifically, universal vs. non-universal beliefs affected the attitude towards discriminatory pricing based on body weight ($M_{\text{Non-universal}} = 3.78$ vs. $M_{\text{Universal}} = 5.29$, $p < .001$), but not based on financial situation ($M_{\text{Non-universal}} = 4.37$ vs. $M_{\text{Universal}} = 4.48$, $p = .71$). Additionally, the pattern of results for buying intention and word of mouth was similar.

In study 4, we examined the moderating role of fixed-growth beliefs. A pretest confirmed that non-universal-universal beliefs are only moderately correlated with fixed-growth beliefs ($r = .36$, $p < .01$). Participants evaluated the insurance company's pricing policy on the set of variables used in study 3 (overall attitude, buying intention, and word of mouth). Additionally, participants completed two measures of non-universal-universal beliefs of body weight and fixed-growth beliefs. Results showed that the universal belief was positively related to consumer's attitude towards the pricing policy, $\beta = .55$, $t(382) = 4.35$, $p < .001$. However, the main effect of fixed-growth belief was not significant, $\beta = .11$, $t(382) = .85$, $p = .40$. More importantly, a significant interaction, $\beta = -.23$, $t(382) = -2.78$, $p = .01$, indicated that, among the universal beliefs, the effect of fixed-growth

belief was not significant ($M_{\text{Universal-entirety}} = 4.40$ vs. $M_{\text{Universal-incremental}} = 4.17$, $p = .49$); in contrast, among the non-universal beliefs, growth beliefs lead to a more positive attitude compared to fixed beliefs ($M_{\text{Non-universal-entirety}} = 2.85$ vs. $M_{\text{Non-universal-incremental}} = 3.52$, $p = .01$). Additionally, the pattern of results for buying intention and word of mouth was similar.

To summarize, our research shows that consumers' lay beliefs about weight, shape consumers' acceptance of price discrimination. Consumers holding universal (vs. non-universal) beliefs are more likely to accept such policies because they view these policies as benefitting the individual more than the company. We further show that this effect is moderated by the source of discrimination and consumers' fixed-growth beliefs. Our findings contribute to research on lay beliefs—in a marketing context—and provide useful managerial insights for price discrimination policies and perceptions of price fairness.

REFERENCES

- (2016), "State Plastic and Paper Bag Legislation: Fees, Taxes and Bans | Recycling and Reuse," *National Conference of State Legislatures (NCSL)*, (accessed December 4, 2016), [available at <http://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx>].
- (2016), "Sustainable Products," *Target Brands, Inc.*, (accessed December 4, 2016), [available at <https://corporate.target.com/corporate-responsibility/sustainability/sustainable-products>].
- Allen, Vernon L. (1965), "Situational Factors in Conformity," *Advances in Experimental Social Psychology*, 2, 133-175.
- Andreasen, Alan R. (2002), "Marketing Social Marketing in the Social Change Marketplace," *Journal of Public Policy & Marketing*, 21(1), 3-13.
- Baca-Motes, Katie, Amber Brown, Ayelet Gneezy, Elizabeth A. Keenan, and Leif D. Nelson (2013), "Commitment and Behavior Change: Evidence from the Field," *Journal of Consumer Research*, 39(5), 1070-1084.
- Balsam, Peter D. and Andrew S. Bondy (1983), "The Negative Side Effects of Reward," *Journal of Applied Behavior Analysis*, 16(3), 283-296.
- Bickel, Warren K. and Rudy E. Vuchinich, eds (2000), *Reframing Health Behavior Change with Behavioral Economics*, Psychology Press.
- Bolton, Lisa E., Hean Tat Keh, Joseph W. Alba (2010), "How Do Price Fairness Perceptions Differ Across Culture?" *Journal of Marketing Research*, 47(3), 564-576.
- Campbell, Margaret C. (1999), "Perceptions of Price Unfairness: Antecedents and Consequences," *Journal of Marketing Research*, 36(2), 187-199.
- Chen, Chien-Ming and Magali Delmas (2011), "Measuring Corporate Social Performance: An Efficiency Perspective," *Production and Operations Management*, 20(6), 789-804.
- Chiu, Chi-yue, Ying-yi Hong, and Carol S. Dweck (1997), "Lay Dispositionism and Implicit Theories of Personality," *Journal of Personality and Social Psychology*, 73, 19-30.
- Cialdini, Robert B. (2007), "Descriptive Social Norms as Underappreciated Sources of Social Control," *Psychometrika*, 72(2), 263-268.
- Du, Shuili, Chitrabhan B. Bhattacharya, and Sankar Sen (2010), "Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication," *International Journal of Management Reviews*, 12(1), 8-19.
- Erdley, Cynthia A., and Carol S. Dweck (1993), "Children's Implicit Personality Theories as Predictors of their Social Judgments," *Child Development*, 64, 863-878.
- Freedman, Jonathan L., and Scott C. Fraser (1966), "Compliance Without Pressure: The Foot-in-the-door Technique," *Journal of Personality and Social Psychology*, 4(2), 195-202.
- Ferguson, Jodie L., Pam Scholder Ellen, William O. Bearden (2014), "Procedural and Distributive Fairness: Determinants of Overall Price Fairness," *Journal of Business Ethics*, 121(2), 217-231.
- Festinger, Leon (1953), "An Analysis of Compliant Behavior," in M. Sherif and M. O. Wilson (Eds.), *Group Relations at the Crossroads*, New York: Harper.
- Festinger, Leon (1957), *A Theory of Cognitive Dissonance*, New York: Harper & Row.
- Gino, Francesca, Michael I. Norton, and Dan Ariely (2010), "The Counterfeit Self the Deceptive Costs of Faking It," *Psychological Science*, 21(5), 712-20.
- Gneezy, Uri, Stephan Meier, and Pedro Rey-Biel (2011), "When and Why Incentives (Don't) Work to Modify Behavior," *The Journal of Economic Perspectives*, 25(4), 191-209.
- Goldstein, Noah J., Vidas Griskevicius, and Robert B. Cialdini (2008), "A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels," *Journal of Consumer Research*, 35(3), 472-482.
- Graham, Jesse, Jonathan Haidt, and Brian A. Nosek (2009), "Liberals and Conservatives Rely on Different Sets of Moral Foundations," *Journal of Personality and Social Psychology*, 96(5), 1029-46.
- Graham, Jesse, Brian A. Nosek, Jonathan Haidt, Ravi Iyer, Spassena Koleva, and Peter H. Ditto (2011), "Mapping the Moral Domain," *Journal of Personality and Social Psychology*, 101(2), 366-85.
- Haidt, Jonathan and Jesse Graham (2007), "When Morality Opposed Justice: Conservatives Have Moral Intuitions That Liberals May Not Recognize," *Social Justice Research*, 20, 98-116.
- Haidt Jonathan and Jesse Graham (2009), "Planet of the Durkheimians, Where Community, Authority, and Sacredness Are Foundations of Morality," In: Jost J, Kay AC, Thorisdottir H, editors, *Social and Psychological Bases of Ideology and System Justification*, 371-401, Oxford University Press; New York.
- Kidwell, Blair, Adam Farmer, and David M. Hardesty (2013), "Getting Liberals and Conservatives to Go Green: Political Ideology and Congruent Appeals," *Journal of Consumer Research*, 40(2), 350-67.
- Kim, Eunkyung, Morteza Dehghani, Yoo Kyoung Kim, Peter J. Carnevale, and Jonathan Gratch (2014), "Effects of Moral Concerns on Negotiations," *Proceedings of the 36th Annual Meeting of the Cognitive Science Society*.
- Kivetz, Ran (2005), "Promotion Reactance: The Role of Effort-Reward Congruity," *Journal of Consumer Research*, 31(4), 725-736.
- Kuo, Andrew, Dan Hamilton Rice, Patrick Fennell (2016), "How Fitting! The Influence of Fence-context Fit on Price Discrimination Fairness," *Journal of Business Research*, 69(8), 2634-2640.
- Laurin, Kristin, Aaron C. Kay, and Gavan J. Fitzsimons (2012), "Reactance Versus Rationalization: Divergent Responses to Policies that Constrain Freedom," *Psychological Science*, 23(2), 205-209.

- Laurin, Kristin, Aaron C. Kay, Devon Proudfoot, and Gavan J. Fitzsimons (2013), "Response to Restrictive Policies: Reconciling System Justification and Psychological Reactance," *Organizational Behavior and Human Decision Processes*, 122(2), 152-162.
- Murphy, Mary C. and Carol S. Dweck (2016), "Mindsets Shape Consumer Behavior," *Journal of Consumer Psychology*, 26(1), 127-136.
- Nagle, Thomas T., John E. Hogan, and Joseph Zale (2016), *The Strategy and Tactics of Pricing: A Guide to Growing More Profitably (5th edition)*, Routledge.
- Parker, Brinton (2016), "9 Ways to Save Major Money at Trader Joe's," *Popsugar Inc.*, (accessed December 4, 2016), [available at <http://www.popsugar.com/smart-living/How-Save-Money-Trader-Joe-35589009>].
- Plaks, Jason E., Steven J. Stroessner, Carol S. Dweck, and Jeffrey W. Sherman (2001), "Person Theories and Attention Allocation: Preferences for Stereotypic vs. Counterstereotypic Information," *Journal of Personality and Social Psychology*, 80, 876-893.
- Rattan, Aneeta, Krishna Savani, N. V. R. Naidu, and Carol S. Dweck (2012), "Can Everyone Become Highly Intelligent? Cultural Differences in and Societal Consequences of Beliefs About the Universal Potential for Intelligence," *Journal of Personality and Social Psychology*, 103(5), 787.
- Rothschild, Michael L. (1999), "Carrots, Sticks, and Promises: A Conceptual Framework for the Management of Public Health and Social Issue Behaviors," *The Journal of Marketing*, 63(October), 24-37.
- Schultz, Wesley P., Azar M. Khazian, and Adam C. Zaleski (2008), "Using Normative Social Influence to Promote Conservation Among Hotel Guests," *Social Influence* 3(1), 4-23.
- Smith, Michelle R. (2016), "Retailers Push Reusable Bags to Save Money, Environment," *ABC News*, (accessed December 9, 2016), [available at <http://abcnews.go.com/Business/story?id=3609688&page=1>].
- Solomon, Richard L. (1964), "Punishment," *American Psychologist*, 19(4), 239-253.
- Tversky, A., & Kahneman, D. (1991), "Loss Aversion in Riskless Choice: A Reference-Dependent Model," *Quarterly Journal of Economics*, 106(4), 1039-1061.
- Winterich, Karen Page, Yinlong Zhang, and Vikas Mittal (2012), "How Political Identity and Charity Positioning Increase Donations: Insights from Moral Foundations Theory," *International Journal of Research in Marketing*, 29(4), 346-54.
- Wu, Chi-Cheng, Yi-Fen Liu, Ying-Ju Chen, Chih-Jen Wang (2012), "Consumer Responses to Price Discrimination: Discriminating Bases, Inequality Status, and Information Disclosure Timing Influences," *Journal of Business Research*, 65(1), 106-116.
- Xia, Lan, Kent B. Monroe, Jennifer L. Cox (2004), "The Price is Unfair! A Conceptual Framework of Price Fairness Perceptions," *Journal of Marketing*, 68(4), 1-15.

Changing For The Better: When And Why People Fail (or Succeed) to Engage in Beneficial Behavior Change

Chair: Aicea J. Lieberman, University of California, San Diego, USA

Paper #1: The Mere Cost Effect

Aicea J. Lieberman, University of California, San Diego, USA
On Amir, University of California, San Diego, USA
Ziv Carmon, INSEAD, Singapore

Paper #2: Can NFL Players be Viewed as Victims? How Camera Angles Can Increase Sympathy Towards Athletes

Kirk Kristofferson, Arizona State University, USA
Andrea C. Morales, Arizona State University, USA
Brent McFerran, Simon Fraser University, USA
Darren W. Dahl, University of British Columbia, Canada

Paper #3: Good People Don't Need Medication

Sydney E. Scott, University of Pennsylvania, USA
Justin F. Landy, University of Chicago, USA

Paper #4: Sustaining Sustainable Hydration: The Importance of Aligning Information Cues to Motivate Long Term Consumer Behavior Change

Eleanor Putnam-Farr, Yale University, USA
Rhavi Dhar, Yale University, USA

SESSION OVERVIEW

Understanding when and why consumers fail to engage in beneficial behavior change has important consequences for individual and societal well-being. Key reasons why people are unable to change behaviors often include biases, misperceptions, and habits. The goal of this session is to further explore these key drivers and present novel insights on the rich dynamics that influence behavior change.

This series of four papers explores when and why people fail to engage in beneficial behaviors and considers how to influence both deliberative and automatic thought processes in order to encourage such changes. We collectively demonstrate that consumers' failure to change behaviors is due in part to misperceptions, irrational assumptions, and habits, but that even small changes to seemingly inconsequential marketing variables can successfully promote significant changes with substantial benefits to the self and society.

In the first paper, Lieberman, Amir, and Carmon explore a novel mechanism explaining behavior change failures. Specifically, that the mere perception of a cost to change behavior hinders one's willingness to do so, even when the cost is greatly outweighed by the benefit of the change. The authors further show that the longer consumers engage in an inferior behavior, the lower their likelihood to switch to a superior one.

The second paper expands the focus from the perceived cost of the change to the perceived risks associated with the disfavored behavior. Kristofferson, Morales, McFerran, and Dahl focus on the consequences of misperceiving a behavior as less risky than it truly is and examine ways to alter these perceptions to improve well-being. Specifically, the authors demonstrate that changing the way a sporting event is viewed (i.e., through zoomed-in camera angles) can shift feelings of amusement to sympathy and recalibrate risk perceptions, leading to beneficial changes in behaviors.

Next, Scott and Landy assess why consumers fail to accept drug treatments despite acknowledging that they are the most effective method to improve their current state. The authors show that people dislike drug treatments because they believe using drugs reflects poor moral character, for a wide variety of ailments.

In the final paper, Putnam-Farr and Dhar explore the effectiveness of reminders delivered at the moment of choice versus earlier in the choice process. In a 2-month field experiment encouraging the use of reusable water bottles, the authors demonstrate that triggering upstream consumption decisions, relative to in the moment reminders, was more effective at promoting behaviors that led to sustained habit change, even once the reminders were removed.

Collectively, these four papers provide a fresh understanding of the mechanisms underlying the perpetuation of detrimental behaviors and provide new insights about how to effectively promote positive behavior change. Across several domains, we find that consumers maintain existing negative behaviors because change can be misperceived as costly, viewed as unnecessary, deemed immoral, or overpowered by habit. The authors further demonstrate that manipulating the message framing and timing can overcome these behavior change barriers. We believe this session will have broad appeal, drawing researchers investigating behavior change, influence, risk, habits, health, and judgment and decision-making.

The Mere Cost Effect

EXTENDED ABSTRACT

Much of the research from the social sciences expects that people, all else being equal, will engage in self-serving behaviors. However, when presented with an opportunity to change one's existing behavior to a more beneficial one, consumers often fail to do so. Prior research shows that people prefer to stick with an existing option, the status quo (Samuelson and Zeckhauser 1988), which is often explained by a number of psychological factors, including loss aversion and the endowment effect (Kahneman, Knetsch, and Thaler 1991). We add to this literature by proposing a novel mechanism: the felt cost of a behavior change. Specifically, the mere perception of a cost to change a behavior hinders one's willingness to do so, even when the benefit of the change greatly outweighs this cost, there is no potential loss to the individual, and there is no uncertainty. Across four studies, we demonstrate that participants engaged in a behavior fail to switch to a preferred and more lucrative behavior simply because changing is *perceived* as a cost. Further, the more entrenched one is in a current state, the larger the perceived cost, decreasing the probability of making a behavior change.

In an initial study, we test whether consumers indeed fail to switch from a less preferred behavior to one that is preferred. We also test whether the likelihood to change to an improved state decreases the longer a consumer is engaged (i.e., more entrenched) in a suboptimal behavior. Participants ($n = 273$) are assigned to complete 10 rounds of a task, they begin with a tedious task (transcribing sideways paragraphs) and are given the opportunity to switch to a fun task (word game) either on their third round (low entrenchment) or on their sixth round (high entrenchment). Participants who choose not to switch simply continue transcribing, thus the only cost of switching is the action of clicking one additional button. At the outset of the study, participants tested and rated the tasks; social science research predicts that, given all else is equal, participants will switch to their preferred activity when given the opportunity. However, when provided the option to switch, 24% of participants who preferred the word-game failed to do so! Further, a significantly greater proportion failed to switch in high entrenchment (32%) compared to low

entrenchment (16%), $X^2(1, 195) = 6.93, p = .008$). However, in this study participants did have to click one extra button to switch, requiring they perform an action (Ritov and Baron 1992), whereas if they chose to stay they simply continued transcribing.

In a second study we further equate the cost of switching such that participants have to click on a button to stay or click on a button to switch. Similar to study 1, participants ($n = 882$) were assigned to 10 rounds of a tedious transcription task and given the opportunity to switch to a word-game on their sixth round. Participants either saw the same switching opportunity as in study 1 or a cost-equated switching opportunity where they had to actively click on a button to switch or to stay. Again, 23% of participants who preferred the word-game failed to switch when given the opportunity; this proportion did not differ based on whether participants had to passively or actively make the decision ($p > .4$), supporting our hypothesis that the perceived cost is indeed driven by the switch itself.

A 3rd study provides additional support that enhanced entrenchment decreases the likelihood of switching while also ruling out goal completion (Bargh et al 2001) as an alternative explanation. Participants ($n = 442$) were presented with a similar paradigm as the first 2 studies, but here we set up an infinite horizon such that they were unaware of the length of the study. Participants were given the opportunity to switch from transcribing to the word-game on round 3 (low entrenchment), round 6 (medium entrenchment), or round 9 (high entrenchment), all while remaining unaware of how many rounds they had left. Participants behaved in a manner consistent with the first 2 studies. Across conditions, 21% of participants who preferred the word-game failed to switch, and a significantly greater proportion failed to change tasks in high entrenchment (28%) than in low entrenchment (16%), $X^2(1, 201) = 4.49, p = .034$.

In a final study we generalize to two new tasks and provide a monetary incentive such that participants who fail to switch are financially worse off. Participants ($n = 179$) earned points for their performance on a task, and for each point earned they received an additional entry into a lottery for a \$5 bonus. Therefore, the more points a participant earned, the greater their odds of winning. Participants tested and rated new tasks: dragging a slider to exactly 50 (tedious task) and rating captions for New Yorker cartoons (fun task). Participants learned that the average number of points earned was 10 points on the slider task versus 20 points on the cartoon task. Thus, the cartoon task was financially more lucrative in addition to being rated as more enjoyable than the sliders, $t(178) = 9.3, p < .001$. All participants were then assigned to the tedious task (sliders) and given the opportunity to switch to the more fun and lucrative task (cartoons) halfway through. Yet, even with the clear financial advantage of switching, 44% of participants who also subjectively preferred the cartoon task, chose to remain with the sliders! Participants maintained a behavior that they preferred less *and* made them financially worse off, merely because once on a given trajectory the act of changing a behavior is *perceived* as costly.

Across 4 studies we present a novel mechanism explaining that consumers fail to change their behaviors in part because the act of changing is perceived as costly, even when the benefit of doing so clearly outweighs the mere cost of the change itself. These findings shed light on the reasons why behavior change is so difficult and provide unique insights relevant to a broad audience of practitioners and researchers.

Can NFL Players be Viewed as Victims? How Camera Angles Can Increase Sympathy Towards Athletes

EXTENDED ABSTRACT

In 2015, the top 12 television shows of the fall season were all NFL games and *Sunday Night Football* was the #1 most watched primetime show, averaging 23.7 million viewers per telecast (Chase 2015). The staggering and continual popularity of football stands in stark contrast to the dangerous, and sometimes fatal, injuries that we now know the game can cause its players. Case in point, in a recent study, 96% of NFL players (and 79% of all football players) examined by the Department of Veterans Affairs and Boston University were identified to have chronic traumatic encephalopathy, or CTE, a degenerative disease believed to be caused by repeated head trauma (Breslow 2015; Omalu et al. 2005).

The juxtaposition of high viewership and the potential for severe harm to its players provides an opportune context for examining some of the psychological factors that increase or decrease consumers' support for players. Specifically, the current work examines this issue through the theoretical lens of prosociality, to determine possible ways to increase sympathy towards NFL players. In other words, are there factors that can shift consumers' views of the players to victims in need of help, instead of professional athletes who entertain them?

Previous work in prosocial behavior and value of life has focused primarily on increasing sympathy towards victims in order to increase charitable giving; we contend that many of the same psychological underpinnings apply to the current context. Consistent with prior work that shows people are more inclined to help identified victims than unidentified or statistical victims (Schelling 1968; Jenni and Loewenstein 1997; Small and Loewenstein 2003; Kogut and Ritov 2005a; 2005b), we propose that multiple factors contribute to football players being perceived as unidentifiable. For instance, the uniforms and helmets they wear greatly reduce their individuality on the field (Joseph and Alex 1972), and referring to them by number instead of name also leads to increased dehumanization (Haney, Banks, and Zimbardo 1973). The football context may actually be a stronger test than prior work on identifiable victims: football players do not typically engender much sympathy (given their high incomes and celebrity status) and the degree of behavioral change required may be greater (shifting consumers from a state of enjoyment, rather than apathy).

In the current research, we examine how the camera angles used to broadcast games can change the way consumers perceive players. Specifically, we contend that when consumers view physical contact between football players through a zoomed-in (vs. regular) camera angle, consumers will feel heightened negative emotions that cause them to view players as victims, resulting in changes in attitudes and behaviors. In particular, we demonstrate in 2 laboratory studies that using camera angles to increase negative emotions leads to higher risk assessments of football related injuries, lower attitudes towards the NFL, and decreased support for the game of football.

Study 1 provided an initial test for our hypothesis. Undergraduate participants ($n = 228$) were assigned to one of two between-subject conditions (camera angle: regular vs. zoomed-in). Participants were told they would be watching a video clip and then answering questions about their experience. In actuality, all participants viewed a 40-second clip that highlighted some of the biggest hits of the 2015 NFL season. We digitally edited the clip in the zoomed-in condition such that the moment of contact between the two players was zoomed-in to a level similar to a close-up during a broadcast airing. For internal validity, the audio was removed from both videos. To

assess emotional reactions, participants completed a modified version of the consumption emotions scale (Richins 1997). After completing cover story questions, participants were presented with a series of questions to assess their sympathy towards football players (e.g., *How likely are football players to get seriously injured while playing? How risky do you think football is?*) and their attitudes towards the game (e.g., attitude towards NFL, experienced excitement at seeing extreme hits). Finally, participants were asked to imagine they had a son and answered the likelihood of allowing him to play football (1-7). Supporting our predictions, the zoomed-in clip elicited significantly higher negative emotional reactions than the regular clip ($p < .05$). These heightened emotional reactions in turn increased sympathy towards professional football players (all $ps < .05$), decreased attitudes towards the NFL and enjoyment of watching football ($ps < .001$), and reduced the likelihood of allowing one's own son to play football ($p = .01$).

Study 2 built on study 1 by including a behavioral dependent measure of football support (choice of tickets) and added an additional condition to examine whether other digital edits (i.e., slow-motion) also induce sympathy. Undergraduate participants ($n=126$) were assigned to one of three between-subjects conditions (camera angle: regular vs. zoomed-in vs. slow-motion). In addition to completing the same measures as study 1, participants were given the choice of being entered in a draw for two tickets to a football or basketball game featuring their university team. ANOVA results replicated the emotional reaction and attitude results from study 1 ($p < .05$); the zoomed-in clip elicited stronger emotional reactions and subsequent sympathy than either the control or slow-motion conditions (all $ps < .05$). Notably, the zoomed-in clip also led to a shift in choice of tickets to attend the college basketball vs. football game ($p < .05$). A replication of this study is also in process to better understand the null effects of the slow-motion condition. Preliminary analyses suggest watching an entire clip in slow-motion was generally unpleasant for participants, but additional research is needed.

Several additional studies are also currently in preparation to provide process evidence for the above effects. In particular, we contend that vividness is, in part, responsible for the effects in this particular context. Thus, although Schelling (1968) claimed “the more we know, the more we care,” we propose that for increasing sympathy in this domain, the more closely we see what's actually happening, the more we care and the more likely we are to change our attitudes and behavior.

Good People Don't Need Medication

EXTENDED ABSTRACT

Why might consumers dislike effective drug treatments? For example, why might an alcoholic prefer to quit drinking cold turkey instead of taking Naltrexone, an effective anti-craving drug for alcohol addiction? We demonstrate that consumers sometimes dislike drug treatments, even though they acknowledge that a drug treatment is more effective than treatments in the consideration set. Consistent with a person-centered approach to moral judgment (Tannenbaum, Uhlmann, and Diermeier 2011; Uhlmann, Pizarro, and Diermeier 2015), consumers consider taking a drug as reflective of poor moral character.

In study 1, we examine whether consumers sometimes dislike drug treatments and why that might be the case. In study 1A ($n = 200$), participants considered two treatments for alcohol addiction: Naltrexone (an anti-craving drug) and quitting cold turkey. We measured participants' preferences for each treatment and the perceived efficacy of each treatment. Participants clearly indicated that if they

were an alcoholic, they would prefer to quit cold turkey ($t(199) = 3.36, p = .001, d = .24$), even though they believed using Naltrexone would be more effective ($t(199) = 7.92, p < .001, d = .56$). Additionally, to assess character inferences, participants viewed scenarios about two people who are equally addicted to alcohol. One person chooses to try to quit cold turkey and the other chooses to try to quit by using Naltrexone. Participants judged the person who tries to quit with Naltrexone as having worse character ($t(199) = 5.10, p < .001, d = .36$). These character judgments predicted participants' own preferences for quitting cold turkey over using Naltrexone ($r = .26, p < .001$), even after controlling for efficacy assessments ($r_p = .17, p = .020$). Study 1B ($n = 303$) replicates study 1A in the context of multiple different ailments, including alcohol addiction (Naltrexone vs. cold turkey), nicotine addiction (nicotine gum vs. cold turkey), obesity (diet pills vs. diet), and depression (Prozac vs. trying to stay positive). Across examples, drug treatments were less preferred ($t(303) = 12.96, p < .001, d = .74$), though viewed as more effective ($t(303) = 5.04, p < .001, d = .29$). In scenarios, people who choose drug treatments were viewed as having worse character ($t(303) = 11.16, p < .001, d = .64$). These character judgments predicted participants' own preferences not to use drug treatments ($r = .32, p < .001$) even after controlling for efficacy ratings ($r_p = .11, p = .060$).

In study 2 ($n = 405$), we test whether these character inferences are limited to cases where people caused the ailment they are trying to treat. People may feel they have a duty to “clean up their own mess” instead of relying on drugs. In order to test this hypothesis, we presented scenarios about painkiller addiction in a 2 (Fault: Own, Other) X 2 (Treatment Choice: Drug, Cold Turkey) within-subjects design. In the own-fault scenarios, targets took painkillers recreationally and became addicted, whereas in the other-fault scenarios, doctors prescribed too strong a dose of painkillers to patients, who then became addicted. In both conditions, one person tries to quit using a drug (Methadone) and the other tries to quit cold turkey. Participants judged addicts who choose drug treatments (vs. those who choose to quit cold turkey) as having worse character ($F(1, 404) = 92.51, p < .001, \eta_p^2 = .19$), but this effect was not moderated by whose fault the addiction was ($F(1, 404) = 0.002, p = .967$). Choosing a drug treatment reflects poor character regardless of whether the ailment is your fault.

In study 3 ($n = 408$), we tested whether character inferences are specific to certain types of drugs. In particular, we tested two accounts: a pain-specific account where people don't like drugs that remove pain, and an effort-specific account where people don't like drugs that reduce the effort a person needs to exert. In a within-subjects design, participants considered four addicts: one quitting cold turkey, one quitting with a drug that reduces withdrawal pain, one quitting with a drug that reduces cravings (and therefore effort required to quit), and one quitting with a drug that reduces withdrawal pain and cravings. Contrary to both an effort-specific and a pain-specific account, addicts who took any drug treatment were judged to have about equally poor character regardless of the specific drug (on 9-point likert scale, $M_{\text{no pain}} = 5.82$; $M_{\text{no effort}} = 6.02$; $M_{\text{no pain or effort}} = 5.97$), and all were judged to have poorer character than the addict quitting cold turkey ($M_{\text{cold turkey}} = 6.48, ps < .001$). Choosing a drug treatment reflects poor character regardless of whether the drug targets the pain felt or effort exerted.

In study 4 ($n = 365$), we test whether these character inferences are limited to cases where the drug is fixing a psychological (as opposed to biological) problem. It is possible that people think that psychological cures are best for psychological ailments and biological cures are best for biological ailments. In a study testing this account, participants judged the character of two addicts, one who chooses a

drug treatment and another who chooses a therapy treatment for their addiction. Through random assignment, participants were either told that the addictions were biologically caused or were psychologically caused. In order to ensure that participants were not matching more effective treatments to biological causes, we specified that the drug and therapy treatments were equally effective. Participants judged addicts who took drug treatments as having worse character ($F(1, 363) = 141.75, p < .001, \eta_p^2 = .28$), but this effect was not moderated by whether the addiction was biological or psychological ($F(1, 363) = 0.61, p = .436$). Choosing a drug treatment reflects poor character regardless of whether the ailment is biological or psychological.

Across five studies, we find a robust preference for non-drug treatments. This preference occurs in part because using drug treatments reflects poor character, and these character inferences are not moderated by whether the ailment is your fault, whether the drug alters pain or effort, and whether the ailment is biological or psychological.

Sustaining Sustainable Hydration: The Importance of Aligning Information Cues to Motivate Long Term Consumer Behavior Change

EXTENDED ABSTRACT

The standard theory of consumer choice assumes that customers select the option that has the highest value. In contrast, a vast body of choice research finds that preferences are often constructed in the moment rather determined by a careful evaluation of all available options, leading to systematic biases, such as for the status quo option. (Samuelson and Zeckhauser 1988; Tversky and Simonson 1993) Furthermore, the status quo option in the real world is often a choice that reflects an existing habit and is hence difficult to change (Wood and Neal 2009). We propose that changing behavior away from the status quo option relies on System 1 rather than System 2 processing (Dhar and Gorlin 2013), both in the immediate, when customers are influenced by salience of available options, and in the long term, through prolonged exposure to a change in the underlying contextual cues linked to habits. The current article has two objectives: to explore the most effective way of presenting information that will nudge consumers toward a new desired behavior in the short term, and to measure the persistence of different nudges once they are no longer immediately salient. Even effective treatments tend to quickly wear off once the treatment is no longer present (Gneezy and List 2006; Loewenstein 2005), presenting a challenge for those who wish to understand and influence longer term behavior. Our partner (a large technology company) has a dual goal of increasing water consumption by employees (as opposed to other sugary beverages) while simultaneously reducing the amount of plastic waste. We thus focus on trying to shift people from the practice of grabbing a disposable plastic bottle of water towards refilling of reusable bottles.

While traditional communications literature on behavior change has focused on the persuasive power of relevant information, focusing on System 1 processing suggests that timeliness and salience of the information is more likely to impact the outcome of decisions (Bordalo, Gennaioli, and Shleifer 2013). While timely persuasive information is often effective in the short term (Dale and Strauss 2014; Webb and Eves 2007) however, that registered voters, by registering, have already signaled their interest in voting. The theory presented in this article predicts that impersonal, noticeable messages can succeed in increasing the likelihood that a registered voter will turn out by reminding the recipient that Election Day is approaching. Text messaging is examined as an example of an impersonal, noticeable communication to potential voters. A nationwide field experiment (n

$= 8,053$ or at changing opinions (Cacioppo and Petty 1989), research in habit formation has suggested that changing the environment (Chance et al. 2016; Verplanken and Wood 2006) and identifying situational prompts which can lead to automatic activation of a goal (Holland, Aarts, and Langendam 2006) are more effective in changing long term behavior. Indeed, in our setting, efforts to promote the use of reusable bottles with giveaways and informational campaigns have had limited long-term success, with 58% of employees citing convenience as the primary reason for their continued use of disposable bottles. We thus distinguish between moment of choice reminders, which are delivered at the moment of the desired behavior and focus on changing the salience of different options in the choice set, and reminders which are delivered earlier in the choice process, which focus on environmental cues that can trigger situational activation of a behavioral prompt.

There are two key moments in the hydration decision-making process: the obvious one occurs when people are near water, and its availability can be made salient. (Posavac, Sanbonmatsu, and Fazio 1997) However, targeting communications near the water dispensers misses the window of opportunity to bring a reusable bottle from their desks. Getting them to use a reusable bottle requires targeting the upstream behavior of actually taking the water bottle with them when they leave the desk. Targeting the communications at the desk also links the behavior (refilling a water bottle) to the situational context of the desk area, and may be more effective at changing behavior even without the reminder, if the link between desk and water bottle can become automatically activated.

In a seven week field experiment, we randomly assigned six different office areas to have posters in one of two different locations – either near water dispensers (moment of choice) or near desks (environmental trigger). We used three different posters with slight differences in how the information was presented (e.g., visual vs. text), but there were no differences in outcomes between posters so we combined the different posters and focused on the location of the messages as the manipulation of interest. The focal behavioral outcome was the total amount of water consumption from the water dispensers. We collected three weeks of baseline data, two weeks of poster data, and an additional two weeks of data after the posters were taken down.

Dispensed water consumption during the period the posters was displayed increased an average of 24% across all conditions ($t = 3.06, p = .003$). A full regression model controlling for time and office area effects shows a significant difference between the baseline and poster periods, but no interaction with poster location condition. Posters near water and near desks were equally effective at driving water consumption while salient.

This general positive effect was not unexpected, and we were more interested in potential differences in persistence, where we do see significant differences between location conditions. There was no long term effect on dispensed water in the locations where the posters were displayed near water dispensers, while consumption remained significantly higher than baseline in the locations where posters were displayed near desks (interaction $t = 1.95, p = .05$). On average, putting posters near desks resulted in an additional two gallons per day of water dispensed to reusable containers in the two weeks after posters came down, equivalent to 16 plastic bottles per day from one location. This translates to an 8% reduction in the average daily use of bottles.

Overall, this experiment shows that information presentation can serve as effective reminders for short term and long term behavior change. Posters placed near the moment of choice can trigger salience and are effective at changing short-term behavior. In

order to build new habits and motivate sustainable behavior change, it may be more effective to target upstream triggers in the environment. These upstream reminders are likely to be most effective when they link the behavior to situational cues, allowing the behavior to the environment, rather than the prompt.

REFERENCES

- Bargh, John A., Peter M. Gollwitzer, Annette Lee-Chai, Kimberly Barndollar, and Roman Trötschel (2001), "The automated will: nonconscious activation and pursuit of behavioral goals," *Journal of Personality and Social Psychology*, 81(6), 1014.
- Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer (2013), "Salience and Consumer Choice," *Journal of Political Economy*, 121(5), 803–843.
- Breslow, Jason (2015, September 18), "New: 87 Deceased NFL Players Test Positive for Brain Disease," Retrieved from <http://www.pbs.org/wgbh/frontline/article/new-87-deceased-nfl-players-test-positive-for-brain-disease/>.
- Cacioppo, John. T. and Richard E. Petty (1989), "Effects of Message Repetition on Argument Processing, Recall, and Persuasion," *Basic and Applied Social Psychology*, 10(1), 3–12. Retrieved from http://www.tandfonline.com/doi/abs/10.1207/s15324834basp1001_2
- Chance, Zoe, Rhavi Dhar, Michelle Hatzis, Kim Huskey (2016), "Nudging Individuals Toward Healthier Food Choices With the 4 Ps Framework for Behavior Change," In C. A. Roberto and I. Kawachi (Eds.) *Behavioral Economics and Public Health* (pp. 177–202).
- Dale, Allison and Aaron Strauss (2014), "Don't Forget to Vote: Text Message Reminders as a Mobilization Tool," *American Journal of Political Science*, 53(4), 787–804.
- Dhar, Rhavi and Margarita Gorlin (2013), "A dual-system framework to understand preference construction processes in choice," *Journal of Consumer Psychology*, 23(4), 528–542.
- Gneezy, Uri and John A. List (2006), "Putting Behavioral Economics to Work : Testing for Gift Exchange in Labor Markets Using Field Experiments," *Econometrica*, 74(5), 1365–1384.
- Haney, Craig W., Curtis Banks, and Philip G. Zimbardo (1973), "A study of prisoners and guards in a simulated prison," *Naval Research Review*, 30, 4-17.
- Holland, Rob, Henk Aarts, and Daan Langendam (2006), "Breaking and creating habits on the working floor: A field-experiment on the power of implementation intentions," *Journal of Experimental Social Psychology*, 42(6), 776–783.
- Jenni, Karen and George Loewenstein (1997), "Explaining the Identifiable Victim Effect," *Journal of Risk and Uncertainty*, 14 (3), 235-257.
- Joseph, Nathan and Nicholas Alex, "The Uniform: A Sociological Perspective," *American Journal of Sociology* 77, no. 4 (Jan., 1972), 719-730.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), "Anomalies: The endowment effect, loss aversion, and status quo bias," *The Journal of Economic Perspectives*, 5 (1), 193–206.
- Kogut, Tehila and Ilana Ritov (2005a), "The "identified victim" effect: an identified group, or just a single individual?" *Journal of Behavioral Decision Making*, 18, 157–167.
- Kogut, Tehila and Ilana Ritov (2005b), "The singularity effect of identified victims in separate and joint evaluations," *Organizational Behavior and Human Decision Processes*, 97, 106–116.
- Loewenstein, George (2005), "Hot-Cold Empathy Gaps and Medical Decision Making," *Health Psychology*, 24(4), S49–S56.
- Omalu, Bennet I., Steven T. DeKosky, Ryan L. Minster, M. Ilyas Kamboh, Ronald L. Hamilton, and Cyril H. Wecht, "Chronic traumatic encephalopathy in a National Football League player." *Neurosurgery* 57, no. 1: 128-134.
- Posavac, Steven S., David M. Sanbonmatsu, and Russell H. Fazio (1997), "Considering the Best Choice: Effects of the Salience and Accessibility of Alternatives on Attitude-Decision Consistency," *Journal of Personality and Social Psychology*, 72(2), 253–261.
- Richins, Marsha L. (1997), "Measuring Emotions in the Consumption Experience," *Journal of Consumer Research*, 24 (2), 127-146.
- Ritov, Ilana and Jonathan Baron (1992), "Status-quo and omission biases," *Journal of risk and uncertainty*, 5 (1), 49-61.
- Samuelson, William and Richard Zeckhauser (1988), "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty*, 1, 7–59.
- Schelling, Thomas C. (1968), "The Life You Save May Be Your Own," in Samuel Chase (Ed.), *Problems in Public Expenditure Analysis*, Washington DC: The Brookings Institute.
- Small, Deborah. A. and George Loewenstein, G (2003). Helping the victim or helping a victim: Altruism and identifiability. *Journal of Risk and Uncertainty*, 26 (1), 5–16.
- Tannenbaum, David, Eric Luis Uhlmann, and Daniel Diermeier (2011), "Moral Signals, Public Outrage, And Immaterial Harms," *Journal of Experimental Social Psychology*, 47 (6), 1249-1254.
- Tversky, Amos and Itamar Simonson (1993), "Context-dependent preferences," *Management Science*, 39(10), 1179–1189.
- Uhlmann, Eric Luis, David A. Pizarro, and Daniel Diermeier (2015), "A Person-Centered Approach to Moral Judgment," *Perspectives on Psychological Science*, 10 (1), 72-81.
- Verplanken, Bas and Wendy Wood (2006), "Interventions to Break and Create Consumer Habits," *Journal of Public Policy and Marketing*, 25 (1), 90–103.
- Webb, Oliver J. and Frank F. Eves (2007), "Promoting stair climbing: Effects of message specificity and validation. *Health Education Research*," 22 (1), 49–57.
- Wood, Wendy and David T. Neal (2009), "The habitual consumer," *Journal of Consumer Psychology*, 19 (4), 579–592.

Who's Looking Where? Social Comparisons and Consumer Behavior

Chair: Julian Givi, Carnegie Mellon University, USA

Paper #1: Experiential Purchases Trigger More Envy Than Material Purchases do

Ruoyun Lin, University Of Tübingen & Leibniz-Institut Für Wissensmedien, Germany
Niels Van De Ven, Tilburg University, The Netherlands
Sonja Utz, University Of Tübingen & Leibniz-Institut Für Wissensmedien, Germany

Paper #2: Two's Company, Three's a Crowd: Givers' Oversensitivity to Other Givers' Gifts

Julian Givi, Carnegie Mellon University, USA
Jeff Galak, Carnegie Mellon University, USA
Christopher Olivola, Carnegie Mellon University, USA

Paper #3: The Inequity Penalty: Consumers Show Heightened Sensitivity to Inequitable Treatment in The Context of Apology

Emily Rosenzweig, Tulane University, USA
Clayton Critcher, University of California Berkeley, USA

Paper #4: How Comparison Standards Influence Tradeoffs Between Absolute And Relative Outcomes

Sokiente Dagogo-Jack, Boston College, USA
Joshua Beck, University of Oregon, USA

SESSION OVERVIEW

It is well-known that people engage in social comparisons (Festinger 1954). Ever since Festinger's seminal paper, this tendency has garnered attention from researchers in several fields, including consumer behavior. Indeed, consumer researchers have shown that social comparisons affect consumers' feelings after viewing advertisements, their evaluations of dynamic pricing models, and their willingness to pay for various goods and services (Haws and Bearden 2006; Richins 1991; Van de Ven, Zeelenberg, and Pieters 2011). To that end, the goal of this special session is to further develop our understanding of the interplay between social comparisons and consumer behavior.

The first two papers in the session explore consumers' misaligned expectations about the social comparisons made by others. Specifically, **Lin, Van De Ven and Utz** find that consumers become more envious of others' experiential (vs. material) purchases, however, they incorrectly expect others to be more envious of their own material purchases. **Givi, Galak, and Olivola** study social comparisons in the gift giving domain. They show that givers expect a recipient's liking of a gift to be influenced by how the gift compares to other givers' gifts, but that a recipient's actual liking of a gift does not change as a function of this consideration. Further, this expectation drives givers to both spend excessively on gifts and skip gift exchanges altogether. **Rosenzweig and Critcher** investigate how social comparisons differentially influence consumer response to apologetic (vs. other) actions of firms. They find that consumers are especially angered by inequitable compensation offered as part of an apology, and that this occurs because apologies trigger prescriptive norms connected to restorative justice, and inequitable remuneration violates those prescriptions. Importantly, they also identify boundary conditions for this effect, which are undoubtedly of great use to marketers. **Dagogo-Jack and Beck** study the relative strength of social (vs. temporal) comparisons. They find that consumers are more influenced by the latter than the former, and that this is because temporal comparisons present a greater potential threat to one's self-concept than do social comparisons

In sum, these papers investigate social comparisons while tying in several important areas of consumer research – material vs. experimental consumption, gift giving, consumer response to firm behavior, and temporal comparisons. This session is likely to be of great interest to researchers interested in any of these areas, as well as to those interested in envy, self-other decision making, prosocial behavior, firm decision making, and the self. Additionally, these papers raise many interesting research questions. For instance, when is it that decision-makers correctly predict the social comparison processes of others? Indeed, it seems that all sorts of decision-makers (e.g., consumers, gift givers, and firms) are misguided in their prediction of the social comparison processes of others (e.g., other consumers, gift recipients, and customers). Thus, a fruitful avenue for future research may be to develop a nuanced framework of when decision-makers are likely (vs. not likely) to be correct in these predictions, and offer prescriptions for how to reduce the former.

Experiential Purchases Trigger More Envy Than Material Purchases do

EXTENDED ABSTRACT

An important distinction in consumer psychology is that between experiential purchases (spending money with the primary intention of acquiring a life experience) and material purchases (spending money with the primary intention of acquiring a material possession). The result of an extensive program of research showed that experiential purchases typically bring more happiness and satisfaction than material purchases do (Gilovich, Kumar, & Jampol, 2015). However, we believe this is not the full picture. Although we think the past findings are convincing that (most) people would have a higher well-being when they were to spend more on experiences than on material goods, we also think that there are situations in which the experiential purchases can have some negative effects - triggering other people's envy (Krasnova, Wenninger, Widjaja, & Buxmann, 2013).

We investigated whether experiential or material purchases are more likely to trigger envy. Prior research on the distinction between experiential and material purchases could lead to both a prediction that experiential purchases would trigger more envy and to the prediction that material purchases would trigger more envy:

Experiential purchases make people happier because they tend to be more closely associated with one's central identity than material purchases are (Carter & Gilovich, 2012). Self-relevance of a social comparison is also an important antecedent of envy: things that are more important to you and are seen as a larger part of your identity are more likely to trigger envy (Salovey & Rodin, 1984). This would thus predict that experiential purchases trigger more envy in others.

Experiential purchases make people happier because it is more difficult to compare someone else's experiential purchase to what one owns oneself, than it is for material purchases (Carter & Gilovich, 2010). The easier it is to make a (social) comparison, the more envy one experiences. This would predict that material purchases elicit more envy.

We therefore test whether it are experiential or material purchases that trigger more envy in three studies. We explore the causes of envy for such purchases (Studies 1 and 2) and whether people are envious for the same things that they think others are envious for.

Studies

Study 1 asked participants to look through their own Facebook timeline, and write down the first post about an experiential and material purchase they could find (in a maximum time period of ten minutes). Among 172 Facebook users, 131 participants found both types of posts, 39 participants found only a post of experiential purchase, and 2 participants found only a post of material purchase. This suggests that posts about both experiential and material purchases are quite common, but experiential purchases are shared more than material ones are. Most importantly, participants reported a higher level of envy when they read the reported experiential post than the reported material post. Self-relevance, the perception that the purchase of the other was also important for oneself, was much higher in the experiential condition than in the material condition. The comparability of experiential purchases was lower than that of material purchases. Furthermore, the effect of experiential purchases on envy was mediated by self-relevance of the topic, not by the comparability.

Study 2 (N = 241) finds that for hypothetical Facebook posts of an experiential or material purchase (of the same price) people report more envy for the experiential purchase. We also again find that an experiential purchase is seen as more self-relevant, and self-relevance (partially) mediated the effect of experiential purchases on experienced envy.

If experiential purchases are more likely to trigger envy, sharing experiential purchases on for example social media can have two possible negative consequences. First, envy is a negative emotion that contains feelings of frustration and in general is an experience that people would rather not feel (Smith & Kim, 2007). Indeed, envy has been found to negatively affect life satisfaction (Krasnova, Widjaja, Buxmann, Wenninger, & Benbasat, 2015) and to increase depression (Appel, Crusius, & Gerlach, 2015). Second, people also dislike being envied by others (Foster, 1972; Rodriguez-Mosquera, Parrott, & Hurtade de Mendoza, 2010; Van de Ven, Zeelenberg, & Pieters, 2010). So if posting about experiences is likely to trigger more envy, the readers of such a message might feel negative and the posters of the message might worry about being envied.

In the third study (N = 332) we test why people quite easily share experiential purchases on social media (see Study 1), even though these posts are likely to trigger envy and people in general do not like to be envied. We replicated again that people who took the perspective of a reader of social media posts indicated that they would experience more envy from experiential posts. However, people who took the perspective from someone *writing* a Facebook post expected that posts about material purchases would actually trigger more envy in others.

Conclusion

People become more envious when they see others display their experiential purchases than when they display their material purchases. However, they expect others to be more envious for material purchases. These effects seem to occur because experiences are more important to people, and more important social comparisons trigger stronger envy (Salovey & Rodin, 1984). Past research has documented many positive effects of experiential consumption (Gilovich et al., 2015), but the current work also shows a negative side effect as it increases envy.

So why do people share experiential purchases so often, if they are likely to elicit envy? One possibility is that people do not necessarily want to be envied, but want to be admired (which is close to, but distinct from, envy, see Van de Ven, 2016, 2017). Another reason is that people hold favourable views over those who spend their

money on experiences (Van Boven, Campbell, & Gilovich, 2010), something we replicate in Study 2 and Study 3.

Two's Company, Three's a Crowd: Givers' Oversensitivity to Other Givers' Gifts

EXTENDED ABSTRACT

Social comparisons are made by consumers every day, and these comparisons constantly influence attitudes, beliefs, and behavior (Festinger 1954). That said, one context in which social comparisons are likely quite prevalent, but which we know little about in terms of social comparisons, is gift giving. That is, at many gift exchanges there are several gifts being exchanged, and thus there is the opportunity for givers and recipients to compare gifts against each other; however, these comparisons and their downstream consequences are yet to be empirically investigated.

To that end, this research investigates whether givers believe a recipient's liking of their gift changes as a function of how it compares to other givers' gifts, and whether a recipient's actual liking of a gift changes based on how it compares to the other gifts the recipient receives. Across several experiments, we find an asymmetry such that givers believe recipients will like their gift more when it compares favorably (vs. unfavorably) to other givers' gifts, but a recipient's actual liking of a gift does not fluctuate in this manner. Further, to avoid giving gifts that they believe will go unappreciated, when givers know others will be giving high (vs. low) quality gifts, they spend more money on gifts and even avoid gift exchanges altogether.

Study 1 serves an initial demonstration of the effect. The study is a 2 (Role: *Giver*, *Recipient*) x 2 (Gift Rank: *Superior*, *Inferior*) between-subjects design. Participants in the *Giver* conditions imagine they and another giver (Jordan) are invited by their friend (Alex) to his/her birthday dinner. Participants in the *Recipient* conditions imagine they invite two friends (Alex and Jordan) to their own birthday dinner. Participants in the (*Giver-Superior* / *Giver-Inferior*) condition imagine they give Alex, who likes wine, two bottles of wine, and Jordan gives (one bottle / three bottles) of the same wine. Participants in the (*Recipient-Superior* / *Recipient-Inferior*) condition imagine they like wine, and that Alex gives them two bottles of wine, and Jordan gives them (one bottle / three bottles) of the same wine. Next, participants in the (*Giver* / *Recipient*) conditions indicate (how much they think Alex likes their two bottles of wine / how much they like Alex's two bottles of wine). The results reveal that participants in the *Giver-Superior* condition thought Alex would like their gift more than participants in the *Giver-Inferior* condition, but participants in the two *Recipient* conditions liked the gift the same (interaction $p < .01$).

Study 2 investigates the extent of givers' misguided beliefs. The study is a 2 (Role: *Giver*, *Recipient*) x 2 (Gift Rank: *Superior*, *Inferior*) between-subjects design. The setup is similar to study 1's, except participants in the (*Giver-Superior* / *Giver-Inferior*) condition imagine they give Alex (one bottle / two bottles) of wine, and Jordan gives (no gift because he/she did not have time to get a gift / three bottles of the same wine). Participants in the (*Recipient-Superior* / *Recipient-Inferior*) condition imagine Alex gives them (one bottle / two bottles) of wine, and Jordan gives them (no gift because he/she did not have time to get a gift / three bottles of the same wine). Next, participants in the (*Giver* / *Recipient*) conditions indicate (how much they think Alex likes their gift / how much they like Alex's gift). The results reveal that participants in the *Giver-Superior* condition, who gave **one** bottle, thought Alex would like their gift **more** than participants in the *Giver-Inferior* condition, who gave **two** bottles,

while participants in the two *Recipient* conditions liked Alex's gift the same (interaction $p < .03$).

Study 3 demonstrates an important economic consequence of this miscalculation by givers. Specifically, study 3 employs two conditions (Gift Rank: *Superior*; *Inferior*). Participants imagine they are planning on getting a friend, who likes movies, two gift certificates to the movies for his/her birthday. Next, participants in the (*Superior* / *Inferior*) condition learn another giver is going to be giving (one certificate / three certificates) to the movies, and then decide whether to purchase two certificates as planned, or to instead purchase five (the cover story was that the theatre was having a sale on a five-certificate package). After choosing, participants indicate how much Alex would have liked two gift certificates if they would have decided to purchase two. As expected, participants in the *Inferior* condition were more likely to upgrade to five certificates than were participants in the *Superior* condition ($p < .001$), and this was mediated by participants in the *Inferior* condition believing their two certificates would be liked less, compared to participants in the *Superior* condition ($p < .001$).

Study 4 demonstrates a second downstream consequence. Specifically, study 4 employs two conditions (Gift Rank: *Superior*; *Inferior*). Participants imagine they purchase an authentic jersey of an average athlete on the local sports team, and are planning on giving it as a "Secret Santa" gift to a coworker who likes sports, at an optional work party. Next, participants in the (*Superior* / *Inferior*) condition learn another giver (who also drew the recipient's name in the Secret Santa) is going to be giving the recipient (a plain white t-shirt with a generic logo of the local sports team on it / an authentic jersey of the recipient's favorite athlete on the local sports team), and then choose whether they will still attend the party and give the recipient his/her gift, or instead go see their favorite band in concert and not give the recipient any gift (the cover story was that another friend invited the participant at the last-minute to the concert, which was at the same time as the party). After choosing, participants indicate how much the recipient would have liked their gift if they would have given it. As expected, participants in the *Inferior* condition were more likely to attend the concert than were participants in the *Superior* condition ($p < .03$), and this was mediated by participants in the *Inferior* condition believing their gift would be liked less, compared to participants in the *Superior* condition ($p < .01$).

The Inequity Penalty: Consumers Show Heightened Sensitivity to Inequitable Treatment in The Context of Apology

EXTENDED ABSTRACT

We live in an era when customer relationship management and loyalty programs have become the norm, employed in industries ranging from air travel to restaurants to cosmetics. Businesses identify their most valuable customers and treat the top twenty percent quite differently than the bottom eighty. For the majority of consumers who do not have privileged status with a company they purchase from, this means they may often be confronted by inequity and often reminded of their relatively low worth as a customer. But while inequitable treatment is most often deployed in the context of rewarding valuable customers, inequitable treatment can also be found in service recovery, when compensating customers who have been inconvenienced or mistreated. In six studies set across three different business contexts, we find that people are especially sensitive to—and angered by—inequitable compensation offered as part of an *apology*.

We hypothesize that this is because apologies activate prescriptive norms associated with restorative justice—specifically the

principle of proportionality—and inequitable remuneration violates those prescriptions. Of course, upward comparisons are often painful (Collins 1996), meaning that even under ordinary conditions consumers should generally feel it is more fair to be treated the same as instead of worse than fellow customers (Soderlund and Collander 2015). But our argument is that this *inequity penalty*—the moral dissatisfaction that consumers have from being treated inequitably compared to equitably—is particularly acute in the context of apology. This is because people are experiencing moral outrage not merely at the inequity itself, but also at the norm violation that inequity represents. Critically, by exploring the conditions that elicit and moderate the impact apology has on people's response to inequitable treatment, we gain insight into how companies can have their cake and eat it too—differentially compensate high status customers without (excessively) angering their broader customer base.

In Study 1, we demonstrate that people are more troubled by inequitable compensation offered in apology for wrongdoing than when that same compensation is provided for a different reason. Participants imagined receiving compensation either for suffering through a long flight delay or in celebration for being part of an airline's millionth flight. Within each of these conditions, participants learned that a frequent flier sitting next to them received either the same (equitable) or greater (inequitable) compensation than they had. While inequity rankled in both conditions, participants were significantly more troubled by inequitable (relative to equitable) compensation when that compensation was offered as part of an apology for the airline's wrongdoing.

Studies 2 and 3 were both designed to rule out the possibility that this heightened 'inequity penalty' was caused by negative experiences (in this case service failures) hyper-sensitizing people to their relative standing or to subsequent slights. In Study 2 all participants imagined taking a cruise to celebrate their anniversary, where they were part of large group of people who contracted food poisoning while on board the ship. Participants who imagined receiving flowers from the cruiseline in compensation for that harm were more upset by the fact that they received a smaller bouquet than first-class passengers than participants who imagined receiving the same inequitably-sized bouquet from the cruiseline as a happy anniversary gift. Study 3 also ruled out the negativity-sensitization hypothesis, but more tightly linked the inequity penalty to our hypothesized mechanism: that it arises in response to a violation of the norms associated with restorative justice. We find that the inequity penalty is heightened specifically when inequitable compensation is offered by a company apologizing for its *own* wrongdoing (e.g. by a hotel whose own fire alarm went off at night), rather than when it accompanies an "empathetic" apology for a harm the company itself was not responsible for (e.g. by a hotel whose guests were woken by a fire alarm in a neighboring building).

Studies 4 and 5 directly test our hypothesis that it is specifically violations of the principle of proportionality that drive the inequity penalty. We do so by manipulating the level of harm that two airline passengers receive, and demonstrate that the inequity penalty is reduced when the amount of harm that those customers have suffered is also unequal. In Study 4, we gain insight into what type of harms people factor into their expectations of proportional restitution. Across measures of both moral wrongness and online word of mouth, we find that the inequity penalty is reduced when consumers are differentially harmed by the firm directly (e.g. suffering different length flight delays), but also when they suffer differential consequences that result the same direct harm (e.g. when both customers experience the same flight delay, but only one misses an important business meeting because of it). In Study 5, we extend this work, de-

termining that companies need not even be aware of the differential consequences their service failures create in order for the inequity penalty to be reduced as a result of them.

Finally, in Study 6, we take lessons learned from studies 2, 4, and 5 to identify ways companies can have their cake and eat it too – differentially compensate high status customers following service failure, without unduly angering their broader customer base. We show that the inequity penalty is reduced both when companies dissociate the compensation from apology (and in fact being explicit that it is being offered to maintain the higher status customer's patronage), or when companies tie differential compensation to differential assumed harm for higher status customers.

Our work breaks new ground in service recovery research, which has almost exclusively studied the effects of compensation and apology separately (e.g. Roschk and Gelbrich 2014; Smith, Bolton, and Wagner 1999; Roschk and Kaiser 2013; Franz and Benningson 2005). What little work addresses these concepts together is focused on whether they are additive or substitutable (Boshoff 2012; Wirtz and Matilla 2004). We take a qualitatively new approach by thinking about how apologies may *constrain* the ways in which people see compensation as just or not. We also offer applied lessons that businesses can implement in their service recovery efforts.

How Comparison Standards Influence Tradeoffs Between Absolute and Relative Outcomes

EXTENDED ABSTRACT

Prior research has demonstrated that two types of comparison standards can influence people's judgments and preferences—other people [i.e., social comparisons (SC); Festinger 1954] and one's own past [i.e., temporal comparisons (TC); Albert 1977]. Typically, individuals are more satisfied by outcomes where they are better (vs. worse) than others (Fox and Kahneman 1992; Klein 1997) and better (vs. worse) than their past (Aronson and Linder 1965; Hsee and Abelson 1991). In fact, people sometimes prefer outcomes in which they are better than others (e.g., you make \$50,000/year; others make \$25,000/year) to absolutely superior outcomes in which they are worse than others (e.g., you make \$100,000/year; others make \$200,000/year; Solnick and Hemenway 1998; 2005). That is, individuals will forgo a better absolute outcome for the sake of being relatively superior to others. Whereas such tradeoffs have been demonstrated for SC, whether similar effects hold for TC is unclear. Furthermore, the relative strength of the two standards remains in question. Although individuals generally prefer improving sequences (Loewenstein and Prelec 1993; Loewenstein and Sicherman 1991), whether such preferences for relative temporal superiority are stronger than corresponding preferences for relative social superiority is unclear. Here, we investigate whether people will be more likely to choose a relatively superior (but absolutely inferior) outcome when comparing themselves to others or when comparing themselves to their past.

In study 1, we sought to determine what proportion of people will forgo a better absolute outcome in favor of being relatively superior to their past (much like they do when comparing to others). One-hundred and sixty participants read ten scenarios in various domains (e.g., income, leisure time, intelligence, physical attractiveness) and made a series of forced choices. In each scenario, participants chose between a situation in which they are better than their past (e.g., you currently make \$50,000/year and used to make \$25,000/year) and a situation in which they are better off in an absolute sense but relatively worse than their past (e.g., you currently make \$100,000/year and used to make \$200,000/year). On average participants preferred

outcomes in which they were absolutely worse off but relatively superior to their past (e.g., choosing \$50,000 over \$100,000) 36.56% of the time, which is significantly greater than zero ($t(159) = 14.69$, $p < .001$). Furthermore, in each individual domain, the proportion of participants who preferred the relatively superior (but absolutely inferior) outcome ranged from 23.75% to 51.25% and was significantly greater than zero (all $t_s(159) > 7.00$, $p_s < .001$). Thus, just as individuals sometimes prefer being better than others to being better off in an absolute sense (Solnick & Hemenway 1998), they sometimes prefer being better than their past to being better off in an absolute sense.

Study 2 built on these findings by directly comparing the effect of TC and SC standards on these tradeoffs. Two-hundred and eighty-seven participants were randomly assigned to one of three conditions and made a series of twelve forced choices that were all framed in terms of TC, SC, or no comparisons. For example, participants in the TC condition chose between a) making \$50,000 when they used to make \$25,000 and b) making \$100,000 when they used to make \$200,000; in the SC condition, participants chose between a) making \$50,000 when others make \$25,000 and b) making \$100,000 when others make \$200,000; in the no comparison (control) condition, participants chose between making \$50,000 and making \$100,000. The key dependent variable was the proportion of relatively superior (but absolutely inferior) outcomes selected (e.g., choosing \$50,000 over \$100,000). A one-way ANOVA revealed a significant main effect of comparison condition ($F(2, 284) = 32.32$, $p < .001$). Participants chose absolutely worse off (but relatively superior) outcomes more frequently in the TC condition ($M = 37.27\%$) than in the SC condition ($M = 20.51\%$) or control condition ($M = 12.15\%$). Notably, simple contrasts revealed a significant difference between the control and SC conditions ($t(284) = 2.71$, $p = .007$), the control and TC conditions ($t(284) = 7.84$, $p < .001$), and the TC and SC conditions ($t(284) = 5.42$, $p < .001$). Thus, it appears that the desire for relatively (vs. absolutely) superior outcomes is stronger when making comparisons to other people than to one's own past.

In study 3, we investigate a boundary condition of the demonstrated effect. We propose that individuals' greater sensitivity to change than to the level of an outcome (Kahneman and Tversky 1979) can account for the stronger preference for relative temporal superiority than relative social superiority. Indeed, TC necessarily involves change (or its absence), whereas SC primarily concerns static levels. Accordingly, factors such as political ideology that reflect individuals' sensitivity to change should moderate the differential effect of TC and SC standards. As liberals are generally less averse to change than conservatives (Jost et al. 2003, 2008), we expect the effect of comparison standard to be attenuated among liberals.

Two-hundred and three participants were randomly assigned to either a TC or SC condition and completed the same choice task from study 2, after which they reported their political ideology (PI) on a 1 (*very liberal*) to 7 (*very conservative*) scale. A linear regression on the proportion of relatively superior choices selected revealed main effects of comparison standard ($b = .06$, $t(199) = 3.35$, $p = .001$) and PI ($b = .02$, $t(199) = 2.20$, $p = .029$), qualified by the predicted interaction ($b = .02$, $t(199) = 2.29$, $p = .023$). A floodlight analysis revealed that the preference for absolutely inferior outcomes was significantly greater in the TC condition than in the SC condition at any level of PI above 2.71 ($b = .08$, $t(199) = 1.97$, $p = .05$). That is, conservatives—who are more threatened by change—were more likely to prefer the relatively superior (but absolutely inferior) outcome when comparing to their past than when comparing to others; however, this was attenuated among liberals.

REFERENCES

- Albert, Stuart (1977), "Temporal Comparison Theory," *Psychological Review*, 84 (6), 485-503.
- Appel, Helmut, Jan Crusius, and Alexander L. Gerlach (2015), "Social Comparison, Envy, and Depression on Facebook: A Study Looking at the Effects of High Comparison Standards on Depressed Individuals," *Journal of Social and Clinical Psychology*, 34 (4), 277-89.
- Aronson, Elliot and Darwyn Linder (1965), "Gain and Loss of Esteem as Determinants of Interpersonal Attractiveness," *Journal of Experimental Social Psychology*, 1 (2), 156-71.
- Boshoff, Criso (2012), "Can Service Firms Overdo Service Recovery? An Assessment of Non Linearity in Service Recovery Satisfaction," *South African Journal of Business Management*, 43 (3), 1-12.
- Carter, Travis J., and Thomas Gilovich (2010), "The Relative Relativity of Material and Experiential Purchases," *Journal of Personality and Social Psychology*, 98 (1), 146-59.
- _____ (2012), "I Am What I Do, Not What I Have: The Differential Centrality of Experiential and Material Purchases to the Self," *Journal of Personality and Social Psychology*, 102 (6), 1304-317.
- Collins, Rebecca L. (1996), "For Better or Worse: The Impact of Upward Social Comparisons on Self-Evaluations," *Psychological Bulletin*, 119 (1), 51-69.
- Festinger, Leon (1954), "A Theory of Social Comparison Processes," *Human Relations*, 7 (2), 117-40.
- Foster, George M. (1972), "The Anatomy of Envy," *Current Anthropology*, 13 (2), 165-202.
- Fox, Craig R. and Daniel Kahneman (1992), "Correlations, Causes, and Heuristics in Surveys of Life Satisfaction," *Social Indicators Research*, 27 (3), 221-34.
- Frantz, Cynthia M., and Courtney Bennigson (2005), "Better Late Than Early: The Influence of Timing on Apology Effectiveness," *Journal of Experimental Social Psychology*, 41 (2), 201-07.
- Gilovich, Thomas, Amit Kumar, and Lily Jampol (2015), "A wonderful life: experiential consumption and the pursuit of happiness," *Journal of Consumer Psychology*, 25 (1), 152-165.
- Haws, Kelly L., and William O. Bearden (2006), "Dynamic Pricing and Consumer Fairness Perceptions," *Journal of Consumer Research*, 33 (3), 304-11.
- Hsee, Christopher K. and Robert P. Abelson (1991), "Velocity Relation: Satisfaction as a Function of the First Derivative of Outcome over Time," *Journal of Personality and Social Psychology*, 60 (3), 341-47.
- Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway (2003), "Political Conservatism as Motivated Social Cognition," *Psychological Bulletin*, 129 (3), 339-75.
- Jost, John T., Brian A. Nosek, and Samuel D. Gosling (2008), "Ideology: Its Resurgence in Social, Personality, and Political Psychology," *Perspectives on Psychological Science*, 3 (2), 126-36.
- Klein, William M. (1997), "Objective Standards Are Not Enough: Affective, Self-Evaluative, and Behavioral Responses to Social Comparison Information," *Journal of Personality and Social Psychology*, 72 (4), 763-74.
- Krasnova, Hanna, Helena Wenninger, Thomas Widjaja, and Peter Buxmann (2013), "Envy on Facebook: A hidden threat to users' life satisfaction?" *11th International Conference on Wirtschaftsinformatik*, 1-16.
- Krasnova, Hanna, Thomas Widjaja, Peter Buxmann, Helena Wenninger, and Izak Benbasat (2015), "Why Following Friends Can Hurt You: An Exploratory Investigation of the Effects of Envy on Social Networking Sites among College-Age Users," *Information Systems Research*, 26 (3), 585-605.
- Richins, Marsha L (1991), "Social Comparison and the Idealized Images of Advertising," *Journal of Consumer Research*, 18 (1), 71-83.
- Rodriguez-Mosquera, Patricia. M., W. Gerrod Parrott, and Alejandra Hurtado de Mendoza (2010), "I Fear Your Envy I Rejoice in Your Coveting: On the Ambivalent Experience of Being Envied by Others," *Journal of Personality and Social Psychology*, 99 (5), 842-54.
- Roschk, Holger and Katja Gelbrich (2014), "Identifying Appropriate Compensation Types for Service Failures: A Meta-Analytic and Experimental Analysis," *Journal of Service Research*, 17 (2), 195-211.
- Roschk, Holger and Susanne Kaiser (2013), "The Nature Of An Apology: An Experimental Study On How To Apologize After A Service Failure," *Marketing Letters*, 24 (3), 293-309.
- Salovey, Peter, and Judith Rodin (1984), "Some Antecedents and Consequences of Social Comparison Jealousy," *Journal of Personality and Social Psychology*, 47 (4), 780-792.
- Smith, Amy K., Ruth N. Bolton and Janet Wagner (1999), "A Model Of Customer Satisfaction With Service Encounters Involving Failure And Recovery," *Journal of Marketing Research*, 36 (3), 356-72.
- Soderlund, Magnus an Jonas Colliander (2015), "Loyalty Program Rewards and Their Impact on Perceived Justice, Customer Satisfaction, and Repurchase Intentions," *Journal of Retailing and Consumer Services*, 25 (July), 47-57.
- Solnick, Sara J. and David Hemenway (1998), "Is More Always Better? A Survey on Positional Concerns," *Journal of Economic Behavior and Organization*, 37 (3), 373-83.
- _____ (2005), "Are Positional Concerns Stronger in Some Domains Than in Others?" *The American Economic Review*, 95 (2), 147-51.
- Van de Ven, Niels (2016), "Envy and Its Consequences: Why It Is Useful to Distinguish between Benign and Malicious Envy," *Social and Personality Psychology Compass*, 10 (6), 337-49.
- _____ (2017), "Envy and admiration: Emotion and motivation following upward social comparison," *Cognition and Emotion*, 31 (1), 193-200.
- Van de Ven, Niels, Marcel Zeelenberg, and Rik Pieters (2010). "Warding Off the Evil Eye: When the Fear of Being Envied Increases Prosocial Behavior," *Psychological Science*, 21 (11), 1671-677.
- _____ (2011), "The Envy Premium in Product Evaluation," *Journal of Consumer Research*, 37 (6), 984-98.
- Wirtz, Jochen and Anna S. Mattila (2004), "Consumer Responses to Compensation, Speed of Recovery and Apology After A Service Failure," *International Journal of Service Industry Management*, 15 (2), 150-166.

You, Me, or We? Conceptualizing and Testing Consumer Choices for Others

Chairs: Eugenia Wu, University of Pittsburgh, USA
Sarah G. Moore, University of Alberta, Canada

Paper #1: A Conceptual Framework for Understanding Consumer Choices for Others

Peggy Liu, University of Pittsburgh, USA
Steven Dallas, New York University, USA
Gavan Fitzsimons, Duke University, USA

Paper #2: People Make More Informed Choices for Others

Evan Polman, University of Wisconsin-Madison, USA

Paper #3: The Spirit of Giving: Impure Altruism in Funeral Contracts

Ximena Garcia-Rada, Harvard University, USA
Sarah C. Whitley, Boston University, USA
Dan Ariely, Duke University, USA
Carey K. Morewedge, Boston University, USA

Paper #4: Wine for the Table: Self-Construal and Choosing for Large Versus Small Groups

Sarah G. Moore, University of Alberta, Canada
Eugenia Wu, University of Pittsburgh, USA
Gavan Fitzsimons, Duke University, USA

SESSION OVERVIEW

Consumers choose for others daily: what to pack in a child's lunch, what gift to purchase for a friend, what food to bring to a potluck, or what to order for a partner running late to dinner. These choices are fraught with difficulty: what does the recipient prefer? What does the chooser prefer? What are the consequences—for the recipient, the chooser, and their relationship—of making a poor choice? Despite their ubiquity and complexity, consumer research has neglected such choices (but see, e.g., Sherry 1983). Thus, this session offers conceptual and empirical insight into choosing for others.

To begin, Liu and colleagues develop a conceptual framework that describes choosing for others based on two critical dimensions: whether the chooser is focused on the recipient or the relationship, and whether they have a primary goal to please the recipient. The resulting four choice contexts are gift-giving (relationship-focus, goal to please is primary), absent-recipient (recipient-focus, goal to please is primary), joint consumption (relationship-focus, goal to please is secondary), and paternalistic (recipient-focus, goal to please is secondary).

The three empirical papers in this session fit into and expand on this framework. In three studies, Polman finds that in absent-recipient contexts, consumers gather more attribute and alternative information when choosing for others (vs. themselves). In eight studies, Garcia-Rada and colleagues examine spending on others in the paternalistic context of funerals, and test whether choosers are motivated by pure or impure altruism. In four studies, Moore and colleagues examine how group size and self-construal affect choice in a joint consumption context.

Each empirical paper explores a different choice context from Liu and colleagues' framework. The contexts these papers explore are also the least researched; while there is a large and still-growing literature on gift-giving (Ward and Broniarczyk 2011; Steffel and Le Boeuf 2014), there is less research on choosing for others in absent-recipient, paternalistic, and joint consumption contexts. Further, each paper provides insight into—and helps to refine and expand—Liu and colleagues' framework. Polman's results suggest that information search is a critical outcome of making recipient-focused choices.

Garcia-Rada and colleagues' findings highlight impure altruism as a driver of choice when pleasing the recipient is not a primary goal. Moore and colleagues identify situational and individual factors that affect consumers' degree of relationship-focus and emphasis on pleasing the recipient in joint consumption contexts.

Given their advanced stages, these papers can integrate existing research on choosing for others and generate new research in this area. We expect this session to interest a diverse audience, including consumer psychologists studying social influence, motivation, and decision-making. We hope the session will spur discussion of theoretical and empirical questions for future research, including: 1) beyond outcomes such as search behavior and choice, what are the individual and relationship consequences of choosing for others?; 2) what individual, relationship, or situational factors predict the strength of the chooser's relationship- or recipient-focus?; 3) If choosers are not focused on pleasing the recipient, what secondary goals might they adopt, with what outcomes?

A Conceptual Framework for Understanding Consumer Choices for Others

EXTENDED ABSTRACT

Consumers spend their lives surrounded by others and thus often make choices not just for themselves, but also for others. Yet most consumer behavior research, and the resulting marketing insights, has historically neglected to consider choices for others. Recently, however, consumer behavior researchers have increasingly focused on consumers' choices for others. We consider the remaining gaps in this literature as well as the marketing implications of choosing for others. We do so by developing a new choosing-for-others conceptual framework with two fundamental dimensions.

We propose that thinking about another person in various ways is at the conceptual center of choosing for others. Thus, choosing-for-others situations can be differentiated on two fundamental dimensions—(i) whether the chooser is focused on the relationship between self and other or whether the chooser is focused exclusively on the other person when choosing, and (ii) whether the chooser's primary goal is to maximize the recipient's immediate happiness or to balance this goal against competing interests (i.e., the chooser's own preferences or the recipient's long-term welfare).

With regard to the first dimension, a relationship focus involves high concern with the self-other link, as choosers care considerably about the relational message they convey to the other person through their choice, as well as the relational expectations, dynamics, and implications of their choice (Cavanaugh 2016; Epp and Price 2011; Kelley and Thibaut 1978). In contrast, when consumers adopt a recipient focus, they are much less concerned with the self-other link and the relational implications of their choice (Barasz, Kim, and John 2016; Laran 2010), focusing mainly on the other person's wants and needs instead.

With regard to the second dimension, when a chooser's primary goal is to please the recipient, they consider the recipient's preferences and choose the option that they believe will maximize the recipient's immediate happiness (even if their beliefs about the recipient's preferences are incorrect). By contrast, other situations exist in which beliefs about the other person's preferences are a secondary input to choice, and the goal to please the recipient is not primary. By

secondary, we mean that other concerns, such as what the other person *ought* to receive or what the chooser prefers to choose on his or her own, are similarly important or sometimes even more important than pleasing the recipient. However, this is not to say that the other person's preferences do not matter at all.

Combining these two fundamental dimensions of choosing-for-others results in four "cells". These cells or choice contexts are labeled to correspond to four major, distinct choosing-for-others literatures that can be considered prototypical situations for each cell: gift-giving, joint consumption, absent-recipient, and paternalistic. These labels may not and are not intended to be able to describe every situation that fits into a given cell based on its standing on the two fundamental framework dimensions. However, each context is labeled to improve comprehension, and these labels each represent common, important, prototypical contexts. Furthermore, established literature streams correspond to each label, which facilitates a deeper understanding of the main choice motives in each context and of the choice implications and managerial implications in each context. In our presentation, we will provide an overview of these motives, choice implications, and managerial implications, while acknowledging blurrier cases that are not perfectly described by one of the four labels.

The first cell is labeled the "gift-giving" context. This cell involves a considerable relationship focus (Belk 1979, 1996; Camerer 1988; Lowrey, Otnes, and Ruth 2004; Otnes, Lowrey, and Kim 1993; Ruth, Otnes, and Brunel 1999; Schwartz 1967; Sherry 1983) and pleasing the other person is a primary consideration of the chooser. The second cell is labeled the "joint consumption" context, which consists of making shared consumption choices for self and other (e.g., a shared restaurant choice, a shared vacation destination, or a shared car). This cell also involves a strong relationship focus, but pleasing the other person is not necessarily the primary goal, as the chooser also weighs his/her own preferences. The third and fourth cells are labeled the "absent-recipient" and "paternalistic" contexts. Unlike the gift-giving and joint consumption contexts, choosers in the absent-recipient and paternalistic contexts are more focused on the other person than on the self-other relationship. In the absent-recipient context, which consists of making consumption choices for an able-minded but physically absent recipient (e.g., picking up coffee for a fellow coworker, buying groceries for a spouse), there is a strong recipient-focus, and satisfying the other person's preferences is the chooser's primary goal. In the paternalistic context, on the other hand, the chooser makes consumption choices for another person who is for some reason less *able* to choose (e.g., children, the elderly). In other words, an absent-recipient context (vs. paternalistic context) involves another person who does not have the *opportunity* (vs. ability) to choose. Thus, in the paternalistic context, the chooser considers the welfare implications of each option—in addition to the recipient's preferences—when deciding what to choose.

These four distinct contexts are both theoretically and empirically grounded in their relevance. Theoretically, these four contexts map onto the four main reasons why one consumer would make a choice for another consumer: desire to send a relational signal, sharing of the choice between chooser and recipient, the recipient's lack of opportunity to choose, or the recipient's lack of ability to choose. Empirically, a pilot study shows that this framework parsimoniously captures nearly all contexts in which consumers make choices for others and that each context encapsulates a considerable breadth of situations.

Given that this is a conceptual paper, in our presentation, we would discuss this framework, including the distinct profile of choosers' motives, choice outcomes, and marketing implications within each of the four main choice contexts. Additionally, we would

discuss novel insights of our framework and its generativity for new academic research.

People Make More Informed Choices for Others

EXTENDED ABSTRACT

Consider a recent study that measured how well participants respond to complicated problems, like the classic bat-and-ball problem (Mata, Fiedler, Ferreira, and Almeida 2013). In their examination of these problems, Mata and colleagues discovered that some people were more likely to solve them when the problems belonged to someone else. Why? The authors revealed that because people believe they are less biased than others (Pronin 2008), their confidence in others' ability to identify the correct answer is relatively low, hence they subsequently scrutinize others' choices more. Could this mean that people are "better" (more informed) at making choices for others? We believe so. Specifically, we predict that when making choices for others (vs. themselves), decision makers search for more information.

Several lines of research hint at this idea. For example, some research finds that when people decide for others, their choices are less biased compared to when they decide for themselves. That is, people who choose for others demonstrate less inter-temporal discounting, decoy effect, omission bias, betrayal bias, post-decisional distortion, choice overload, ego depletion, and loss aversion (Gershoff and Koehler 2011; Helgadóttir 2015; Pronin, Olivola, and Kennedy 2008; Polman 2010, 2012a, 2012b; Polman and Emich 2011; Polman and Vohs 2016; Ziegler and Tunney 2012; Zikmund-Fisher, Sarr, Fagerlin, and Ubel 2006).

Research also shows that people sometimes help others more than they help themselves. For example, people behave more assertively and less forgivingly toward transgressors who offend their friends than transgressors who offend them personally (Green, Burnette, and Davis 2008). People also pay more to stop other people's pain than they pay to stop their own (Crockett et al. 2014). In this vein, it would appear as though people occasionally prioritize others' well-being over their own. In support, research has shown that people value their close friends' possessions more than their own (Greenstein and Xu 2015).

Together, these findings suggest that when people choose for others, they may think more about their choices (by considering more alternatives and attributes) than when making their own choices. Entirely consistent with this view, making a choice for someone else has been theorized as an instance of accountability (Tetlock 1992). Further, research by Lee, Herr, Kardes, and Kim (1999) showed that under the sway of accountability, people examine more information, employ multiple search criteria, and employ more compensatory choice strategies.

We therefore tested whether choosing for others increases the extent to which decision makers search for options (*alternative-search*) and pursue information about each alternative (*attribute-search*). We also focused on a theoretically-derived mediator—regulatory focus—which brings to bear a new prediction concerning alternative- and attribute-search. Polman (2012a, 2012b) established that choosing for others puts people into a more promotion- (vs. prevention-) focused state, whereas choosing for the self puts people into a more prevention- (vs. promotion-) focused state. Also, in a nutshell, the literature on regulatory focus reveals parallels with alternative- and attribute-search (Forster and Higgins 2005; Forster, Higgins, and Bianco 2003; Mantel and Kardes 1999; Pham and Avnet 2004; Sanbonmatsu and Fazio 1990; Zhu and Myers-Levy 2007). In our research, we develop a theoretical and empirical link between

self-other decision making, regulatory focus, and alternative/attribute-search, which highlights when and why decision makers pursue more information, and what kind of information they pursue.

In study 1, 124 participants chose between two college courses with ten attributes describing each course. For each attribute, we created three levels and assigned one level of each attribute to each course randomly. Following the initial display of one attribute (for both courses), participants were asked whether they were ready to make a choice or whether they wanted to see another attribute. We found participants making choices for others pursued more attributes than participants making choices for themselves, $d = .81$.

In study 2, 119 participants chose between ten restaurants, where they saw information about one restaurant at a time. Following the initial display of one restaurant, participants were asked whether they were ready to make a choice or whether they wanted to see another restaurant alternative. We found participants making choices for others considered more alternatives than participants making choices for themselves, $d = .54$.

Although the preceding studies provide evidence consistent with our hypothesis, they did not directly examine the trade-off between alternative- and attribute-search. In study 3, we addressed the conflict between alternative- and attribute-search by allowing participants to research information about both alternatives and attributes. In line with our investigation of regulatory focus, we predicted a higher promotion-focus (activated by choosing for others) would lead to trading off attribute information in favor of alternatives, and vice versa, a higher prevention-focus (activated by choosing for the self) would lead to trading off information about alternatives in favor of attributes.

In study 3, 137 participants received three attributes each about three college courses and were asked whether they were ready to make a final choice, or whether they wanted additional information and if so, what kind of information (attribute or alternative). Participants who chose to see more information were shown the requested information (attribute or alternative) until they were ready to make a final choice. We found a significant interaction between target and information type which demonstrates the trade-off between alternative- and attribute-search. Participants choosing for others considered more alternatives than attributes, $d = .62$. In contrast, participants choosing for themselves pursued more attributes than alternatives, $d = .77$.

We carried out two bootstrapping procedures to determine whether promotion/prevention focus mediated the relation between target and alternative/attribute search. For these respective indirect effects, results indicated that the 95% confidence intervals (with 1000 samples) were $[-0.49, -0.10]$ and $[0.24, 0.78]$.

Summing up, our results show that a path to self-help might include a dose of other-help. In fact, it is perhaps no coincidence that when it comes to offering advice, people sometimes say “here’s my two cents” yet when people ask for others’ advice, they might say “penny for your thoughts.” In line with our results, people *can* offer more to others.

The Spirit of Giving: Impure Altruism in Funeral Contracts

EXTENDED ABSTRACT

Giving to others is driven by many extrinsic motives, such as reciprocal and reputational benefits—but its most cryptic drivers are intrinsic, altruistic motives (Falk and Fischbacher 2006; Rabin 1993). People give to others because prosocial giving is pleasurable (Andreoni 1989, 1990), but identifying the source of this pleasure

is difficult. Dictator games can remove reputational and reciprocal motives by making giving private (Haley and Fessler 2005; Nettle et al. 2013) and by anonymizing givers and recipients (Franzen and Pointner 2012; Hoffman, McCabe and Smith 1996). Yet, in almost all cases, giving can still benefit the recipient in some way. Thus, it is unclear whether the pleasure of giving requires that the recipient receives some benefit (i.e., pure altruism), or if pleasure can be derived solely from the act of giving itself (i.e., impure altruism).

Funeral contracts are an exceptional case in which prosocial giving does not benefit the recipient; they are dead. With industry sales of \$14.2 billion per year (McGinley 2016) and an average cost of \$6,500 in the United States, funerals contracts are important financial decisions that must be made by or for almost all persons. Moreover, for most funeral contracts, the recipient does not benefit from executor spending (contracts planned for deceased others), but there are contracts in which the executor is the recipient (contracts planned for the self). Comparing self-planned and other-planned funeral contracts can thus elucidate whether the “warm glow” derived from the act of giving itself influences the spirit of giving. Impure altruism should lead executors to spend more on expenses for others than themselves, particularly on expenses where the amount spent is only clear to the executor.

In Study 1, we used funeral contract data from a U.S. funeral home to test for differences in expenditures between people who pre-planned their own funeral and people who planned a funeral for another person. Total and itemized expenses were collected from 385 funeral contracts prepared between 2012 and 2014 (self-planned funerals=128; other-planned funerals=257). Two samples of funerals planned for others were collected: one matched by age and gender to self-planned funerals, and another randomly sampled from the target years (these groups did not differ and were collapsed in further analyses).

Overall, we find that people spend more on others’ funerals ($M_o = \$6,671.07$) than on their own ($M_s = \$5,779.49$; $b = 471.47$, $SE = 131.00$, $p < .001$), even when controlling for important covariates such as service type, gender, and age of the deceased. Additionally, we explored variation in expense category spending (public vs. private) to disentangle whether reputational effects also drive funeral spending in addition to a feeling of warm-glow. Twenty-four funeral expense categories were deemed public or private (based on the number of people who would notice the amount spent on the item, as indicated by 75 Mturk participants). Applying this categorization to our data, we find that people spend more on both public ($M_{\text{Difference}} = \489.08 ; $b = 246.32$, $SE = 84.41$, $p = .004$) and private expenses ($M_{\text{Difference}} = \257.18 ; $b = 115.00$, $SE = 56.70$, $p = .048$) when planning others’ funerals versus their own. These similar results between public and private funeral expenses address the alternative explanation that reputation or signaling motives drive funeral spending. In two lab studies when participants were assigned randomly to plan their own funeral or a loved one’s funeral, we replicate the self-other spending gap for both burial ($N = 391$) and cremation services ($N = 387$) and show that self-selection does not drive these differences (self-other spending gap: $ps < .001$).

We next ruled out alternative explanations that might drive this self-other difference; participants were asked to read a scenario and make funeral choices, and we manipulated who the recipient was as well as conditions about the funeral. In Study 2 ($N = 765$), we test whether ambiguity about what the deceased would have wanted motivated consumers’ greater spending for others’ funerals; scenarios providing participants with the deceased’s suggested spending amount versus no information about the deceased’s expectations did not differ. In Study 3 ($N = 582$), we refute the explanation that

greater funeral spending for others compared to the self is driven by an expectation of future reciprocity (i.e., spending more on another's funerals to have someone else do the same for you in the future). In Study 4 ($N=580$), we explore whether greater spending for others' funerals is driven by decision makers' expectations of utility from experiencing that recipients' funeral ceremony. Results from this study reveal that funeral attendance did not affect the amount people spent on others' funerals.

Finally, we conducted two additional studies to examine specific drivers of impure altruism (i.e., warm glow) that account for our effect. In Study 5 ($N=799$), we separate two drivers of impure altruism: positive affect felt from benefitting the recipient and utility from the act of giving itself. While funerals constitute a social exchange in which the recipient generally does not benefit due to their status, we test whether decision makers feel that a deceased recipient might still benefit in a supernatural sense. Using scenarios including funeral planning for others who were either alive or deceased at the time of planning, our results suggest that decision makers do not perceive recipients to benefit in a supernatural sense, thus supporting the claim that this prosocial spending on others' funerals is driven by utility from the act of giving itself. Furthermore, in Study 6 ($N=752$), we compare whether decision makers truly engage in greater spending for others' funerals out of utility from giving or due to a moral obligation. Results did not confirm the moral obligation account, further suggesting that greater funeral spending is driven by utility from the act of giving itself.

In sum, this research provides an in-depth look at the understudied and unique context of funeral decisions and the motivations that drive them. We find that people spend more on the funerals they plan for others than themselves, and demonstrate that this self-other gap is robust using archival data and experiments. More importantly, we identify a new driver of impure altruism that motivates prosocial spending when recipients do not receive material benefits: utility from the act of giving.

Wine for the Table: Self-Construal and Choosing for Large Versus Small Groups

EXTENDED ABSTRACT

Imagine that you are out to dinner with friends and you have been tasked with selecting wine for the table. How does the number of friends at dinner, in conjunction with your self-construal, affect your choice? Although recent research has begun to explore how consumers choose for others, little work has examined what role the characteristics of the choice recipient(s) might play in such choices.

The present research proposes that the number of choice recipients, in conjunction with self-construal, will affect consumers' choices for themselves and others. Prior work shows that although individuals have a strong default tendency to focus on themselves (Chambers and Windschitl 2004), making others salient can shift attentional focus towards others (Alicke and Govorun 2005). Importantly, the number of others matters: interacting with a small number of others (e.g., a single other person) increases other-focus, whereas interacting with a larger group maintains individuals' natural self-focus (Barasch and Berger 2014). In addition, research on self-construal suggests that consumers differ in their habitual focus on the self versus others. Independent individuals see themselves as distinct, autonomous beings, leading them to focus relatively more on the self than interdependent individuals. In contrast, interdependent individuals see themselves as inextricably situated within relationships, leading them to focus relatively more on others than independent individuals (Markus and Kitayama 1991).

Combining these ideas, we propose that group size and self-construal will interact to determine choices for others. We focus on joint consumption choices, which have shared outcomes—for example, choosing a t-shirt design to be worn by oneself and other team members, or selecting a happy hour location for a group. In such contexts, the decision-maker must consider not just her own preferences, but also those of others, making the tension between weighing self and others' preferences especially salient.

We propose that when choosing for themselves and a small group of others, independents and interdependents will make choices that account for others' preferences along with their own. When choosing for themselves and a large group of others, however, we expect that independents and interdependents' choice behavior will diverge. Specifically, we expect that while interdependents' other-focus will lead them to continue making choices that account for everybody's preferences, independents will switch to choices that prioritize their own preferences over others. We suggest that this occurs because small (but not large) group contexts heighten the chooser's other-focus—that is, their attention to others.

In study 1A, we primed 297 participants with independence or interdependence and asked them to choose a movie package for viewing with a large or small group of friends. Participants were told that the group's movie preferences were evenly split between drama and western movies. They then chose one of several movie packages with varying numbers of western and drama films. Participants also reported their preferences for both film genres. Choice was predicted by a three-way interaction between self-construal prime, group size, and self-preferences. When choosing for a small group, self-preferences did not drive choice for independents or interdependents ($p > .41$). When choosing for a large group, while self-preferences did not drive choice for interdependents ($p > .50$), they did for independents ($\beta = 0.19$, $t(287) = 3.88$, $p = .0001$): as their preference for western movies increased, so did the relative proportion of western movies in the movie package they chose.

In study 1B, we primed 253 participants with independence or interdependence and asked them to choose one bottle each of red and white wine for dinner with a large or small group of friends. Participants were given a budget and a real wine menu to choose from. They also reported their preferences for red and white wine. Results replicated study 1A: when choosing for a small group, self-preferences did not predict choice for independents or interdependents ($p > .61$). When choosing for a large group, while self-preferences did not drive choice for interdependents ($p > .61$), they did for independents ($\beta = 0.28$, $t(245) = 3.50$, $p = .0006$), who spent more of their budget on their preferred wine (red or white).

In study 2, we examined the mechanism underlying this effect. We primed 276 participants with independence or interdependence and asked them to choose a book deal for their large or small book club. Participants chose one of several deals that contained varying proportions of fiction and non-fiction books, described what they thought reading the books with their club would be like, and reported their book preferences. When choosing for a small group, self-preferences did not predict choice for independents or interdependents ($p > .34$). When choosing for a large group, however, self-preferences predicted choice only for independents ($\beta = 0.22$, $t(266) = 3.68$, $p = .0003$) such that they chose more books of their preferred type (fiction or non-fiction). Supporting an attentional-focus hypothesis, mediation analysis revealed that independents used more other-focused pronouns (i.e., "we") in their written descriptions in small versus large group contexts, and that pronoun use mediated the relationship between group size and choice (CI: 0.0023–0.3686, $p < .05$). This was not true for interdependents ($p > .05$).

Study 3 further tested our process, using wine choices in a small group context. Our prior studies suggest that despite their natural self-focus, small groups draw independents' attention to others; thus, we interfered with their ability to pay attention. We first primed 433 participants with independence and then manipulated cognitive load. Replicating prior studies, when load was low, self-preferences did not predict wine choice ($p > .84$). In contrast, and supporting our hypothesized attention-based process, when load was high, participants chose more expensive wines of their preferred type ($t(429) = 2.99, p < .003$).

We show that group size and self-construal are key factors in predicting consumers' choices on behalf of self and others. In doing so, we identify a context where independents adjust their choices for others—a finding that is in contrast to past work, which has largely shown when interdependents adjust for others (e.g., Morling, Kitayama and Miyamoto 2002).

REFERENCES

Session Overview

- Sherry, John F (1983), "Gift Giving in Anthropological Perspective," *Journal of Consumer Research*, 10 (2), 157-68.
- Steffel, Mary, and Robyn A. Le Boeuf (2014), "Overindividuation in gift giving: Shopping for multiple recipients leads givers to choose unique but less preferred gifts," *Journal of Consumer Research*, 40(6), 1167-1180.
- Ward, Morgan K., and Susan M. Broniarczyk (2011), "It's not me, it's you: How gift giving creates giver identity threat as a function of social closeness," *Journal of Consumer Research*, 38(1), 164-181.

Paper 1

- Barasz, Kate, Tami Kim, and Leslie K John (2016), "The Role of (Dis) Similarity in (Mis) Predicting Others' Preferences," *Journal of Marketing Research*, 53 (4), 597-607.
- Belk, Russell W. (1979), "Gift-Giving Behavior," in *Research in Marketing*, Vol. 2, ed. Jagdish Sheth, Greenwich, CT: JAI Press, 95-126.
- Belk, Russell W. (1996), "The Perfect Gift," in *Gift Giving: A Research Anthology*, ed. Cele Otnes and Richard F. Beltramini, Bowling Green, OH: Bowling Green State University Popular Press, 59-84.
- Camerer, Colin (1988), "Gifts as Economic Signals and Social Symbols," *American Journal of Sociology*, 94 (Supplement), S180-S214.
- Cavanaugh, Lisa A (2016), "Consumer Behavior in Close Relationships," *Current Opinion in Psychology*, 10, 101-06.
- Epp, Amber M and Linda L Price (2011), "Designing Solutions around Customer Network Identity Goals," *Journal of Marketing*, 75 (2), 36-54.
- Kelley, Harold H and John W Thibaut (1978), *Interpersonal Relations: A Theory of Interdependence*, New York: John Wiley & Sons.
- Laran, Juliano (2010), "Goal Management in Sequential Choices: Consumer Choices for Others Are More Indulgent Than Personal Choices," *Journal of Consumer Research*, 37 (2), 304-14.
- Lowrey, Tina M., Cele C. Otnes, and Julie A. Ruth (2004), "Social Influences on Dyadic Giving over Time: A Taxonomy from the Giver's Perspective," *Journal of Consumer Research*, 30 (4), 547-58.

- Otnes, Cele, Tina M. Lowrey, and Young Chan Kim (1993), "Gift Selection for Easy and Difficult Recipients: A Social Roles Interpretation," *Journal of Consumer Research*, 20 (2), 229-44.
- Ruth, Julie A., Cele C. Otnes, and Frederic F. Brunel (1999), "Gift Receipt and the Reformulation of Interpersonal Relationships," *Journal of Consumer Research*, 25 (4), 385-402.
- Schwartz, Barry (1967), "The Social Psychology of the Gift," *American Journal of Sociology*, 73 (1), 1-11.
- Sherry, John F (1983), "Gift Giving in Anthropological Perspective," *Journal of Consumer Research*, 10 (2), 157-68.

Paper 2

- Crockett, Molly J., Zeb Kurth-Nelson, Jenifer Z. Siegel, Peter Dayan, and Raymond J. Dolan (2014), "Harm to Others Outweighs Harm to Self in Moral Decision Making," *Proceedings Of The National Academy Of Sciences*, 111 (48), 17320-17325.
- Förster, Jens, and E. Tory Higgins (2005), "How Global versus Local Perception Fits Regulatory Focus," *Psychological Science*, 16 (8), 631-636.
- Förster, Jens, E. Tory Higgins, and Amy Taylor Bianco (2003), "Speed/Accuracy Decisions in Task Performance: Built-In Trade-Off or Separate Strategic Concerns?," *Organizational Behavior and Human Decision Processes*, 90 (1), 148-164.
- Gershoff, Andrew D., and Jonathan J. Koehler (2011), "Safety First? The Role of Emotion in Safety Product Betrayal Aversion," *Journal of Consumer Research*, 38 (1), 140-150.
- Green, Jeffrey D., Jeni L. Burnette, and Jody L. Davis (2008), "Third-Party Forgiveness: (Not) Forgiving Your Close Other's Betrayer," *Personality and Social Psychology Bulletin*, 34 (3), 407-418.
- Greenstein, Michael J., and Xiaomeng Xu (2015), "My Mug Is Valuable, But My Partner's is Even More So: Economic Decisions for Close Others," *Basic and Applied Social Psychology*, 37 (3), 174-187.
- Helgadóttir, Arna (2015), "Asymmetric Dominance Effect in Choice for Others," Unpublished Doctoral Dissertation. Reykjavik University, Iceland.
- Lee, Hanjoon, Paul M. Herr, Frank R. Kardes, and Chankon Kim (1999), "Motivated Search: Effects of Choice Accountability, Issue Involvement, and Prior Knowledge on Information Acquisition and Use," *Journal of Business Research*, 45 (1), 75-88.
- Mantel, Susan Powell, and Frank R. Kardes (1999), "The Role of Direction of Comparison, Attribute-Based Processing, and Attitude-Based Processing in Consumer Preference," *Journal Of Consumer Research*, 25 (4), 335-352.
- Mata, André, Klaus Fiedler, Mário B. Ferreira, and Tiago Almeida (2013), "Reasoning about Others' Reasoning," *Journal of Experimental Social Psychology* 49 (3), 486-491.
- Pham, Michel Tuan, and Tamar Avnet (2004). "Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion," *Journal of Consumer Research*, 30 (4), 503-518.
- Polman, Evan (2010), "Information Distortion in Self-Other Decision Making," *Journal of Experimental Social Psychology*, 46 (2), 432-435.
- Polman, Evan (2012a), "Effects of Self-Other Decision Making on Regulatory Focus and Choice Overload," *Journal of Personality and Social Psychology*, 102 (5), 980-993.

- Polman, Evan (2012b), "Self-Other Decision Making and Loss Aversion," *Organizational Behavior and Human Decision Processes*, 119 (2), 141-150.
- Polman, Evan, And Kyle J. Emich (2011), "Decisions for Others are More Creative than Decisions for the Self," *Personality and Social Psychology Bulletin* 37 (4), 492-501.
- Polman, Evan, And Kathleen D. Vohs (2016), "Decision Fatigue, Choosing for Others, and Self-Construal," *Social Psychological and Personality Science* 7 (5), 471-478.
- Pronin, Emily (2008), "How We See Ourselves and How We See Others," *Science*, 320 (5880), 1177-1180.
- Pronin, Emily, Christopher Y. Olivola, And Kathleen A. Kennedy (2008), "Doing Unto Future Selves as You Would Do Unto Others: Psychological Distance and Decision Making," *Personality and Social Psychology Bulletin*, 34 (2), 224-236.
- Sanbonmatsu, David M., and Russell H. Fazio (1990), "The Role of Attitudes in Memory-Based Decision Making," *Journal of Personality and Social Psychology*, 59 (4): 614-622.
- Tetlock, Philip E (1992), "The Impact of Accountability on Judgment and Choice: Toward a Social Contingency Model," *Advances in Experimental Social Psychology*, 25, 331-376.
- Zhu, Rui, And Joan Meyers-Levy (2007), "Exploring The Cognitive Mechanism That Underlies Regulatory Focus Effects," *Journal Of Consumer Research*, 34 (1), 89-96.
- Ziegler, Fenja V., And Richard J. Tunney (2012), "Decisions for Others Become Less Impulsive The Further Away They are on the Family Tree," *Plos One*, 7 (11), E49479.
- Zikmund-Fisher, Brian J., Brianna Sarr, Angela Fagerlin, And Peter A. Ubel (2006), "A Matter of Perspective: Choosing for Others Differs from Choosing for Yourself in Making Treatment Decisions," *Journal Of General Internal Medicine*, 21 (6), 618-622.
- Paper 3**
- Andreoni, James (1989), "Giving with impure altruism: Applications to charity and Ricardian equivalence", *Journal of Political Economy*, 97(6), 1447-1458.
- Andreoni, James (1990), "Impure altruism and donations to public goods: A theory of warm-glow giving," *The Economic Journal*, 100(401), 464-477.
- Falk, Armin and Urs Fischbacher (2006), "A theory of reciprocity," *Games and Economic Behavior*, 54(2), 293-315.
- Franzen, Axel, and Sonja Pointner (2012), "Anonymity in the dictator game revisited," *Journal of Economic Behavior & Organization*, 81(1), 74-81.
- Haley, Kevin J. and Daniel M. Fessler (2005), "Nobody's watching?: Subtle cues affect generosity in an anonymous economic game," *Evolution and Human Behavior*, 26(3), 245-256.
- Hoffman, Elizabeth, Kevin McCabe, Vernon L. Smith (1996), "Social distance and other-regarding behavior in dictator games," *The American Economic Review*, 86(3), 653-660.
- McGinley, D. (2016), "IBIS World Industry Report 81221: Funeral Homes in the US," IBIS World.
- Nettle, Daniel, Zoe Harper, Adam Kidson, Rosie Stone, Ian S. Penton-Voak, and Melissa Bateson (2013), "The watching eyes effect in the Dictator Game: it's not how much you give, it's being seen to give something," *Evolution and Human Behavior*, 34(1), 35-40.
- Rabin, Matthew (1993), "Incorporating fairness into game theory and economics," *The American Economic Review*, 1281-1302.
- Paper 4**
- Alicke, Mark D., and Olesya Govorun (2005), "The better-than-average effect," *The Self in Social Judgment*, 1, 85-106.
- Barasch, Alixandra, and Jonah Berger (2014), "Broadcasting and narrowcasting: How audience size affects what people share," *Journal of Marketing Research*, 51(3), 286-299.
- Chambers, John R., and Paul D. Windschitl (2014), "Biases in social comparative judgments: the role of nonmotivated factors in above-average and comparative-optimism effects," *Psychological Bulletin*, 130(5), 813-838.
- Markus, Hazel R., and Shinobu Kitayama (1991), "Culture and the self: Implications for cognition, emotion, and motivation," *Psychological Review*, 98(2), 224-253.
- Morling, Beth, Shinobu Kitayama, and Yuri Miyamoto (2002), "Cultural practices emphasize influence in the United States and adjustment in Japan," *Personality and Social Psychology Bulletin*, 28(3), 311-323.

Possessions and Wellbeing: Increasing, Sustaining and Sharing Happiness

Chair: Jingshi (Joyce) Liu, HKUST, Hong Kong

Paper #1: My Favorite Thing: How Special Possessions can Increase Subjective Wellbeing

Jingshi (Joyce) Liu, HKUST, Hong Kong
Amy N. Dalton, HKUST, Hong Kong
Anirban Mukhopadhyay, HKUST, Hong Kong

Paper #2: Satisfying Inherent Preferences to Promote Sustainable Happiness

Yanping Tu, University of Florida, USA
Christopher Hsee, University of Chicago, USA
Xilin Li, University of Chicago, USA

Paper #3: When Consumers Prefer to Give Material Gifts instead of Experiences1: The Role of Social Distance

Joseph K. Goodman, The Ohio State University, USA
Sarah Lim, Cornell University, USA

Paper #4: Losing Our Most Special Possession: The Unexpected Positivity of Dying

Amelia Goranson, University of North Carolina at Chapel Hill, USA
Ryan Ritter, University of Illinois at Urbana-Champaign, USA
Adam Waytz, Northwestern University, USA
Michael I. Norton, Harvard University, USA
Kurt Gray, University of North Carolina at Chapel Hill, USA

SESSION OVERVIEW

People generally want to be happy. The extant literature has examined different factors that influence our wellbeing and happiness. Much research suggested that focusing on time and social connections better predict happiness than focusing on money and possessions (e.g. Mogilner 2010; Aaker et al. 2011; Dunn et al. 2011; Dittmar et al. 2014; Ryan and Dzurowiec 2001). Yet, our possessions are essential to our lives (Belk 1988). Thus, it is critical to examine the ways in which possessions can influence different aspects of wellbeing and happiness. Collectively, the four papers in this session study how possessions influence wellbeing and happiness.

In the first paper, Liu, Dalton and Mukhopadhyay suggest that special possessions can *increase* subjective wellbeing. While valuing material possessions may decrease wellbeing in general, focusing on a particular special possession may actually increase subjective wellbeing beyond baseline levels and compared to focusing on multiple possessions taken together. This is because a special possession increases a sense of connectedness, which in turn increases subjective wellbeing.

In the second paper, Tu, Hsee, and Li examine how one can *sustain* happiness by satisfying inherent, as opposed to learned, preferences. Purchasing a product that satisfies inherent (vs. learned) preferences leads to a slower decrease in happiness over time. This is because the happiness gained from satisfying inherent (vs. learned) preferences is less context dependent, and thus longer lasting. This effect also generalizes to the broader domain of improvements in personal life.

In the third paper, Goodman and Lim examine how one *shares* happiness through gift-giving. Despite research suggesting that experiences are more likely to make consumers happy than material goods, consumers are more likely to give material [experiential] gifts to socially-distant [-close] recipients. This is because giving experiential gifts requires greater knowledge about the recipient than giving material gifts.

Finally, Goranson, Ritter, Waytz, Norton, and Gray suggest that wellbeing is unexpectedly high when people are facing the loss of their most valued possession: life. Blog posts of terminally ill patients and the last words of death row inmates are more positive than others would forecast. The blog posts of terminally ill patients also become more positive as death approaches. Thus, facing the prospect of dying, people experience greater wellbeing than others would expect.

This session contributes to answering a very important question: how do possessions influence wellbeing and happiness? Subjective wellbeing is an important but under-researched area of consumer psychology, and the relationship between possessions and well-being is less well understood. The papers in this session highlight the subtle and complex nature of consumer wellbeing by providing insights into the factors that influence the increase, sustainability, sharing, and unexpected experience of wellbeing. We believe this special session on special possessions will attract a large audience with different backgrounds, including researchers of consumer wellbeing, materialism, positive psychology, and emotions, as well as anyone who cares about being happy.

My Favorite Thing: How Special Possessions can Increase Subjective Wellbeing

EXTENDED ABSTRACT

Much research has shown that an emphasis on material possessions negatively affects consumers' wellbeing (Dittmar et al. 2014; Richins and Dawson, 1992; Ryan and Dzurowiec 2001). However, materialistic consumption continues to be central to many consumers' lives, evidenced by the long queues outside of luxury retail stores and the shopping behavior of consumers on Black Friday. In this research, we examine *when* valuing material possessions can increase consumers' subjective wellbeing. Our insight is that focusing on a *particular* possession that is considered special may actually increase subjective wellbeing beyond baseline levels (study 1) and compared to focusing on multiple possessions taken together (studies 2-3).

Extant literature defines "special possessions" as possessions that consumers consider special, valued, and meaningful compared to their other possessions (e.g., Kleine and Baker 2004; Price et al. 2000; Richins 1994). This construct is well-established in the CCT literature, but there is no experimental investigation of its antecedents or consequences. Leading CCT researchers have suggested that special possessions reflect people's connections with the past, future, and others (Price et al. 2000; Wallendorf and Arnould 1988). Based on this work, we propose that special possessions may increase one's general sense of connectedness. Because people's sense of connection to people and things is positively correlated with their happiness (Zelenski and Nisbet 2014), the sense of connection derived from special possessions may increase subjective wellbeing. In what follows, we report three studies that examined the effect of special possessions on consumers' subjective wellbeing and the sense of connectedness as an underlying mechanism.

Study 1 tested the basic effect of recalling a special possession on subjective wellbeing. Participants (N=356) were randomly assigned across two recall conditions: either a special possession or a baseline control condition. Participants in the special possession [baseline control] condition were asked to recall and describe a possession that is special and meaningful to them [everything they did

that morning]. They then reported subjective wellbeing, which was measured using the Satisfaction With Life Scale in all studies (Diener et al., 1985, $\alpha=.85$). Results showed that the special possession (vs. baseline control) condition indeed reported greater subjective wellbeing ($M_{\text{special}} = 4.41$, $M_{\text{control}} = 4.16$, $p < .05$), demonstrating initial support for our basic proposition: special possessions can boost wellbeing above baseline levels. One potential confound in this study is that the two recall conditions pertained to possessions and non-possession. To address this confound, in study 2 we operationally our control condition also using possessions.

In study 2, we aimed to replicate study 1 using a different operationalization: favorite versus all possessions. In particular, we focused on clothing items in this study. Our rationale was that while all possessions include the favorite possession, the average of all possessions taken together should be less special than one's favorite possession. A pretest showed that one's favorite clothing item was indeed more special than all one's clothing items taken together (7-point scale: "special", "valued", and "meaningful"; $\alpha = .94$, $M_{\text{favorite}} = 4.97$, $M_{\text{all}} = 3.78$, $p < .001$). In the main study, undergraduate students ($N=329$) participated for course credit and were randomly assigned across the two recall conditions: favorite versus all. Participants in the favorite [all] condition recalled and described their favorite item of clothing [all clothing items, each on a separate line] that they had purchased in the past five months. All participants then reported subjective wellbeing ($\alpha=.85$). Results showed that the favorite condition reported significantly greater subjective wellbeing ($M = 4.54$) than the all condition ($M = 4.28$, $p < .04$). Moreover, the number of purchases described in the all condition had no effect on subjective wellbeing ($p > .3$), ruling out the possibility that the difference between the two conditions was driven by the number of items recalled. These results conceptually replicated study 1, showing that recalling a special possession generates greater subjective wellbeing than recalling less special possessions.

Study 3 examined our proposed underlying mechanism, a sense of connectedness. The design was similar to study 2, with two key exceptions. First, we included a measure of connectedness after the subjective wellbeing measure as described below. And second, we examined possessions that were received as gifts as opposed to purchased by the recipients themselves. A separate pretest showed that one's favorite Christmas gift was more special than all one's Christmas gifts taken together (7-point scale: "special", "valued", and "meaningful"; $\alpha > .90$, $M_{\text{favorite}} = 5.80$, $M_{\text{all}} = 5.26$, $p < .001$). We conducted the main experiment online one day after Christmas. Participants ($N = 275$) wrote about either the favorite gift they had received, or all the gifts they had received. After describing their Christmas gift(s), participants reported subjective wellbeing ($\alpha=.92$), and completed a 7-point general connectedness scale (adapted from Howell et al. 2011; sample item: "At the moment, I am feeling embedded within the broader world", $\alpha=.95$). Finally, they reported the total number of gifts they had received for Christmas, and demographic information. Results showed a marginal effect of favorite (vs. all) gifts on subjective wellbeing ($M_{\text{favorite}} = 4.87$, $M_{\text{all}} = 4.57$, $p < .10$), and significant effects on the sense of connectedness ($M_{\text{favorite}} = 4.84$, $M_{\text{all}} = 4.42$, $p < .02$). Mediation analyses showed that the sense of connectedness mediated the effect of favorite (vs. all) gifts on subjective wellbeing, controlling for the total number of gifts received (95% CI = .0043, .0483). Thus, an increased sense of connectedness underlies the effect of special possessions on subjective wellbeing.

These results show that valuing material possessions *can* increase subjective wellbeing if consumers focus on the possessions that are most special to them. Additional studies are currently being conducted to further examine the underlying mechanism and bound-

ary conditions. One potential moderator is consumers' tendencies to extend the self to possessions (Ferraro et al. 2012). The effect we observed might be mitigated among consumers who do not identify themselves with their possessions in general. A key implication of these findings is that subjective wellbeing does not derive from owning multiple possessions but, rather, subjective wellbeing derives from imbuing a particular possession with special meaning.

Satisfying Inherent Preferences to Promote Sustainable Happiness

EXTENDED ABSTRACT

We all want to be happy, but the pursuit of happiness seems to be endless. Acquiring and consuming goods and experiences to satisfy our preferences do increase happiness, yet the effects tend to be fleeting. Indeed, maintaining happiness is hard, as evidenced in decades of research on hedonic adaptation (for a review, see Frederick and Loewenstein 1999). Then, is there a recipe for sustainable happiness? We explore this question and suggest that investing resources in satisfying "inherent preferences" (Tu and Hsee 2016) can be a secret sauce.

All preferences are not created equal. Preferences that are rooted in our physiological system and developed early in evolution are more inherent (inherent preferences; IP) than those acquired more recently in specific social, cultural contexts (learned preferences; LP). For example, our preference for a warm ambient temperature, our appetite for delicious food, and our need to belong to social groups are inherent, as they are hard-wired and hold regardless of time and contexts. In contrast, our preference for diamonds, our desire to own luxury products, and our taste for fashion are learned, as they are malleable and vary with time and contexts.

The context-independence nature of IP (inherent preference) suggests that the gain in happiness from an improvement on an IP attribute will last. Conversely, the context-dependence nature of LP (learned preference) suggests that the gain in happiness from an improvement on an LP attribute will exist only when relevant external reference points (e.g., other people's status, one's past status) are salient and constant, and will evaporate when the external reference points change. For instance, whereas the increase in wellbeing when a person gets social acceptance will endure regardless of whether other people get socially accepted, the increase in wellbeing via getting a luxury bag will fade when other people catch up or when one forgets the experience of not owning one in the past.

We conducted two empirical studies to test our theory. Similar to the methodological approach of studying material and experiential consumption (Van Boven and Gilovich 2003), in both studies, we first described our definitions of IP and LP with examples and then tested people's comprehension in some obvious contexts. For example, we asked participants to indicate which preference is more inherent – "the preference for a warm ambient temperature to a cold ambient temperature in winter" or "the preference for earning \$100,000 a year to earning \$80,000 a year." The former is the correct answer. We found that the correction rates are generally high, suggesting that people can intuit and identify the distinction between the two types of preferences.

Study 1 surveyed people about their past purchases, using a 2 (IP vs. LP purchase; between-participants) x 2 (immediate vs. current happiness; within-participants) mixed design. We asked participants to think about a purchase made with the intention to satisfy an inherent (vs. learned) preference. We specified the time frame ("more than two years ago"), the cost ("between \$50-\$500) and the durability of the purchase ("something you still have and are still using"). Partici-

pants recalled such a purchase, described the type of preference they tried to satisfy, and then rated immediate happiness and current happiness due to the purchase. A IP/LP Purchase X Immediate/Current Happiness ANOVA yielded a marginally significant interaction ($F(1, 333) = 3.18, p = .075$); suggesting that the decrease of happiness of IP-oriented purchase ($M_{\text{immediate}} = 4.09, SD_{\text{immediate}} = .96$ vs. $M_{\text{current}} = 3.71, SD_{\text{current}} = 1.07$; $F(1, 191) = 30.25, p < .001$) is smaller than that of LP-oriented purchase ($M_{\text{immediate}} = 4.16, SD_{\text{immediate}} = .85$ vs. $M_{\text{current}} = 3.59, SD_{\text{current}} = 1.11$; $F(1, 142) = 46.06, p < .001$).

Study 2 replicated study 1 in a broader context (i.e., life events) and controlled for immediate happiness, using a 2 (IP vs. LP improvement) within-participants design. We asked participants to recall two improvements in their life within the past 5 years, one satisfying an inherent preference and the other a learned preference. We specified that these two improvements must have had similar immediate impact on their happiness. Participants described two such improvements and rated whether the improvements had a long-lasting effect on happiness. Supporting our prediction, participants rated improvements that satisfied an inherent preference ($M = 4.36, SD = .97$) as having a longer-lasting effect on happiness than those that satisfied a learned preference ($M = 3.56, SD = 1.05$; $t(38) = 3.12, p = .003$).

In sum, this project makes two related contributions. First, it draws a distinction between inherent preferences and learned preferences, a distinction that has potentially profound implications for both theory building and policymaking. Second, it provides initial empirical evidence suggesting that improvements related to inherent preferences produce more sustainable gains in happiness than do improvements related to learned preferences. This insight is important, in light of the fact that most improvements that have been made over the years are only about learned preferences and not about inherent preferences.

When Consumers Prefer to Give Material Gifts instead of Experiences: The Role of Social Distance

EXTENDED ABSTRACT

Gift giving is ubiquitous. It is practiced by consumers of every culture, and researchers from various disciplines have been studying it for decades (e.g., Belk and Coon 1993; Foa and Foa 1980; Mauss 1925). Despite emerging evidence suggesting hedonic benefits to giving experiences (Chan and Mogilner 2016), it seems that consumers prefer to give material gifts. The vast majority of gifts recommended by gift giving gurus are material in nature (e.g., New York Magazine 2015), and in a survey of 100 Americans (via MTurk) we found a vast majority of the gifts—81% of holiday gifts and 66% of birthday gifts—were material in nature. Why are consumers not giving more experiences? And are there times when consumers prefer to give experiences?

We answer these questions by exploring how social distance between gift givers and their recipients influences preferences for giving experiences and material gifts. Based on the interpersonal relationship literature (Berscheid, Snyder, and Omoto, 1989; Kelley et al. 1983), we propose that givers will have less knowledge about individual preferences of socially distant recipients than socially close recipients. Since experiences have been shown to be more unique and more individualized than material goods (Carter and Gilovich 2012; Dai, Chan, and Mogilner 2016), choosing experiential gifts likely requires more knowledge of recipients' preferences to avoid the social risk of giving a poorly liked gift. Thus, consumers will be more likely to give material gifts when they are socially distant from their recipients compared to socially close, and givers will be more

likely to give experiential gifts when they are socially close to their recipients (vs. distant).

Across five studies, we examined the role of social distance on givers' preferences for gift type. In study 1a we asked participants ($N=74$) to imagine that they were choosing a holiday gift for either a close or distant friend and indicate their preferences for ten holiday gifts (five experiential and five material, randomized, and pretested). The social distance by gift type interaction ($F(1,72)=15.02, p < .01, \eta^2=.17$) showed that participants were more willing to give experiences than material gifts for a close friend ($M_{\text{experiential}}=4.20$ vs. $M_{\text{material}}=3.16$; $F(1,72)=8.88, p < .01, \eta^2=.11$), whereas they were more willing to give material gifts than experiences for a distant friend ($M_{\text{material}}=3.01$ vs. $M_{\text{experiential}}=1.93$; $F(1,72)=6.58, p < .05, \eta^2=.08$). In study 1b participants ($N=276$) listed any gift for either a close or distant friend and rated the extent to which the gift was more material or experiential. As expected, participants rated gifts chosen for a close friend ($M=4.36$) as more experiential than those chosen for a distant friend ($M=3.08$; $t(274)=4.13, p < .001, d=.50$) and the effect remained significant when controlling for price of the gift (logged), age, and gender ($p < .001$). We replicated this result in a follow-up study in which a separate group of coders rated the gifts listed by participants ($M_{\text{close}}=3.54$ vs. $M_{\text{distant}}=3.01$; $t(274)=2.80, p < .01, d=.35$).

In study 2, we tested our preference knowledge theory by manipulating perceived knowledge of recipient's preferences. Participants ($N=225$) were asked to write down how well they know (vs. do not know) what their friend likes or dislikes. Next, they listed a gift that they would like to give to their friend and rated whether it was more material or experiential. We found participants were more likely to give experiences when they perceived greater knowledge about a recipient ($M_{\text{high}}=4.44$ vs. $M_{\text{low}}=3.78, t(223)=1.90, p=.06, d=.25$). When controlling for price of the gift (logged), age, and gender, the effect of subjective knowledge became even more reliable ($F(1,220)=4.37, p < .05, \eta^2=.02$).

Study 3 further examined our theory by testing the mediating role of preference knowledge and ruled out joint consumption as an alternative explanation by manipulating whether experiential gifts were shared by givers and recipients. Participants ($N=290$) assessed their preference for the same gifts used in study 1a. Consistent with our previous findings, we found a social distance x gift type interaction ($F(1,285)=21.18, p < .001, \eta^2=.07$). For a distant friend, participants were more willing to give material gifts ($M=3.26$) than experiential gifts ($M=2.44$; $F(1,285)=15.38, p < .001, \eta^2=.05$), whereas for a close friend they were more willing to give experiences ($M=4.09$) than material gifts ($M=3.53$; $F(1,285)=6.78, p < .01, \eta^2=.02$). Most importantly, this two-way interaction was not moderated by shared consumption (three-way interaction: $p > .1$), suggesting that our effects were not driven by shared consumption. Additionally, a mediation analysis on the relative preference difference score revealed a significant indirect effect of social distance on relative gift preference through preference knowledge (95% CI = [.1956, 1.1798]; 5000 samples).

Finally, in study 4, we tested whether providing an opportunity to give experiential gifts with low social risk—gifts that do not require a high degree of knowledge about recipients—eliminates the effect of social distance. The design was similar to study 1a except for the fact that social risk associated with experiential gifts was manipulated. Participants ($N=368$) were presented with either high-risk experiential gifts or low-risk experiential gifts (pretested as different in terms of social risk, $p < .001$, but not in attractiveness, $p > .4$). In the high risk condition, we replicated the interaction effect between social distance and gift type ($F(1,364)=23.75, p < .01$), whereas

in the low risk condition we only found a main effect of gift type ($F(1,364)=15.25, p < .01, \eta p^2=.04$) such that experiential gifts were more preferred than material gifts regardless of the social distance. Together, these results confirmed the proposed moderating role of the social risk associated with experiential gifts.

In sum, this research demonstrated that consumers prefer to give material gifts compared to experiential gifts for distant (vs. close) recipients due to the greater knowledge of individual preferences that is required to give experiential gifts. The results suggest that if firms can provide offerings that lower the social risk of experiential gift giving—thus lowering the knowledge needed to give an experience—then we may find a future where giving experiences becomes more mainstream.

Losing Our Most Special Possession: The Unexpected Positivity of Dying

EXTENDED ABSTRACT

Of all our worldly possessions, our lives are perhaps the most valuable—a fact that can make death seem terrifying. Both death and its inevitability are central to the human condition, inspiring countless poems, books, and plays—as well as substantial psychological research. Much of this research has focused on the general idea of one's own death (Juhl & Routledge, 2016; Kashdan et al., 2014) or reactions to others' deaths (Kastenbaum, 2000; Nelson & Nelson, 1975), rather than the actual experience of dying. What is it like to have only days—or even minutes—left to live?

In this project, we investigate the emotional lives of those about to lose their most valuable possession: those dying via terminal illness or execution. We assess whether their experience differs from how people imagine dying. Becker (1997) suggested that the mere thought of eventual death is so terrifying that ideologies, like religion, can automatically suppress or sublimate these thoughts—an idea borne out by early research (e.g., Greenberg et al., 1990). However, these negative beliefs about dying may be overinflated. Research on affective forecasting suggests that people overestimate the affective impact of negative events because of both focalism—thinking of the negative event in isolation (Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000) the tendency to overpredict the duration of affective reactions to future events, may be due in part to focalism, whereby people focus too much on the event in question and not enough on the consequences of other future events. If so, asking people to think about other future activities should reduce the durability bias. In Studies 1-3, college football fans were less likely to overpredict how long the outcome of a football game would influence their happiness if they first thought about how much time they would spend on other future activities. Studies 4 and 5 ruled out alternative explanations and found evidence for a distraction interpretation, that people who think about future events moderate their forecasts because they believe that these events will reduce thinking about the focal event. The authors discuss the implications of focalism for other literatures, such as the planning fallacy.”,ISSN:”0022-3514”,”note:”PMID: 10821192”,”shortTitle:”Focalism”,”journalAbbreviation:”J Pers Soc Psychol”,”author:”[{"family:”Wilson”,”given:”T D”}, {"family:”Wheatley”,”given:”T”}, {"family:”Meyers”,”given:”J M”}, {"family:”Gilbert”,”given:”D T”}, {"family:”Axsom”,”given:”D”}],”issued:”[{"date-parts:”[”2000”,5]}]”,”schema:”https://github.com/citation-style-language/schema/raw/master/csl-citation.json”) —and immune neglect—discounting their ability to positively reinterpret negative events (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998; Hoerger, 2012).

Grounding our predictions in these two streams of research, we hypothesize that as people come closer to death, they will view the loss of this most valuable possession more positively and less negatively than those imagining their death in prospect. Revealing that dying is more pleasant than expected may suggest a reassessment of one of humanity's great fears. We compare blogs of terminal illness patients (Study 1) and the last words of death row inmates (Study 2) with forecasts of everyday people imagining themselves facing death. We also examine affect over time in illness blogs (Study 1), and compare death row last words with death row poetry (Study 2). Overall, these investigations will reveal whether death is more pleasant than individuals might think.

Study 1 contrasted the affective tone of blog posts of terminally ill patients ($N = 2,616$) with simulated posts of non-patient participants asked to imagine that they are dying of a terminal illness and to write a blog post about it ($N = 50$). To examine these writings, we used both Linguistic Inquiry and Word Count (LIWC) software and independent coders to rate affect of posts. LIWC analyses revealed that non-patient forecasters ($M = 2.25$) used significantly more negative affect words than terminal patients ($M = 1.70; p = .006$). There were no significant differences in positive affect between terminal patients ($M = 3.43$) and non-patient forecasters ($M = 3.61; p = .52$).

Similarly, independent coders rated blog posts of terminal patients significantly higher on positive affect ($M = 2.65$) than posts of non-patient forecasters ($M = 2.43; p = 0.003$). Coders rated the posts of terminal patients ($M = 2.00$) significantly lower in negative affect than those of non-patient forecasters ($M = 2.36; p < .001$).

As an exploratory investigation, we examined the affective character of terminal patient blogs over time. Multi-level model analyses reveal that positive affect significantly increased as patients approached death ($b = -0.14, p = 0.026$) but negative affect did not increase ($b = 0.008, p = 0.839$).

Our second study examined affect in death row inmates' last statements. Given the results of Study 1, we predicted that inmate last words would be relatively more positive and less negative than non-inmate affective forecasts or poetry written by death row inmates. Last statements of non-inmate forecasters ($N = 117$) and death row poetry ($N = 188$) were compared to those of death row inmates ($N = 396$).

A one-way ANOVA of LIWC ratings revealed significant differences between last words, simulated last words, and death-row poetry in both negative affect ($p < .001$) and in positive affect ($p = .011$). Death row inmates ($M = 2.61$) used a significantly lower percentage of negative affect words in their last statements than in inmate poetry ($M = 5.12$), which both contained less negative affect than in non-inmate forecaster simulated last words ($M = 7.00$). Additionally, positive affect words were higher in last words ($M = 9.23$) and death-row poetry ($M = 10.25, SD = 17.55, 95\% \text{ CI } [8.67, 11.83]$), than in simulated last words ($M = 6.37$).

Independent coder ratings showed a similar pattern of significant differences between last words, simulated last words and death-row poetry in both negative affect ($p < .001$) and in positive affect ($p < .001$). Inmate last words were rated less negative ($M = 1.96$) than death row poetry ($M = 2.19$), with non-inmate forecaster simulated last words being rated as most negative ($M = 2.33$). Additionally, last words ($M = 2.24$) and death row poetry ($M = 2.39$) were rated as more positive than non-inmate forecasters' last words ($M = 2.08$).

In sum, two studies reveal that, when we are about to part with our most valuable possession, we view the loss of our lives in an unexpectedly positive way. Not only do the blog posts of terminally ill patients become more positive as death approaches, but the blogs of near-death patients are less negative and more positive those of

non-patient forecasters. The last words of death row inmates are also more positive and less negative than those of non-inmate forecasters and death row poetry (Study 2). This work has the potential to inform the way we view the loss of this most precious possession – our lives. Our work suggests that death is experienced much more positively than people expect: giving our lives to the Grim Reaper may not be quite as grim as it seems.

REFERENCES

- Aaker, J., Rudd, M., & Mogilner, C. (2011). If money doesn't make you happy, consider time. *Journal of Consumer Psychology*, 21(2), 126-130.
- Becker, E. (1997). *The denial of death*. New York: Free Press.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of consumer research*, 15(2), 139-168.
- Berscheid, Ellen, Mark Snyder, and Allen M. Omoto (1989), "The Relationship Closeness Inventory: Assessing the Closeness of Interpersonal Relationships," *Journal of Personality and Social Psychology*, 57 (5), 792–807.
- Carter, Travis J. and Thomas Gilovich (2012), "I Am What I Do, Not What I Have: The Centrality of Experiential Purchases to the Self-concept," *Journal of Personality and Social Psychology*, 102, 1304–17.
- Chan, Cindy and Cassie Mogilner (2016), "Experiential Gifts Forster Stronger Social Relationships than Material Gifts," *Journal of Consumer Research*, forthcoming.
- Dai, Hengchen, Cindy Chan, and Cassie Mogilner (2015), "Don't Tell Me What to Do! Shoppers Rely Less on Consumer Reviews for Experiential than Material Purchases," working paper, The Wharton School, University of Pennsylvania.
- Diener, E. D., et al. "The satisfaction with life scale." *Journal of Personality Assessment* 49.1 (1985): 71-75.
- Dittmar, Helga, et al. "The relationship between materialism and personal well-being: A meta-analysis." *Journal of Personality and Social Psychology* 107 (5), 879–924.
- Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology*, 21(2), 115-125.
- Ferraro, Rosellina, Jennifer Edson Escalas, and James R. Bettman. "Our possessions, our selves: Domains of self-worth and the possession–self link." *Journal of Consumer Psychology* 21.2 (2011): 169-177.
- Frederick, Shane and George Loewenstein (1999), "Hedonic Adaptation," in *Well Being: The Foundations of Hedonic Psychology*, ed. Kahneman, Daniel, Ed Diener, and Norbert Schwarz N. New York: Russell Sage Foundation Press, 392-406.
- Gawande, A. (2014). *Being mortal: Medicine and what matters in the end*. Metropolitan Books.
- Gilbert, D. T., Piel, E. C., Wilson, T. D., Blumberg, S. J., & Wheatley, T. P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 75(3), 617–638. <https://doi.org/10.1037/0022-3514.75.3.617>
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, 58(2), 308–318. <https://doi.org/10.1037/0022-3514.58.2.308>
- Hoerger, M. (2012). Coping strategies and immune neglect in affective forecasting: Direct evidence and key moderators. *Judgment and Decision Making*, 7(1), 86.
- Juhl, J., & Routledge, C. (2016). Putting the terror in terror management theory evidence that the awareness of death does cause anxiety and undermine psychological well-being. *Current Directions in Psychological Science*, 25(2), 99–103.
- Kashdan, T. B., Nathan DeWall, C., Schurtz, D. R., Deckman, T., Lykins, E. L. B., Evans, D. R., ... Brown, K. W. (2014). More than words: Contemplating death enhances positive emotional word use. *Personality and Individual Differences*, 71, 171–175. <https://doi.org/10.1016/j.paid.2014.07.035>
- Kastenbaum, R. (2000). *The psychology of death*. Springer Publishing Company.
- Kelley, Harold H., Ellen Berscheid, Andrew Christensen, John H. Harvey, Ted L. Huston, George Levinger, et al. (1983), "Analyzing Close Relationships" in *Close Relationships*, ed. Kelley, Harold H., Ellen Berscheid, Andrew Christensen, John H. Harvey, Ted L. Huston, George Levinger, et al., San Francisco: Freeman, 20–67.
- Kleine, Susan Schultz, and Stacey Menzel Baker. "An integrative review of material possession attachment." *Academy of marketing science review* 2004 (2004): 1.
- Mogilner, C. (2010). The pursuit of happiness time, money, and social connection. *Psychological Science*, 21(9), 1348-1354.
- Nelson, L., & Nelson, C. (1975). A factor analytic inquiry into the multidimensionality of death anxiety. *OMEGA-Journal of Death and Dying*, 6(2), 171–178.
- New York Magazine (2015), "Gifts, the Ultimate Catalogue," <http://nymag.com/guides/holidays/gifts/2015>.
- Price, Linda L., Eric J. Arnould, and Carolyn Folkman Curasi. "Older consumers' disposition of special possessions." *Journal of Consumer Research* 27.2 (2000): 179-201.
- Richins, Marsha L. "Special possessions and the expression of material values." *Journal of Consumer Research* 21.3 (1994): 522-533.
- Richins, Marsha L., and Scott Dawson. "A consumer values orientation for materialism and its measurement: Scale development and validation." *Journal of Consumer Research* 19.3 (1992): 303-316.
- Ryan, Lisa, and Suzanne Dziurawiec. "Materialism and its relationship to life satisfaction." *Social Indicators Research* 55.2 (2001): 185-197.
- Tu, Yanping and Christopher K. Hsee (2016), "Consumer Happiness Derived from Inherent Preferences and Learned Preferences," *Current Opinion in Psychology* (Special Issue on Consumer Behavior), 10, 83-8.
- Van Boven, Leaf and Thomas Gilovich (2003), "To Do or to Have? That Is the Question," *Journal of Personality and Social Psychology*, 85 (6), 1193-202.
- Wallendorf, Melanie, and Eric J. Arnould. "My favorite things": a cross-cultural inquiry into object attachment, possessiveness, and social linkage." *Journal of Consumer Research* 14.4 (1988): 531-547.
- Wilson, T. D., Wheatley, T., Meyers, J. M., Gilbert, D. T., & Axsom, D. (2000). Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 78(5), 821–836.
- Zelenski, John M., and Elizabeth K. Nisbet. "Happiness and feeling connected: The distinct role of nature relatedness." *Environment and behavior* 46.1 (2014): 3-23.

This Looks, Feels, and Smells Healthy: Multi-Sensory Tools to Encourage Healthy Consumption

Chair: Dipayan Biswas, University of South Florida, USA

Paper #1: The Primacy of “What” Over “How Much”: How Type and Quantity Shape Healthiness Perceptions of Food Portions

Peggy Liu, University of Pittsburgh, USA
Kelly Haws, Vanderbilt University, USA
Karen Scherr, Duke University, USA
Joseph Redden, University of Minnesota, USA
James Bettman, Duke University, USA
Gavan Fitzsimons, Duke University, USA

Paper #2: Some Like it Hot: The Effect of Serving Temperature on Perceived Caloric Content and Intent to Purchase Complementary Food

Sara Baskentli, Baruch College, CUNY, USA
Lauren Block, Baruch College, CUNY, USA
Maureen Morrin, Temple University, USA

Paper #3: Unpacking Self-Control: When More Categories Lead to Lower Calorie Budgets

Miaolei (Liam) Jia, National University of Singapore, Singapore
Aradhna Krishna, University of Michigan, USA
Xiuping Li, National University of Singapore, Singapore

Paper #4: The Smell of Healthy Choices: The Paradoxical Effects of Ambient Scent on Children’s and Adults’ Food Choices

Dipayan Biswas, University of South Florida, USA
Courtney Szocs, Portland State University, USA

SESSION OVERVIEW

The theme of the proposed special session relates to altering perceptions of healthiness through various multi-sensory tools. The collection of papers identifies tools related to the visual, haptic, and olfactory senses that consumers can use to see, touch and smell their way to healthier consumption. In the first paper, Liu, Haws, Scherr, Redden, Bettman, and Fitzsimons focus on visual factors that influence healthiness. They examine the effects of varying the type of food (e.g., chocolates vs. cookies vs. almonds vs. crackers) and the quantity (e.g., ½ serving vs. 1 serving vs. 2 servings vs. 3 servings) on healthiness perceptions. They find that the type of food serves as the primary dimension that dominates healthiness judgments while the quantity of food serves as the secondary dimension that does not critically affect healthiness perceptions.

The second paper focuses on a haptic factor that can influence healthiness perceptions. Specifically, Baskentli, Block, and Morrin examine how the temperature at which a food is served might influence consumers’ calorie perceptions and complementary food choices. They identify a “serving temperature bias” whereby serving a food hot leads to higher calorie perceptions than serving the same food cold. This is because warm foods are perceived as “homelike” and enhance perceptions of hedonic pleasure.

The third paper by Jia, Krishna and Li examines another visual factor that influences healthiness perceptions. They investigate how setting calorie budgets by day (i.e., an “overall approach”) versus by meal (i.e., a categorical approach) influences the total number of calories budgeted and consumed. They find that the categorical approach to budgeting leads to lower total budgets and lower con-

sumption by offering the consumer more opportunities to exercise self-control.

Finally, Biswas and Szocs examine how an olfactory factor related to ambient scent of an indulgent (vs. non-indulgent) food influences consumers’ food choices. They find that children and adults choose healthier options when they have prolonged exposure to an indulgent (vs. non-indulgent) ambient food scent. They attribute their effects to cross-modal sensory compensation whereby olfactory inputs compensate for gustatory pleasure.

Collectively, the four papers in this session identify four novel multi-sensory factors that influence healthiness perceptions. The key question, raised by all the papers as a group, relates to what might be some critical sensory factors that can influence healthful consumption? The proposed special session brings together leading scholars and addresses healthful consumption using diverse methods (e.g., field experiments, lab experiments) and multiple populations (e.g., adults, children). We expect this session to have a broad appeal.

The Primacy of “What” Over “How Much”: How Type and Quantity Shape Healthiness Perceptions of Food Portions

EXTENDED ABSTRACT

Imagine a consumer with a healthy eating goal who is deciding whether to consume a particular portion of chocolate candies. Like most consumers with healthy eating goals, this consumer’s main health goal consists of losing or maintaining weight (International Food Information Council Foundation 2012), such that calories are typically considered the objective measure of health goal impact (Campbell and Warren 2015; Chandon and Wansink 2007; Cochran and Tesser 1996; Huang, Zhang, and Broniarczyk 2012). Given the importance of calories as an objective measure for most consumers’ health goals, there are two main aspects of the food consumed that ought to combine to jointly determine how a given food portion will affect the consumer’s health goals: the type of food and the quantity of the food. However, do a consumer’s judgments of the health impact of a food portion fully factor in both type and quantity, or are they driven more by one dimension than the other?

In this research, we examine the effects of varying food types (e.g., chocolates vs. cookies vs. almonds vs. crackers) and varying food quantities (e.g., ½ serving vs. 1 serving vs. 2 servings vs. 3 servings) on healthiness perceptions. In comparison, the existing food and health literature generally either: (1) separately examines type or quantity; or (2) does not distinguish between type and quantity, instead defining objective healthiness in terms of total calories. We instead introduce an explicit comparison between pursuing health via changing the type versus quantity of a food. Drawing from literature on processing categorical versus continuous attributes (Ha, Park, and Ahn 2009) and by drawing an analogy to research on how people make area judgments of geometric figures (Krider, Raghubir, and Krishna 2001), our main proposition is that for healthiness perceptions, food type is treated as a “primary dimension” (i.e., a highly salient dimension that dominates judgments), whereas food quantity is treated as a “secondary dimension” (i.e., a dimension that does not affect judgments much unless made salient, and, even then, affects judgments less than a primary dimension).

We demonstrate the secondary nature of quantity and the spontaneous tendency to underweight quantity across six studies. Studies 1-3 utilize a visual food diary paradigm with before-after photos of food portions to indicate a snack episode. Study 1 provides initial evidence for our primary-secondary account by showing that consumers' healthiness evaluations of these snack episodes reflect food type differences but are largely insensitive to food quantity differences, even though consumers are able to perceive the quantity differences. Studies 2a and 2b then test process-related predictions stemming from our primary-secondary account by examining two theoretically-motivated ways of increasing the salience of quantity at the time of making healthiness judgments. Study 2a increases the salience of quantity by prompting a joint evaluation mode among participants (González-Vallejo and Moran 2001; Hsee 1996). Study 2b increases the salience of quantity by drawing from expectancy-disconfirmation theory (Bettman 1979; Helgeson and Beatty 1987) to create a condition in which participants evaluate a portion size much larger than would be expected for consumption on one occasion. Studies 2a and 2b show that when the salience of quantity is increased, consumers adjust their healthiness perceptions to account for quantity but only to a small extent.

Study 3 further tests our primary-secondary account by adding emphasis to the actual consumption or eating of (nearly) the entire food portion, finding that consumers continue to treat quantity as secondary. In addition, while our main focus is on healthiness perceptions, Study 3 examines the additional outcome of caloric perceptions and shows that they track less than 1:1 with size perceptions, again suggesting an underweighting of quantity in caloric perceptions.

Study 4 then further tests our primary-secondary account of healthiness perceptions by examining healthiness perceptions when caloric information about food portions is explicitly provided. Study 4 shows that the secondary nature of quantity in healthiness assessments holds even when consumers are provided with caloric information. Study 4 also finds support for our primary-secondary account using direct process measures adapted from Krider et al. (2001).

Finally, Study 5 examines choice implications by examining how consumers instructed to make choices for a healthy lifestyle choose between portions of two calorically dense but differentially healthy foods (chocolates vs. almonds). We find that consumers choose the healthier food type (almonds) even when the size of the almond portion means that the caloric content of the almond portion far exceeds the caloric content of the chocolate candies portion. This finding suggests that the secondary nature of quantity is also reflected in consumers' food choices.

In closing, we provide substantial evidence that although both the types and quantities of foods eaten jointly contribute to weight and overall health, consumers treat type as a primary dimension and quantity as a secondary dimension. Accordingly, a food's type (vs. quantity) has greater impact on perceived health impact, across multiple study designs and stimuli, and even when controlling for caloric content or providing caloric information. Given that healthiness perceptions are an important input to food choice, the tendency towards neglecting or underweighting quantity may have negative effects on those pursuing health goals, especially weight loss goals.

Our findings offer contributions to two main literatures. First, we contribute to the goals literature by showing that even when a change in type or quantity results in exactly the same caloric change, the changes are perceived by consumers to impact healthiness to different extents. This stands in contrast to the existing goals literature, which has to-date treated calories as an objective indicator of health impact given that weight loss is a common health goal. Further, our

research also contributes to the extensive food decision making literature, which has generally used two different choice paradigms (either choice among different food types or choice among different food quantities) to examine the healthiness of food choices. We show that the choice paradigm used affects consumers' perceptions of the healthiness differences between options, suggesting that conclusions from one choice paradigm may not always translate directly to contexts involving the other choice paradigm.

Some Like it Hot: The Effect of Serving Temperature on Perceived Caloric Content and Intent to Purchase Complementary Food

EXTENDED ABSTRACT

Which temperature, hot or cold, to choose for a meal or snack is a common – one might say ordinary-- food decision that consumers make throughout the day, at home as well as at a variety of food retailers. Despite the ubiquity of this decision, no research to date has examined the impact, if any, that consuming a food item served hot, rather than cold, has on consumer inferences regarding its caloric content. Biased caloric estimates have important implications for consumers, as research has shown downstream consequences on obesity (Chandon and Wansink 2007), subsequent and/or concurrent food choices, and overall food well-being (see Chandon and Wansink 2012, and Bublitz et al. 2013).

With this research, we uncover a phenomenon we refer to as the “*serving temperature bias*,” as well as the theoretical underlying source of this bias. The serving temperature bias refers to the notion that people generally believe that a food or beverage served hot has more calories and is more fattening than the same item served cold. Specifically, we show that the serving temperature bias results from a series of sequential linkages. We show that warm foods and beverages are perceived to be prepared with love and that consuming them feels indulgent. We thus build consumer theory by showing that perceived love triggers feelings of indulgence, which is the direct antecedent of perceived caloric content. This research also extends the basis upon which the concept of “psychological warmth” is based. Whereas previous research has suggested this concept arises primarily from the physical holding and cuddling that provides infants with warmth, we suggest it is also based on the warmth emanating from the nourishment (foods and beverages) provided by caregivers early in life. Importantly, we show the existence of a downstream consequence of the serving temperature bias in the form of compensatory consumption.

We begin by providing phenomenon-based evidence of the downstream consequence of the food serving temperature bias in the form of complementary foods or beverages using collected sales receipts from a sandwich shop. Results of this field study revealed that customers who ordered a cold sandwich purchased significantly more complementary items (bag of chips, cookies, beverages) than those who ordered a hot sandwich ($M_{\text{cold}} = 0.79$ vs. $M_{\text{hot}} = 0.33$; $F(1, 121) = 9.48, p = .003$).

In study 2a, we gave participants a sandwich consumption scenario and asked them to imagine consuming the sandwich either hot or cold. Results revealed a significant main effect of serving temperature such that those who imagined consuming the hot sandwich estimated the caloric content to be higher than those who imagined consuming the cold sandwich ($M_{\text{hot}} = 4.71$ vs. $M_{\text{cold}} = 4.13$; $F(1, 103) = 11.11, p < .002$). We also showed the underlying reasons for the serving temperature bias. Results showed that the path from serving temperature (hot = 1, cold = -1) to prepared with love was significant ($B = 0.40, p = .0088$), as was the path from prepared with love to

indulgence ($B = 0.26, p = .0009$) and the path from indulgence to perceived caloric content ($B = 0.23, p = .0021$). In support of our theorizing, a bootstrap analysis of this causal chain yielded a confidence interval that did not contain zero (indirect effect = .0236, $SE = .0150, 95\% CI = .0051$ to $.0728$). Similar to the results observed in the field study, an ANOVA confirmed a significant main effect of serving temperature on complementary food choices such that participants in the cold condition were more likely to order a bag of chips with their sandwich than participants in the hot condition ($M_{hot} = 3.77$ vs. $M_{cold} = 4.62, F(1, 103) = 4.90, p = .029$). Studies 2b, 3 and 4 revealed similar results in actual food consumption settings (i.e., apple cider, chocolate chip cookie, and milk respectively). Through our lab studies we are also able to rule out several alternative explanations (such as effort, satiation, taste, mood, freshness, relevant sensory attributes, and perceived consumption quantity).

Then, in study 5, we show that it is not the initial temperature of the food that matters, but rather the temperature at which it is served that elicits the biased perceptions. To do this, participants were assigned to one of three conditions; hot, cold, or cold-then-hot. An ANOVA with caloric content as the dependent variable was significant ($F(2, 153) = 5.17, p = .007$). Planned contrasts revealed that, as predicted, those in the hot sandwich condition estimated the caloric content to be significantly higher than those in the cold sandwich condition ($M_{hot} = 4.26$ and $M_{cold} = 3.71, t(153) = 3.15, p = .002$) as shown in the previous studies. Importantly, and in support of our serving temperature bias, people in the cold-then-hot sandwich condition also estimated the caloric content of their sandwich to be higher than those in the cold sandwich condition ($M_{cold-then-hot} = 4.09$ vs. $M_{cold} = 3.71, t(153) = 2.16, p = .033$) and equally caloric to those in the hot sandwich condition ($M_{hot} = 4.26$ vs. $M_{cold-then-hot} = 4.09, t(153) = .94, p = .349$).

Thus, in six studies, we provide empirical evidence of the serving temperature bias, demonstrate the underlying reasons (while ruling out several alternative processes) and show the existence of an important downstream consequence of the serving temperature bias in the form of compensatory consumption.

Unpacking Self-Control: When More Categories Lead to Lower Calorie Budgets

EXTENDED ABSTRACT

Research on self-control has documented that people have trouble limiting their consumption across various domains such as eating and smoking (Heatherton and Baumeister 1991). One way to effectively address the problem of overconsumption is to set budgets (Herman and Polivy 2004). In this research, we study how different budgeting approaches result in different total consumption budget, and why they do so. Specifically, we examine two approaches that consumers may employ to set their daily consumption budgets. One approach sets an individual calorie budget for each consumption occasion (e.g., breakfast, lunch, dinner, and snacks; hereafter, called the “categorical approach”). Alternatively, consumers directly set an overall calorie budget (hereafter, called the “overall approach”).

Prior unpacking effects suggest that unpacking an overarching category into its components will increase numeric judgment (Rotenstreich and Tversky 1997; Tversky and Koehler 1994). However, we propose and demonstrate that unpacking, i.e., the categorical (vs. overall) approach, makes consumers set a lower budget – we call this the “Budget Contraction Effect” (BCE). We show that the BCE arises because the categorical (vs. overall) budgeting approach provides multiple opportunities for individuals to exert self-control.

Study 1a was conducted to test the BCE. Participants ($n=294$) were randomly assigned into one of the three conditions. In the *categorical* condition, participants were asked to set calorie budgets for four eating occasions (breakfast, lunch, dinner, and snacks). The budgets that participants set for the four occasions were automatically summed to derive their total daily budget. In the *overall-with-category-information* condition, participants were asked to set a daily calorie budget but were reminded to include their calorie intake for breakfast, lunch, dinner, and snacks. In the *overall-without-category-information* condition, participants were just asked to set their daily calorie intake budget without being reminded of the four eating occasions.

An ANOVA revealed a significant effect of budgeting approach on the calorie budget ($F(2, 291) = 3.06, p < .05$). A contrast analysis further indicated that participants set a lower budget under the categorical approach ($M = 1801.92$ calories) than either the overall-with-category-information approach ($M = 1981.39$ calories; $p = .03$) or the overall-without-category-information approach ($M = 1978.16$ calories; $p = .04$). There was no significant difference in budget between the two overall-approach conditions ($p = .97$). To test the robustness of the BCE, we used natural food groups (e.g., vegetables, grains) as the components in study 1b and replicated the findings of study 1a.

Next, we test the self-control process explanation. We argue that the BCE occurs because (many) consumers want to limit their consumption. Therefore, the strength of consumers’ self-control motivation should moderate the BCE.

In studies 2a and 2b, we test individuals’ internal motivation strength. In study 2a ($n=392$), as well as the later studies, we included only the overall-with-category-information condition to keep the component information constant between the overall and categorical conditions. The proxy for motivation strength was whether participants were dieters or non-dieters. We found that the BCE was observed for dieters ($M_{categorical} = 1756.29$ calories, $M_{overall} = 1950.52$ calories; $F(1, 388) = 5.85, p = .02$) but not for non-dieters ($M_{categorical} = 2082.89$ calories, $M_{overall} = 2195.36$ calories; $F(1, 388) = 1.92, p = .17$).

In study 2b ($n=122$), we manipulated participants’ motivation to control calorie consumption. In the *dieting-is-better* [*exercise-is-better*] condition, participants were told that to lose weight, “eating less” is better than “exercising more.” [“exercising more” is better than “eating less.”] We found a significant interaction between motivation and budgeting approach ($F(1, 118) = 7.10, p = .009$). The BCE was observed in the dieting-is-better condition ($M_{categorical} = 1664.26$ calories, $M_{overall} = 2420.00$ calories; $F(1, 118) = 16.72, p < .001$) but not in the exercise-is-better condition ($M_{categorical} = 2097.65$ calories, $M_{overall} = 2157.04$ calories; $F < 1$).

In studies 3a and 3b, we test the role of the budgeting unit (e.g., calories vs. food points). We predict that the BCE will be stronger when the budgeting unit can activate self-control (e.g., calories) versus not (e.g., food points). In study 3a ($n=386$), half of the participants were asked to set consumption budgets using *calories* as the budgeting unit while the other half of the participants used *food points* as the budgeting unit. We found a significant interaction between budgeting unit and budgeting approach ($F(1, 382) = 4.82, p = .03$). The BCE was observed when the budgeting unit was calories ($M_{categorical} = 1873.98$ calories, $M_{overall} = 2049.00$ calories; $F(1, 382) = 9.01, p = .003$) but not for food points ($M_{categorical} = 27.54$ food-points, $M_{overall} = 25.16$ food-points; $F < 1$).

To further test the role of the budgeting unit, we conducted study 3b ($n=198$) with smokers. Half of the participants were asked to set budgets for “cigarette consumption”, while the other half of the participants were asked to set budgets for “nicotine consump-

tion” from cigarettes. We found a significant interaction between budgeting unit and budgeting approach ($F(1, 191) = 4.21, p = .04$). The BCE was not observed when the budgeting unit was cigarettes ($M_{\text{categorical}} = 12.54$ cigarettes, $M_{\text{overall}} = 11.43$ cigarettes; $F < 1$) but was observed when the budgeting unit was nicotine ($M_{\text{categorical}} = 91.22$ mg-of-nicotine, $M_{\text{overall}} = 122.57$ mg-of-nicotine; $F(1, 191) = 4.59, p = .03$).

In study 4 ($n=89$), we test the behavioral consequence of budgeting approaches. In day 1, participants were asked to set a calorie budget for their food consumption next day. In day 2, participants reported their actual consumption by taking pictures of the food that they ate all day. We found that participants set a lower budget under the categorical versus overall approach ($M_{\text{categorical}} = 1528.36$ calories, $M_{\text{overall}} = 2011.36$ calories; $F(1, 87) = 13.55, p < .001$), and consumed less under the categorical versus overall approach ($M_{\text{categorical}} = 1418.22$ calories, $M_{\text{overall}} = 1649.44$ calories; $F(1, 87) = 5.33, p = .02$). A mediation analysis further revealed that budget set fully mediated the effect of budgeting approach on real consumption.

Our research adds to the literature on unpacking and self-control and has implications for obesity and anti-smoking programs.

The Smell of Healthy Choices: The Paradoxical Effects of Ambient Scent on Children’s and Adults’ Food Choices

EXTENDED ABSTRACT

The obesity rate among children continues to be high (Ogden et al. 2014). Childhood obesity often leads to lifelong medical problems including diabetes, heart disease, and cancer (Weiss et al. 2013), along with social and psychological problems (Puhl and Latner 2007). While physical exercise and even genetic factors can potentially influence obesity, food choices and diet regimens play more influential roles (Livingston and Zylke 2012).

To tackle the high obesity rates among children, regulators/policymakers have implemented restrictive policies to encourage healthier eating, such as by banning sales of “junk food” (Lincoff 2014), sugary sodas (Park 2011), and chocolate milk (Firger 2014) in school cafeterias and vending machines. However, such restrictive policies have often been met with strong resistance and even led to unintended negative consequences, suggesting that subliminal factors might be more effective in influencing behavior (Biswas et al. 2017).

This research examines how one such subliminal factor, in the form of ambient scent, might help to encourage healthier food choices. We focus specifically on how ambient scents related to indulgent (e.g., pizza, cookie) versus non-indulgent foods (e.g., strawberry, apple) influence children’s food choices at school cafeterias. We build on work related to cross-modal sensory compensation which shows that the sensory cortical areas, and particularly the areas related to the olfactory and gustatory systems, are interconnected (De Araujo et al. 2003; Maier, Wachowiak, and Katz 2012) as well as work which shows that exposure to pleasurable stimuli activates reward centers of the brain (Aharon et al. 2001). We propose that when exposed to an ambient scent of an indulgent food item, due to cross-modal sensory influences the reward circuitry of the brain can be satisfied with the sensory olfactory inputs of something tasty and unhealthy, which in turn will reduce the desire for actual indulgent (i.e., unhealthy) foods. We test this hypothesis in five studies.

Study 1a, a field experiment conducted at a middle school cafeteria, examined the effects of artificially diffusing pizza (vs. apple vs. no) scent in the ambience of the cafeteria on schoolchildren’s food choices. The children were exposed to apple, pizza, or no scent as they waited to enter the lunch line. Sales data were obtained from the school administration. The results show that a higher percentage

of healthy items were purchased when the cafeteria had a pizza versus apple ambient scent (78.57% vs. 63.04%; $\chi^2 = 168.33, p < .001$) or versus the control condition of “no scent” (78.57% vs. 62.14%; $\chi^2 = 185.42, p < .001$). There was no difference when the ambient scent was apple versus “no scent” (63.04% vs. 62.14%; $\chi^2 = .47, p = .49$). Study 1b, another field experiment, replicated the effects of Study 1a using a different set of indulgent versus non-indulgent ambient scents (pizza vs. strawberry).

We hypothesized that an unhealthy food related scent would enhance feelings related to a “rewarding pleasant experience” in the reward circuitry of the brain, which in turn will reduce the desire for unhealthy foods. In study 2, we directly tested this proposed mediating effect. In addition, study 2 also examined the moderating effect of hunger. Since hunger tends to enhance the acuity of the olfactory system (Critchley and Rolls 1996), olfactory sensitivity is greater under higher hunger states (Stafford and Welbeck 2011). Hence, we propose that the cross-modal influence of food-related olfactory cues on satisfying gustatory desires related to the brain’s reward circuits would be stronger under high hunger and weaker under low hunger. Study 2 was a field experiment conducted at a middle school cafeteria. Ambient scent was manipulated as in studies 1a and 1b. Study 2 involved participants filling out a short survey. As hypothesized, exposure to cookie (vs. apple) ambient scent led to higher choices of healthier options (53.66% vs. 29.73%; $\chi^2 = 4.56, p < .05$). Mediation analysis using Preacher and Hayes’s (2008) bootstrapped samples (5,000) showed a direct effect of ambient scent on food choices ($CI_{95\%}: .2513, 2.3260$) as well as indirect effects with the effects being mediated by feelings of rewarding pleasant experience ($CI_{95\%}: -.7824, -.0013$). Also, there was a significant effect of ambient scent on food choices (at $p < .05$) for hunger values at 4.51 and above with the effects getting weaker, and attenuated, with hunger levels below this threshold point.

Study 3 examined the moderating effect of duration of exposure to the ambient scent. If as conceptualized, prolonged exposure to the indulgent ambient scent satisfies gustatory cravings, then the effects should hold when an individual is exposed to the ambient scent for a prolonged period as the children were in the field studies. In contrast, brief duration of exposure to the scents should whet the appetite (Wadhwa, Shiv, and Nowlis 2008), leading to priming effects. Study 3 was a 2 (ambient scent: cookie vs. strawberry) X 2 (duration of exposure: prolonged vs. brief) between-subjects experiment. The results of a logistic regression show an interaction effect (Wald $\chi^2 = 8.47, p < .01$). Long duration of exposure to the cookie (vs. strawberry) ambient scent led to greater degree of choice for the healthy option (78.0% vs. 59.74%; $\chi^2 = 4.57, p < .05$). The pattern of results reversed in the case of short duration of exposure to the ambient scents, whereby exposure to cookie (vs. strawberry) ambient scent led to lower degree of choice for the healthy option (55.17% vs. 72.22%; $\chi^2 = 4.08, p < .05$).

Finally, study 4 examines the moderating effect of scent identification capability. UPSIT kits were administered to determine scent identification capabilities. The results of a floodlight analysis demonstrate that the effects of ambient scent on food choices hold for individuals with moderate to high levels of scent identification capability but the effects attenuate for individuals with low scent identification capability.

Overall, across five experimental studies with both children and adults and using a mix of field and lab experiments, we show that prolonged exposure to indulgent food related ambient scents paradoxically enhances preference for healthy food options. These findings have implications for consumer wellbeing and managerial practices.

REFERENCES

- Aharon, Itzhak, Nancy Etcoff, Dan Ariely, Christopher F. Chabris, Ethan O'Connor, and Hans C. Breiter (2001), "Beautiful Faces Have Variable Reward Value: fMRI and Behavioral Evidence," *Neuron*, 32(3), 537-51.
- Biswas, Dipayan, Courtney Szocs, Roger Chacko, and Brian Wansink (2017), "Shining Light on Atmospheric: How Ambient Light Influences Food Choices," *Journal of Marketing Research*, February, 111-123.
- Bettman, James R. (1979), *Information Processing Theory of Consumer Choice*, Reading, MA: Addison-Wesley.
- Bublitz, Melissa G., Laura A. Peracchio, Alan R. Andreasen, Jeremy Kees, Blair Kidwell, Elizabeth Gelfand Miller, Carol M. Motley, Paula C. Peter, Priyali Rajagopal, Maura L. Scott and Beth Vallen (2013), "Promoting Positive Change: Advancing the Food Well-Being Paradigm," *Journal of Business Research*, 66 (8), 1211-8.
- Campbell, Margaret C. and Caleb Warren (2015), "The Progress Bias in Goal Pursuit: When One Step Forward Seems Larger Than One Step Back," *Journal of Consumer Research*, 41 (5), 1316-31.
- Chandon, Pierre and Brian Wansink (2007), "The Biasing Health Halos of Fast-Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions," *Journal of Consumer Research*, 34 (3), 301-14.
- Chandon, Pierre and Brian Wansink (2012), "Does Food Marketing Need to Make Us Fat? A Review and Solutions," *Nutrition Reviews*, 70 (10), 571-93.
- Chernev, Alexander and David Gal (2010), "Categorization Effects in Value Judgments: Averaging Bias in Evaluating Combinations of Vices and Virtues," *Journal of Marketing Research*, 47 (9), 738-47.
- Cochran, Winona and Abraham Tesser (1996), "The 'What the Hell' Effect: Some Effects of Goal Proximity and Goal Framing on Performance," in *Striving and Feeling: Interactions among Goals, Affect, and Self-Regulation*, Hillsdale, NJ: Lawrence Erlbaum Associates, 99-120.
- Critchley, Hugo D. and Edmund T. Rolls (1996), "Hunger and Satiety Modify the Responses of Olfactory and Visual Neurons in the Primate Orbitofrontal Cortex," *Journal of Neurophysiology*, 75 (4), 1673-86.
- De Araujo, Ivan E. T., Edmund T. Rolls, Morten L. Kringelbach, Francis McGlone, and Nicola Phillips (2003), "Taste-Olfactory convergence, and the Representation of the Pleasantness of Flavour, in the Human Brain," *European Journal of Neuroscience*, 18, 2059-68.
- Firger, Jessica (2014), "Connecticut Proposed Chocolate Milk Ban in Schools," CBS News, www.cbsnews.com/news/connecticut-proposes-chocolate-milk-ban-in-schools/
- González-Vallejo, Claudia and Elizabeth Moran (2001), "The Evaluability Hypothesis Revisited: Joint and Separate Evaluation Preference Reversal as a Function of Attribute Importance," *Organizational Behavior and Human Decision Processes*, 86 (2), 216-33.
- Ha, Young-Won, Sehoon Park, and Hee-Kyung Ahn (2009), "The Influence of Categorical Attributes on Choice Context Effects," *Journal of Consumer Research*, 36 (3), 463-77.
- Heatherton, Todd F. and Roy F. Baumeister (1991), "Binge Eating as Escape from Self-Awareness," *Psychological Bulletin*, 110 (1), 86-108.
- Helgeson, James G. and Sharon E. Beatty (1987), "Price Expectation and Price Recall Error: An Empirical Study," *Journal of Consumer Research*, 14 (3), 379-86.
- Herman, Peter C. and Janet Polivy (2004), "The Self-Regulation of Eating: Theoretical and Practical Problems," in *Handbook of Self-Regulation: Research, Theory, and Applications*, ed. Roy F. Baumeister and Kathleen D. Vohs, New York: Guilford Press, 492-508.
- Hsee, Christopher K. (1996), "The Evaluability Hypothesis: An Explanation for Preference Reversals between Joint and Separate Evaluations of Alternatives," *Organizational Behavior and Human Decision Processes*, 67 (3), 247-57.
- Huang, Szu-chi, Ying Zhang, and Susan M. Broniarczyk (2012), "So near and yet So Far: The Mental Representation of Goal Progress," *Journal of Personality and Social Psychology*, 103 (2), 225-41.
- International Food Information Council Foundation (2012), "2012 Food & Health Survey: Consumer Attitudes toward Food Safety, Nutrition & Health," Washington, DC: International Food Information Council Foundation.
- Krider, Robert E, Priya Raghuram, and Aradhna Krishna (2001), "Pizzas: Pi or Square? Psychophysical Biases in Area Comparisons," *Marketing Science*, 20 (4), 405-25.
- Lincoff, Nina (2014), "New USDA Rules Ban 'Junk' Food in Schools," Available at: <http://www.healthline.com/health-news/new-rules-ban-junk-food-in-schools-041714>
- Livingston, Edward and Jodie W. Zylke (2012), "JAMA Obesity Theme Issue: Call for Papers," *Journal of the American Medical Association*, 307, 970-71.
- Maier, Joost X., Matt Wachowiak, and Donald B. Katz (2012), "Chemosensory Convergence on Primary Olfactory Cortex" *Journal of Neuroscience*, 32, 17037-47.
- Ogden Cynthia L., Margaret D. Carroll, Brian K. Kit, Katherine M. Flegal (2014), "Prevalence of Childhood and Adult Obesity in the United States, 2011-2012," *Journal of the American Medical Association*, 311 (8), 806-14.
- Park, Alice (2011), "Banning Sugared Drinks in Schools Doesn't Lower Student Consumption," *Time*, Available at: <http://healthland.time.com/2011/11/08/banning-sugared-drinks-in-schools-doesnt-lower-student-consumption/>
- Preacher, Kristopher J. and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40 (3), 879-91.
- Puhl, Rebecca M. and Janet D. Latner (2007), "Stigma, Obesity, and the Health of the Nation's Children," *Psychological Bulletin*, 133 (4), 557-80.
- Rottenstreich, Yuval and Amos Tversky (1997), "Unpacking, Repacking, and Anchoring: Advances in Support Theory," *Psychological Review*, 104 (2), 406-15.
- Stafford, Lorenzo D. and Kimberley Welbeck (2011), "High Hunger State increases Olfactory Sensitivity to Neutral but not Food Odors," *Chemical Senses*, 36 (2), 189-98.
- Tversky, Amos and Derek J. Koehler (1994), "Support Theory: A Nonextensional Representation of Subjective Probability," *Psychological Review*, 101 (October), 547-67.
- Wadhwa, Monica, Baba Shiv, and Stephen M. Nowlis (2008), "A Bite to Whet the Reward Appetite: The Influence of Sampling on Reward-Seeking Behaviors," *Journal of Marketing Research*, 45 (4), 403-13.
- Weiss, Ram, Andrew A. Bremer, and Robert H. Lustig (2013), "What is Metabolic Syndrome and why are Children getting it?" *Annals of the New York Academy of Sciences*, 1281, 123-40.

The Darker Side of Giving: Exploring Implicit Motives that Negatively Shape Prosocial Behavior

Chair: Coby Morvinski, Interdisciplinary Center Herzliya, Israel

Paper #1: Goal Proximity, Social Information, and Giving: When Norms Backfire

Matt Lupoli, UC San Diego, USA
Coby Morvinski, Interdisciplinary Center Herzliya, Israel
On Amir, UC San Diego, USA

Paper #2: Exalted Purchases or Tainted Donations? The Effects of Product Incentives on Charitable Giving

Jennifer Savary, University of Arizona, USA
Charis Li, University of Florida, USA
and George E. Newman, Yale University, USA

Paper #3: Opting In to Prosocial and Standard Incentives

Daniel Schwartz, University of Chile, Chile
Elizabeth A. Keenan, Harvard University, USA
Alex Imas, Carnegie Mellon University, USA
and Ayelet Gneezy, UC San Diego, USA

Paper #4: The Value of Sacrifice - Relative Evaluation of Prosocial Behavior

Gil Peleg, Ben-Gurion University, Israel
Oded Lowengart, Ben-Gurion University, Israel
Danny Shapira, Ben-Gurion University, Israel

SESSION OVERVIEW

In 2015, Americans gave over \$370 billion, of which the vast majority came from individuals, which drives an important question – what motivates individuals to contribute to charitable causes? In this session, we focus on perhaps a more intriguing question – what *reduces* individuals' motivation to contribute time and money to or on behalf of charitable causes?

What motivates people to give less than they would give otherwise? What may lead society to devalue prosocial behavior? And, how might opportunities to behave prosocially through giving reduce participation in unrelated activities? Four papers explore these and related questions as they deepen our understanding of individuals' prosocial behavior.

The first two papers examine specific information cues that influence donation behavior, sometimes in counterintuitive ways. **Lupoli, Morvinski and Amir**'s paper challenges established notions that individuals are expected to increase their donation amount, the closer the fundraising campaign is to reaching its goal, and that popularity information positively affects donations. Their paper demonstrates that when the campaign goal has nearly been reached, individuals donate less when they see a large, rather than a small, number of past donors. The paper by **Savary, Li and Newman** examines how different expectations about altruism, which derive from different framing of the donation offering, affect donation decisions. Specifically, they show that a bundle framed as a "donation with a gift," as opposed to "charitable giving," evokes expectations of genuine altruism by causing people to compare the offer to donating without receiving a gift in return, and as a result, they are less likely to donate. The last two papers examine broader aspects of prosocial decisions. **Schwartz, Keenan, Imas, and Gneezy**'s paper demonstrates another situation where threatening one's altruistic self-image can be detrimental. Their work shows that people are less likely to opt-in to activities when they are offered prosocial incentives, where payment for work is donated to charity. Specifically, people avoid this type of

incentives even when they can keep the earnings for themselves due to the guilt associated with potentially saying no to such incentive offers. In the last paper, **Peleg, Lowengart, and Shapira** explore how prosocial behavior is evaluated by society and find that not only the economic value for the beneficiary is considered, but also the amount of self-sacrifice involved in the prosocial activity itself. Such findings may put in question whether social rewards concerns may lead to less effective prosocial responses.

Prior work on prosocial behavior has demonstrated the positive effects of information processing goals on giving, but little is known about how prosocial behavior is negatively impacted by consumers' implicit motives. Taken together, the four papers present novel findings that further our understanding of the mechanisms by which consumers prosocial decisions are constructed.

The session should be of interest not only to researchers who study consumer prosocial-behavior, but also to those who are more broadly interested in decision making, information processing, and incentive scheme optimization. The session incorporates multiple methodologies and speaks to audiences that include theory-inclined academics, consumers, policy-makers, and marketers.

Goal Proximity, Social Information, and Giving: When Norms Backfire

EXTENDED ABSTRACT

The crowdfunding industry has reached over \$34B in 2015 and is growing exponentially (www.crowdsourcing.org). Online fundraisers try to increase donations by providing potential donors with up-to-date information about their campaigns. Two types of information commonly presented are the percentage of the campaign goal that has been reached ("goal proximity"), and the number of individuals who have donated to the campaign. Research suggests that fundraisers would be wise to present these two metrics to potential donors. Indeed, individuals are more likely to donate when campaigns are close to (versus far from) reaching their goals (Cryder et. al. 2013). Likewise, information about the behavior of past donors (descriptive norms) has been shown to increase giving. For instance, people are more likely to give when they learn that a large (versus small) proportion of a population has donated (Frey & Meier 2004). Given the effects of goal proximity and descriptive norms on giving, one might expect these tactics to be at least equally effective when implemented simultaneously. In three studies, we observed a surprising interaction: when campaigns are close to reaching their goals, individuals donate more when there are few (versus many) past donors. We find that both impact concerns and perceived average donation by others drive the observed effect. Individuals may perceive their donation as being more impactful if they learn that few (rather than many) people have donated. In addition, individuals who receive information that a small (rather than large) number of people have donated (holding goal proximity constant), may assume that the average donation is relatively larger, which subsequently, affect their own giving amount. Interestingly, those effects strengthen, or manifest only, when the goal has nearly been reached.

In Study 1 ($N=12,265$ campaigns), we analyzed aggregated data from a popular fundraising website, Kickstarter.com, and found a significant negative interaction between goal proximity and number of past donors on the average amount donated across campaigns.

When campaigns were under 54% complete, there was no relationship between number of donors and giving. However, above 54%, this relationship was significantly (and increasingly) negative. This result held with and without covariates and transformations to account for data skewness.

In Study 2 ($N=571$), we obtained causal evidence for the interaction seen in the Kickstarter data. In this 3(Past Donors: many/few/no-information) \times 2(Goal Proximity: close/far) between-subject laboratory experiment, undergraduate student participants learned that they would be entered into a lottery for \$20, and that, prior to selection of the winner, they could choose to donate \$0-\$20 to a real charity campaign that is committed to saving the lives of malnourished children. They then received the manipulation in the form of a pie chart and written statement explaining that 86% (23%) of the campaign goal had been reached, and that there were 1,023 (23) previous donors (no-information treatment did not specify number of previous donors). Results: There were no main effects of goal proximity or past donors but there was a significant interaction ($F(2, 565)=3.94, p=.02$). When close to the goal, participants in the few treatments donated significantly more than those in the many treatment ($M_{\text{few}}=\$14.06, M_{\text{many}}=\$11.30, p=.01$). The average amount donated by those in the no-information treatment was in between those of the other conditions ($M=\$12.97$). When far from the goal, however, there was no effect of the past donors manipulation on giving. Participants in the many treatment gave slightly more than those in the few treatment but the effect was not significant ($M_{\text{few}}=\$12.08, M_{\text{many}}=\$13.52, p=.19$). The no-information treatment amount was once again in between the other conditions ($M=\$12.27$). Similar results observed when analyzing the probability of giving.

In Study 3 ($N=709$), we examined potential mechanisms for the effect and also tested progress-focus (accumulated versus remaining goal progress) as a potential boundary condition (Koo & Fishbach, 2008). In this 2 (Past Donors: few/many) \times 2 (Focus: accumulated/remaining) between-subjects design study, participants received the same charity campaign and past donors manipulations from Study 2, but everyone saw only the close goal proximity information. We manipulated progress-focus by either presenting (visually and textually) the percentage of the goal already funded (86%)—as was displayed to participants in Study 2—or the remaining percentage left to be funded (14%). Following the donation decision, we measured the perceived impact of donating on reaching the campaign goal using 3 items adopted from Cryder et al. (2013). We also measured other motivations for giving that could potentially account for the effect: perceived average donation, importance placed on campaign, perceived importance others place on campaign, anticipated positive and negative emotions, likelihood of reaching the goal without one's donation, perceived need, and moral responsibility. Results: Replicating Study 2's results, those in the few conditions donated more than those in the many conditions ($M_{\text{few}}=\$13.66, M_{\text{many}}=\$12.11, p<.01$). We observed no main effect of progress-focus, nor an interaction effect, and therefore collapsed across progress-focus. Importantly, a bootstrap multiple mediation analysis containing all potential mechanisms revealed a significant indirect effect of perceived impact on reaching the campaign goal ($\beta = 0.21, 95\% \text{ CI } [0.05, 0.48]$), while no other measure mediated the effect. Analyzing the probability of giving revealed virtually identical results. Together, our results suggest an intriguing phenomenon whereby information about many (as opposed to few) past donors negatively affects giving when the campaign goal is near. This effect is mediated by the perceived impact on reaching the campaign goal such that when the campaign is nearly being reached, information about few (as opposed to many) past do-

nors causes people to think that their donation will have a larger impact, leading them to increase their donation.

This work contributes to theory on goal gradient motivation, norms, and giving by providing the first demonstration that descriptive norms for giving (i.e., many others donated) can sometimes lead to less giving. Our results also have a practical implication: If fundraisers display information about goal proximity, they may be better off emphasizing a small number of past donors (when applicable), at least when the campaign is getting closer to reaching its goal.

Exalted Purchases or Tainted Donations? The Effects of Product Incentives on Charitable Giving

EXTENDED ABSTRACT

The present studies demonstrate a robust framing effect - offers framed as charitable purchases result in more charitable giving than materially identical offers framed as donations with a gift. To explain this result, we suggest that subtle changes in framing give rise to different expectations about altruism. Specifically, when a bundle is framed as a “*donation* with a gift,” it evokes expectations of genuine altruism, and people spontaneously compare the offer to donating without receiving a gift in return. In contrast, when an offer is framed as a “*charitable purchase*,” it is less likely to evoke expectations related to pure altruism and it may be perfectly acceptable (and perhaps preferable) to receive a gift.

Because people find actions that violate their expectations about their own altruism distasteful (Newman and Cain 2014), when the offer is perceived as less than purely altruistic, people are less likely to donate. Therefore, our primary hypothesis is that a charitable purchase should encourage more donations than an otherwise identical offer framed as a donation with a gift. Moreover, these effects should be mediated by differences in people's beliefs about how altruistic they would feel if they accepted the offer. Four laboratory experiments and two field studies provide support for these predictions

Study 1a: 412 participants saw an identical bundle framed as either a Charitable Purchase(CP) or Donation with Gift(DWG). In the DWG condition, the offer was: “Donate and receive a gift in exchange: Currently this organization is seeking donations in the amount of \$3.00. In exchange for your donation, you will receive a thank-you gift of a scented candle” (adapted from Holmes et al. 2002). In the CP condition, it was framed as: “Make a Charitable Purchase: Currently this organization is selling scented candles for \$3.00.” Participants indicated their choice (yes/no). Perceived altruism of the offers was measured on a subsequent page, where people rated the offer along seven dimensions (i.e. Charitable, Helpful, Selfish(r)). As predicted, participants were more likely to accept the offer when it was framed as a CP (61.9%) than when it was framed as a DWG (38.1%, $p < .001$). Participants rated the CP offer as more altruistic than the DWG, $M_{\text{charitablepurchase}} = 75.7, SD = 19.9$ vs. $M_{\text{donation-withgift}} = 65.3, SD = 24.4, F(1, 400) = 22.3, p < .001$). Bootstrap analysis indicates that the measure of perceived altruism fully mediated the framing effect ($\beta = .76, SE=.19; 95\% \text{ CI}=.42 \text{ to } 1.15$).

Study 1b was a conceptual replication using a Likert scale instead of a choice. As before, participants were more likely to accept the offer when it was framed as a CP ($M = 4.6$) than when it was framed as a DWG ($M = 4.1, p = .02$). The CP offer was rated as more altruistic compared to a DWG ($M_{\text{charitablepurchase}} = 78.5$ vs. $M_{\text{donation-withgift}} = 70.6, p = .000$), and perceived altruism fully mediated ($\beta = .21, SE=.06; 95\% \text{ CI}=.10 \text{ to } .33$).

Study 2 used materials identical to 1b, but was conducted in a campus lab and participants completed a thought-listing protocol after the other measure. Again, participants were more likely to ac-

cept the offer when it was framed as a CP ($M_{charitablepurchase} = 5.5$) than when it was framed as a DWG ($M_{donationwithgift} = 4.7, p = .006$), the offer was more altruistic when it was framed as a CP ($\alpha = .89, M_{charitablepurchase} = 77.5$, vs. $M_{donationwithgift} = 64.6, p < .001$) and perceived altruism mediated ($\beta = .21, SE = .07; 95\% CI = .10, .50$).

We hypothesized that when an offer is framed as a DWG, people are relatively more likely to spontaneously compare it to donating and not receiving a gift in return (i.e., “genuine” altruism). To test this, coders blind to condition and hypothesis categorized the thought-listing responses. DWG participants mentioned that the presence of the gift was negative/that they wish they did not receive the gift more often than CP participants did ($P_{donationwithgift} = 33\%$ vs. $P_{charitablepurchase} = 18\%, p = .034$). According to our hypothesis, this in turn should predict rating the offer as less altruistic, which leads to decreased likelihood of accepting the offer. A serial mediation analysis confirms this causal chain, ($\beta = -.25, SE = .18; 95\% BCCI = -.083, .04$).

Study 3 investigates why differences in perceived altruism affect donation likelihood. To do so, we replicate the framing effect documented in earlier studies (using a different charity, gift and donation/purchase amount), and measure three potential mechanisms: *social-signaling*, “If I accepted this offer, other people would see me as”; *perceptions of the organization*, “In light of this offer, I see The Water Project organization as” and *self-signaling*, “If I accepted this offer, I would think of myself as.” Responses to all three measures were on a 7-point scale (1 = Purely selfish to 7 = Purely altruistic). As before, people were more likely to accept the offer when it was framed as a CP ($M_{charitablepurchase} = 4.96, M_{donationwithgift} = 4.44, p = .004$). Only the measure of self-signaling (i.e. how people would perceive themselves) was affected by the framing, and it mediated the effect of framing (DWG vs. CP) on willingness to accept the offer ($.08(.04); 95\% CI = .02, .19$).

Study 4 is a field study, conducted at a farmers’ market. Participants were exposed to an identical product-donation bundle (a bottle of water/\$1), which was framed either as a DWG or CP, depending on condition. People who heard the offer framed as a CP were more likely to accept it ($P_{donationwithgift} = 48.2\%$ vs. $P_{charitablepurchase} = 75.9\%, p = .002$).

Study 5 is a large-scale field study in which door-to-door solicitors approached roughly 1,400 households offering a product-donation bundle (bag of microwave popcorn/\$1.50). The two focal conditions were framed as a DWG (for every \$1.50 donated the participant received a \$0.75 bag of popcorn), and a CP condition (for every bag of popcorn purchased for \$1.50, \$0.75 was donated to charity). Households were 8% more likely to accept the offer in the CP condition (29.19%) than in the DWG condition (21.01%, $p < .05$).

The present studies suggest that the framing of an offer plays a key role in determining how donation-product bundles are interpreted. Specifically, we suggest an important theoretical distinction between offers framed as “donations” versus identical offers framed as “purchases.”

Opting In to Prosocial and Standard Incentives

EXTENDED ABSTRACT

Optimizing incentive schemes to increase effort provision is an important design question for firms and other organizations. However, standard self-benefiting monetary incentives have been shown to backfire in certain contexts (e.g. Gneezy & Rustichini, 2000). To overcome this detrimental effect, prior work has demonstrated that “prosocial incentives” – where individuals work and their payments go to a charitable organization – can be more effective than stan-

dard incentive schemes, particularly when the stakes are low (Imas, 2013; Yang, Hsee & Urminsky, 2014). However, it remains unclear whether prosocial incentives are effective in prompting individuals to participate in an activity or task in the first place.

We examine the effectiveness of prosocial incentives for participation decisions in field and online settings in which the incentivized activity can be avoided; participants can disregard the invitation to do the activity or shut off the browser. In contrast, participants in prior laboratory studies exploring prosocial incentives have already agreed to participate in the activity by showing up; the decision to opt-out is either cumbersome or costly. We also introduce an *optional prosocial incentive* (i.e., individuals can choose to forego the standard incentive and give to charity instead). From the perspective of standard economics, an *optional prosocial incentive* should be appealing because people can select into the task both if they prefer to work for the standard and prosocial incentive. However, from a psychological perspective, this type of incentive may be less appealing than a standard incentive of equal size because individuals prefer to avoid situations in which they may have to directly turn down a charity solicitation (Dana, Weber, & Kuang, 2007); they would prefer to keep the money rather than donate it, but the psychological cost of saying no to the donation request may deter them from engaging with the activity in the first place.

Study 1. In a field experiment, households (N=951) living in a neighborhood with almost no door-to-door recycling collection received an invitation letter to participate in a program to recycle at a nearby drop-off center. In the letter, households were offered one of three levels of cash rewards (\$2.50, \$12.00, or \$25.00), and a message with either a donation option message: “if you prefer, you can also donate this money to an environmental cause” (optional prosocial incentive) or no donation message. One extra condition offered an “acknowledgement” only (no cash or donation option). Our main measure was the proportion of households who recycled with the program. Results: When there was no donation option message, households were 1.1% more likely to recycle for every \$2.50 increase in rewards ($p < .01$). However, when a donation option was included, households were less likely to recycle as the reward increased ($p < .01$) – in fact, at \$25.00, zero households showed up to recycle. The optional prosocial incentive was completely avoided when the incentive was large.

Study 2. Participants (N=1,345) were hired from an online labor market to verify whether a series of URLs were working. After finishing, they received their payment code, so they could leave the task and collect their compensation. They were also invited to participate in an optional bonus task that involved searching for additional images to complete a research database. In this invitation, participants were randomly assigned to either receive a standard incentive for their work, a non-optional prosocial incentive (their work was directly tied to a donation), or an optional prosocial incentive as in the field study (they could choose to donate their standard incentive after finishing the task, or to keep it). There were two levels of payment for their work (£0.01 or £1.00), generating 6 experimental conditions. Results: At the high incentive levels, compared to a standard incentive, participants were less likely to opt-in when an optional prosocial or non-optional prosocial incentive was offered, $OR = 0.59$ and $OR = 0.17$, respectively ($ps < .01$). At the low incentive levels, people were less likely to opt-in for non-optional prosocial incentives than for standard incentives ($OR = 0.46, p < .01$); there was no difference between the optional prosocial and standard incentives. We use a hurdle model to examine behavior at the intensive margin: people worked harder under prosocial incentives (vs. standard) when the amounts were low, consistent with previous evidence. Finally,

we conducted a mediation analysis which showed that reported feelings of guilt partially explained why people were less likely to opt-in when offered a high prosocial or optional prosocial incentive (vs. standard) – Indirect effects: $b=0.059$, 95% CI [0.027,0.115] and $b=0.013$, 95% CI [0.002,0.038], respectively. This is consistent with previous evidence showing that people feel less happy when they have the option to donate their money instead of just receiving it for themselves (Berman & Small, 2012).

Study 3. Using the same setting and invitation as in the previous study, participants ($N=916$) were randomly assigned to either receive £1.00 for searching additional images (high standard incentive), receive £1.00 and have the option to donate 10% of it to charity (partial donation option), receive £0.90 and donate £0.10 (partial donation), or receive £0.90 (low standard incentive). Consistent with the previous studies, we again found that people were less likely to opt-in when they had the option to donate their earnings, even a small part of it ($OR=0.64$, $p=0.02$). We also found that offering a high standard incentive was directionally more appealing compared to offering the partial donation or the low standard incentive, though the results were not significant at the 5% level.

Across studies, our findings suggest that offering prosocial incentives may not be an effective tool to attract people to participate in a task when they have the option to avoid it, i.e. motivating extensive margin decisions. Furthermore, we find that increasing the incentive level does not make the option to donate more appealing, as would be suggested by a standard economic model in which people can self-select into work depending on the type of incentive. Furthermore, our findings suggest that people avoid optional prosocial incentives due to the guilt associated with potentially saying no. These results have implications for contract design and policies aimed at improving selection and recruitment.

The Value of Sacrifice - Relative Evaluation of Prosocial Behavior

EXTENDED ABSTRACT

Consider a case in which two individuals, Alice and Bob, donate money for a noble cause: while Alice donates \$50, Bob donates \$100. Naturally, we may expect that Bob will receive a higher social evaluation for his prosocial act as he donated twice as much as Alice. However, what if it is also known that Alice earns a weekly wage of \$500, while Bob earns \$1,500 per week? Would society then evaluate these acts differently? In this paper, we show that besides evaluating the economic value of one's contribution, society also values the sacrifice per se (i.e., cost) involved in the prosocial behavior even though the benefactor's sacrifice does not help the respective beneficiary.

In previous studies evaluating prosocial behavior and the sacrifice one has to make when the acts are costly, the sacrifice itself is commonly imposed to justify the selfless intentions of the benefactor (Ariely et al., 2009; Berman et al., 2015; A. Gneezy et al., 2012; Olivola & Shafir, 2013) we provide evidence that the prospect of enduring pain and exerting effort for a prosocial cause can promote contributions to the cause. Specifically, we show that willingness to contribute to a charitable or collective cause increases when the contribution process is expected to be painful and effortful rather than easy and enjoyable. Across five experiments, we document this martyrdom effect, and show that the observed patterns defy standard economic and psychological accounts, and identify a mediator and moderator of the effect. Experiment 1 showed that people are willing to donate more to charity when they anticipate having to suffer to raise money. Experiment 2 extended these findings to a

non-charity laboratory context that involved real money and actual pain. Experiment 3 demonstrated that the martyrdom effect is not the result of an attribute substitution strategy (whereby people use the amount of pain and effort involved in fundraising to determine donation worthiness. Moreover, while the sacrifice effect also known as the "Martyrdom Effect" (Olivola & Shafir, 2013) has been studied in the context of prosocial behavior, it has never been compared with the resultant economic value of the prosocial act to the beneficiary. To the best of our knowledge, we are the first to investigate how the trade-off between the economic value conveyed to the beneficiary and the sacrifice of the benefactor affects the social evaluation of prosocial activities. In particular, we are the first to measure this trade-off as it appears in different forms of a contribution (i.e., financial donations and volunteer work). In two studies, we explored the importance of sacrifice signaling in the overall social evaluation, and whether this evaluation changes due to information regarding the beneficiary's needs. We found that society's evaluation of the benefactor's sacrifice accounts for approximately 35 percent of the evaluation of the economic value of the contribution for the beneficiary. Moreover, when the evaluator is being primed towards the beneficiary's need, (i.e., for monetary donations or volunteers), the importance of the said need increases.

In order to measure how prosocial behavior is evaluated by others in the context of self-sacrifice, we conducted two online choice-based conjoint studies. Participants in both studies were asked to choose the most prosocial scenario out of three scenarios characterized by a benefactor's prosocial behavior: offering a monetary donation and volunteering, in addition to information regarding the benefactor's resources (his or her available time and monetary resources). The resources were introduced as a signal for the benefactor's sacrifice. Each attribute (i.e., monetary donation, volunteer work, working hours as a proxy for available time, and income as a proxy for monetary resources) was presented at one of four levels: low, medium-low, medium-high, and high. Each respondent viewed 14 different combinations of the three scenarios and selected what they believed to be the most prosocial one. In Study 1 ($N=465$), we explored prosocial evaluation in a non-informative environment in regard to the beneficiary's needs, whereas in Study 2 ($N=431$), we provided participants with information regarding the beneficiary's specific needs. Participants were informed that a beneficiary needed either a monetary donation (treatment 1) or volunteers (treatment 2).

We analyzed the combined results of both studies by employing a hierarchical Bayes analysis for individual-level estimation. The estimation yielded 0.80 RLH (i.e., root likelihood as model fit), which is significantly above a baseline level (0.33 for a random choice of 1 out of 3 concepts). Specifically, in Study 1, we analyzed the average attribute importance evaluation given by all the respondents and found that the importance of the economic value of the prosocial acts (i.e., monetary donation and volunteer work) summed up to 65% of the overall evaluation compared to 35% of the resources or sacrifice. Furthermore, we calculated the social reward for the interaction between the prosocial behavior and resource at each level (e.g., small donation when income is low). Our results suggest there are two significant trends wherein both a greater contribution and a lower level of available resources are associated with greater social evaluation (all $p<.01$). The results of the non-informative evaluations in Study 2 were not significantly different from the informative evaluation conditions in Study 1. Also, providing information that the beneficiary was in need of money significantly increased the importance of monetary donations. However, information that the beneficiary was in need of volunteers did not increase the importance of volunteer work. Our studies reveal that prosocial behavior is evaluated by

society in a relative manner. That is, not only is the economic value for the beneficiary considered, but also the amount of self-sacrifice involved in the prosocial activity itself. The greater the self-sacrifice involved, the greater is the reward given by society. Moreover, an evaluation might change due to information regarding a beneficiary's needs. Notably, this reward scheme may eventually lead to ineffective prosocial activities. As benefactors may care about the social reward they gain, they may also increase their sacrifice even if it is found to be unnecessary as far as the beneficiary is concerned. These findings might explain ineffective behaviors such as wealthy people who volunteer their time to do simple tasks (e.g., washing dishes at a shelter) or less affluent people who chose to make significant monetary donations. The benefactor's choice to contribute with the scarcer resource will increase that sacrifice and, therefore, the social reward. However, the contribution's value could decrease as far as the beneficiary is concerned, considering the alternative options for contribution.

REFERENCES

- Ariely, D., Bracha, A., & Meier, S. (2009). Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially. *American Economic Review*, 99(1), 544–555.
- Berman, J. Z., & Small, D. A. (2012). Self-Interest Without Selfishness The Hedonic Benefit of Imposed Self-Interest. *Psychological Science*, 23(10), 1193-1199.
- Berman, J. Z., Levine, E. E., Barasch, A., Small, D. A., David, L., & Enthusiasm, C. Y. (2015). The Braggart's Dilemma : On the Social Rewards and Penalties of Advertising Prosocial Behavior. *Journal of Marketing Research*, LII(February), 90–104.
- Cryder, C. E., Loewenstein, G., & Seltman, H. (2013). Goal gradient in helping behavior. *Journal of Experimental Social Psychology*, 49(6), 1078-1083.
- Dana, J., Weber, R. A., & Kuang, J. X. (2007). Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness. *Economic Theory*, 33(1), 67-80.
- Frey, B. S., & Meier, S. (2004). Social comparisons and prosocial behavior: Testing "conditional cooperation" in a field experiment. *The American Economic Review*, 94(5), 1717-1722.
- Gneezy, A., Imas, A., Brown, A., Nelson, L. D., & Norton, M. I. (2012). Paying to Be Nice : Consistency and Costly Prosocial Behavior, 58(1), 179–187.
- Gneezy, G. & Rustichini, A. (2000). Pay Enough or Don't Pay at All. *Quarterly Journal of Economics*, 115 (3), 791–810.
- Imas, A. (2014). Working for the "warm glow": On the benefits and limits of prosocial incentives. *Journal of Public Economics*, 114, 14-18.
- Koo, M., & Fishbach, A. (2008). Dynamics of self-regulation: How (un) accomplished goal actions affect motivation. *Journal of personality and social psychology*, 94(2), 183-195.
- Olivola, C. Y., & Shafir, E. (2013). The Martyrdom Effect : When Pain and Effort Increase Prosocial Contributions. *Journal of Behavioral Decision Making*, 105(December 2011), 91–105. <http://doi.org/10.1002/bdm>
- Yang, A. X., Hsee, C. K., & Urminsky, O. (2014). Eager to help yet reluctant to give: How pro-social effort and pro-social choices diverge. Available at SSRN: <https://ssrn.com/abstract=2733331> or <http://dx.doi.org/10.2139/ssrn.2733331>

Beyond the Negative Consequences of Crowding: New Psychological Processes and Behavioral Outcomes

Chair: Ying Ding, Renmin University of China, China

Paper #1: The Influence of Social Crowding on Creativity

Ahream Maeng, University of Kansas, USA
Robin J. Tanner, University of Wisconsin Madison, USA
Kaiyang Wu, University of Wisconsin, Madison, USA

Paper #2: The Upside of Social Crowding on Consumer Product Preference

Ying Ding, Renmin University of China, China
Meng Zhu, Johns Hopkins University, USA
Echo Wen Wan, University of Hong Kong, China

Paper #3: The Impact of Crowding on Calorie Consumption

Stefan J. Hock, George Mason University, USA
Rajesh Bagchi, Virginia Tech, USA

Paper #4: Social Crowding versus Spatial Crowding: Differential Influences on Customers' Preference for Anthropomorphized Self-Service Technologies

Lili Wenli Zou, The Chinese University of Hong Kong, Shenzhen, China
Echo Wen Wan, University of Hong Kong, China
Chi Kin (Bennett) Yim, University of Hong Kong, China

SESSION OVERVIEW

As the population continues to grow, the world is becoming ever more crowded. Although there is an emerging body of research on crowding in marketing, the majority of it conceptualizes the impact of crowding in terms of various forms of defensive response from the consumer. For example, socially or spatially crowded stores lead to stress (Epstein 1981), an early exit from the store (Eroglu, Machleit, and Barr 2005), a perceived lack of control (Levav and Zhu 2009), and a preference for safety oriented products (Maeng, Tanner, and Soman 2013). In this session, we aim to broaden our understanding of crowding by bringing together four papers exploring new psychological processes and behavioral outcomes. In particular, collectively, the four papers ask if crowding can influence consumer thinking style, and how might this impact behavior and preference?

The first paper by Maeng, Tanner and Wu extends current understanding of crowding by examining its impact on creative performance. Across five experiments, they demonstrate that as individuals become more crowded they increasingly perform worse on creativity tasks. The authors demonstrate that this relationship between crowdedness and creative performance is moderated by crowd composition and an individual's need for arousal, and attenuated for sensation seekers and for crowds perceived positively.

Shifting attention from cognition to product choice, the second and third paper investigate how crowding in a retail setting influences consumer preference. By using both secondary retail data and experimental design, Ding and Zhu show that when consumers are a priori motivated to purchase from a product class, shopping in the crowded (vs. uncrowded) store will make them infer the overall availability of product supply as low and thus increase sales of the most-preferred items. Hock and Bagchi explore consumers' food consumption in crowded versus uncrowded contexts. Their findings suggest that crowding evokes more affective processing because of distraction and consequently makes individuals consume more calories. They also demonstrate that asking participants to focus on

rational thoughts could attenuate the effect of crowding on calorie consumption.

Finally, Zou, Wan, and Yim differentiate social crowding from spatial crowding and test the differential effects on consumers' adoption of anthropomorphized self-service technologies (SSTs). Specifically, they find that anthropomorphized SSTs could help restore control and will be more effective when consumers attribute crowding to spatial reasons. In contrast, when consumers attribute crowding to social reasons, anthropomorphized SSTs will be less effective due to social withdrawal tendency.

To summarize, this set of four papers identifies multiple new insights and novel psychological processes resulting from crowding in a variety of different contexts. We believe this session will attract audiences from diverse background including researchers interested in crowding, consumer cognition, information processing, decision-making, food consumption, and creativity. Findings discussed in this session will advance knowledge about consequences of crowding in retail settings. In addition, we aim to facilitate connections with marketing practice by presenting four papers that are managerially relevant. We also hope that this session will promote future research that could improve our understanding of service management in crowded retail settings.

The Influence of Social Crowding on Creativity

EXTENDED ABSTRACT

Recent research has revealed a wide variety of psychological consequences of being crowded. In this research, we built on the recent findings that being crowded moderates attentional scope and construal level (Maeng and Tanner 2013) and investigated whether social crowdedness might influence an individual's creative performance. In particular, we explored 1) whether being crowded reduces creativity, 2) whether an individual's threshold for arousal activation moderates the influence of social crowding on creative performance, and 3) whether the ways in which crowds are perceived negatively or positively moderates this effect. Our core hypothesis was that, as attentional scope narrows in crowded environments, individuals perform worse on creativity tasks. However, when the crowded individual is sensation seekers or when the crowds are perceived positively, the negative effect of crowding on creativity disappears. We tested these hypotheses in four studies.

Study 1 tested the basic relationship between crowdedness and creative performance. Students participated in the study for extra credit ($n = 193$). In identical rooms, participants were randomly assigned to either crowded (25 participants invited) or uncrowded (3 participants invited) sessions. Creativity was tested using the Guilford "brick uses and consequences" test (Friedman and Forster 2001) with limited time given. As predicted, the participants in the less crowded room generated a greater number of unusual uses of bricks ($M = 5.7$) compared to those in the crowded classroom ($M = 4.8$, $t(191) = -2.21$, $p < .03$). Moreover, coding use uniqueness on a 1-10 scale revealed that ideas in the less crowded room were also more unique ($M = 6.1$) compared to those from the crowded room ($M = 5.6$, $t(191) = -4.74$, $p < .001$).

Study 2 was designed to replicate this core result using a different task. Participants ($n=159$) were once again assigned to either a crowded or uncrowded room as in Study 1. Creativity was measured

using an insight problem-solving task, the “pig in the pen” problem (Schooler, Ohlsson, and Brooks 1993). It presents participants with an illustration of nine pigs in a single square pen, and challenges them (inside 3 minutes) to place them all in individual pens by drawing two additional squares. Consistent with our prediction, participants in crowded rooms were less likely solve the problem (5%) than participants in uncrowded rooms (13%; $\chi^2_{(1)} = 4.18, p < .03$).

The goal of Study 3 was to explore the potential moderating effect of crowd composition. Specifically, we were interested in whether the reduced avoidance motivations invoked by in-group (vs. out-group) crowds would result in an attenuation of the negative effect of crowding on creativity. The study was 2 (crowdedness: crowded vs. uncrowded) x 2 (group identity: in-group vs. out-group) between subject design. Group identity was manipulated using a dot estimation task which has been shown to reliably manipulate group identity (Tajfel et al. 1971). Creativity was measured using the Remote Associates Test (RAT; Mednick 1962). Participants ($n=94$) were given 15s to respond to each of seven problems. An ANOVA on total RAT score yielded a marginally significant interaction between crowdedness and group membership ($p = .07$). Specifically, when the crowd was comprised of out-group members, participants scored significantly lower in the crowded ($M = .19$) than the uncrowded condition ($M = .68, p < .03$). However, when the scene contained in-group members, no difference in RAT score emerged across the crowdedness conditions ($F < 1$).

Study 4 was designed to explore the potential moderating effect of individual differences in stimulation and arousal needs. Researchers have suggested that high sensation seekers (high need for arousal) reduce the intensity of an incoming stimulus, whereas low sensation seekers (low need for arousal) augment the intensity of the stimulus. Thus, we posited that sensation-seeking tendencies should moderate the influence of crowding on creativity. In particular, individuals who have a low need for arousal show reduced creative performance under crowding, whereas the creative performance of those with a high need for arousal are not much influenced by social crowding. The study was 2 (crowdedness: crowded vs. uncrowded) x 2 (arousal need: high vs. low) between subject design ($n=75$). Crowding was manipulated using a picture priming task and creativity was measured with the RAT used in study 3. The sensation seeking scale was administered to measure individual differences in stimulation and arousal needs (Zuckerman et al., 1978). An ANOVA on a total RAT score yielded a significant interaction between crowdedness and sensation seeking ($p < .01$). Specifically, when an individual is low sensation seeking (low need for arousal), participants scored significantly lower in the crowded ($M = 1.0$) rather than uncrowded conditions ($M = 2.28, p < .005$). However, when individuals that are high sensation seeking (have a high need for arousal), there was no difference in the RAT score that emerged across the crowdedness conditions ($F < 1$).

Study 5 explored the role of arousal and valence for the Study 3 findings. Participants ($n=109$) were first presented with a picture of either a crowded or uncrowded scene before being instructed to visualize and describe how they would feel if they were in the scene. These descriptions were later coded for evidence of expressed arousal (activated vs. deactivated) and valence (positive vs. negative). Participants next conducted the RAT as in Study 3. Participants in the crowded condition expressed significantly more activation than those in the uncrowded condition ($p < .001$). An ANOVA on the total RAT score yielded a marginally significant interaction between valence and arousal ($p = .09$). Results showed that participants reported greater arousal and scored more on the RAT when crowding is perceived as positive ($M = 2.67$) rather than negative ($M = 1.66, p$

$< .05$). However, no such differences were found among the participants who reported less activation ($F < 1$). Thus, Study 5 evidences that it is the type of arousal that is activated by social crowding that moderates creative performance.

In conclusion, our research demonstrated the ways in which social crowdedness influence creative performance. Our research has significant implications in many domains including team sizes for new product design or the potential impact of class size on student creativity in educational settings.

The Upside of Social Crowding on Consumer Product Preference

EXTENDED ABSTRACT

Suppose you decide to purchase a “Holiday Truffle Special Box” from a local dessert store that is currently promoting this special box at a discounted price. When you enter the store on your way home, you notice that the store is crowded with consumers. Will this feeling of crowding influence what truffles you choose to include in the special box? Building on the inference making literature (Fantz 1963; Kardes, Posavac and Cronley 2004), the current research aims to investigate how does social crowding affect consumers’ inference about the overall availability of the product class they intend to purchase from, and its consequence on product preference.

Social crowding is ubiquitous in a retail setting. Prior investigations of social crowding caused by higher level of consumer density have mainly demonstrated its negative affective and behavioral outcomes. For instance, previous literature suggests that social crowding activates an avoidance system (Maeng, Tanner and Soman 2013), leads consumers to infer lower social status of other shoppers at the store (O’Guinn, Tanner, and Maeng 2015), increases likelihood of earlier departure from the store (Hui and Bateson 1991) and decreases overall customer satisfaction (Eroglu, Machleit, and Barr 2005; Machleit, Eroglu, and Mantel 2000).

However, a hitherto unanswered question is whether the detrimental impact of social crowding on consumer preference prevails when consumers are a priori motivated to purchase from a product class. We propose that in such situations, social crowding as a salient cue in the retailing environment, can serve as an inferential cue to guide consumers’ choices from a product class they intend to purchase from and that their impact on product choices is mediated by perceived availability of the featured product category. Because high level of customer density often correlates with high demand and low supply, we argue that when consumers are motivated to make a choice among multiple alternatives from a product class, social crowding in a retail store can lead consumers to infer the overall availability of the product class they intend to purchase from as low. As a consequence, feeling socially crowded will increase the choice share of consumers’ favorite item, while broadening the discrepancy between the liking of their most-preferred and less-preferred alternatives. We further investigate three managerially relevant moderators that may attenuate the inferential effect of social crowding on product preference, that is, 1) product supply quantity, 2) inventory replenishment, and 3) assortment size.

A set of five experiments was conducted to investigate these assertions. In Study 1, we employed one secondary retail data to provide initial empirical evidence of social crowding effect on product preference. Among 204 transactions made by real consumers in a café, we differentiated the transactions completed in rush hours and non-rush hours. The results suggest that the market share of best-selling items was significantly higher in the rush hours than in non-rush hours.

Study 2 replicated the findings of Study 1 in a laboratory setting and explored the underlying process by using a 2 (social crowding: crowded vs. uncrowded) between-subjects design. We collected data of this study in the week before Mid-autumn Festival in China. The participants first ranked five mooncake flavors based on their own preference. Then we instructed the participants to imagine shopping in one shop for mooncakes. In the crowded condition, the shop image included twenty consumers. In the uncrowded condition, the shop image only included two consumers with the same display. The participants were further told the shop carried a total of five different mooncake flavors that have been ranked in the beginning of the study and they decided to purchase one mooncake box by selecting and putting four mooncakes into it. As predicted, participants incorporated a significantly higher proportion of their favorite mooncake flavor in crowded condition than in uncrowded condition. And this effect was mediated by perceived availability of supply level about mooncakes.

Across Studies 3-5, we consistently found that social crowding could boost sales consumers' favorite item from a product class when the overall product supply was perceived as depletable. Study 3 manipulated actual product supply quantity and the results suggested that when the actual product supply quantity is not low, consumers exhibited a greater preference for the favorite item in crowded versus uncrowded condition. Conversely, when the actual product supply quantity is low, consumers always preferred for the favorite option, no matter whether the store is crowded or not.

Study 4 validated that inventory replenishment moderated the impact of social crowding on inferred product availability and consumers' choices from a product class. For depletable products, feeling socially crowded (vs. uncrowded) in a shopping context made consumers infer product availability as low, thus enhanced the choice of favorite item. However, when the product inventory was expected to be replenished on a daily basis, social crowding in a shopping context did not influence the inference about product availability and consumer preference.

Study 5 examined the moderating role of assortment size. We found the inferential impact of social crowding on perceived product availability and product choices held when the assortment size was small. However, this impact was alleviated when the retail store offered large assortment size for a product category that consumers intended to purchase from.

To conclude, this research provides novel insights into the upside of social crowding on consumer product preference. In addition, the findings of current research shed new light on the inference making literature by identifying social crowding as an important contextual factor affecting consumer perception of product availability and by providing managerially relevant factors that may moderate the downstream consequences of social crowding on consumers choices.

The Impact of Crowding on Calorie Consumption

EXTENDED ABSTRACT

Imagine it is noon now and you decided to buy lunch at a local restaurant. You walk into the restaurant and find it crowded. Would the level of crowding influence your calorie consumption? Why?

Human crowding is defined as a "group of people gathered together such that the likelihood of an individual's personal space being violated is significantly increased" (Maeng, Tanner, and Soman 2013, 740). In five studies, we demonstrate that crowding leads to higher calorie consumption, because it increases distraction, which hampers cognitive thinking and evokes more affective processing. When consumers process information affectively, they consume

more calories. Thus, we show that when given a choice between several different options from a menu, people select higher-calorie items. Furthermore, when presented with only one option (e.g., trail mix), people eat more of the same food item. Across all our studies, we also rule out differences in specific emotions, actual and anticipated hunger, quality perceptions, explicit scarcity-based beliefs, age, gender, BMI, and dieting behavior.

In Study 1A we use secondary data from a well-known fast food restaurant and analyze 4,730 orders during a regular week (8 a.m. - 9 p.m.). The number of orders in each 10-minute (e.g., 8:00-8:10 a.m.) and 20-minute (e.g., 8:00-8:20 a.m.) interval served as a continuous measure of crowding. A main effect of crowding emerged in both regressions (10-minute: $B = 2.81$, $F(1, 4727) = 4.47$, $p < .04$; 20-minute: $B = 1.41$, $F(1, 4727) = 3.91$, $p < .05$), controlling for hour and weekday. Other ways of looking at the data (e.g., comparing the busiest with the least busy day, isolating lunch times; eliminating outliers) elicit similar results.

In Study 1B we conduct a survey ($N = 97$) at the same restaurant during lunch hours on days that are either more or less crowded. Participants in the crowded condition not only ordered more food ($M_{\text{more crowded}} = 1,059$ cal, $SD = 372$ vs. $M_{\text{less crowded}} = 887$ cal, $SD = 887$), but they also consumed more ($M_{\text{more crowded}} = 1,036$ cal, $SD = 375$ vs. $M_{\text{less crowded}} = 874$ cal, $SD = 303$; $F(1, 89) = 5.44$, $p = .02$). A sequential mediation revealed that consumption was significantly mediated by distraction and processing in sequence (95% CI: .34, 22.08).

In study 2 we manipulate crowding in the laboratory and engage participants in a taste test ($N = 115$). We show that the effects not only emerge when a large number of people aggregate, but also when fewer people are in close proximity. Participants in the higher density conditions—more crowding ($M = 30.25$ grams, $SD = 19.13$) and dense less-crowding ($M = 28.14$ grams, $SD = 20.82$)—consumed similar amounts of trail mix ($F(1, 70) = .08$, $p = .78$), and these were significantly higher than the sparse less-crowded condition ($M = 18.09$ grams, $SD = 17.87$; respectively $F(1, 68) = 6.38$, $p < .02$ and $F(1, 63) = 3.92$, $p = .05$). We also replicate the mediation results of Study 1B.

In study 3 ($N = 107$) we demonstrate that merely evoking a crowded mindset can cause the effect. We showed participants a picture of a non-restaurant scenario that was either more or less crowded, and asked them to imagine being in that scenario. Next, in a purportedly unrelated study, we asked participants to select food from a restaurant's menu. As expected, participants selected food with more calories in the crowded mindset condition ($M_{\text{more crowded}} = 988$ cal, $SD = 549$ vs. $M_{\text{less crowded}} = 784$ cal, $SD = 385$; $F(1, 102) = 5.09$, $p < .03$).

Lastly, in Study 4 ($N = 108$) we employed a 2 (crowding: less, more) x 2 (processing: affective, cognitive) between-subjects design, and demonstrate an approach to attenuate consumption in crowded environments. Participants engaged in another taste test in a room that was either crowded or not. In the affective (cognitive) condition, we asked participants to focus on their emotional reactions (rational thoughts). A significant two-way interaction emerged ($F(1, 101) = 4.53$, $p < .04$). In the affective condition, participants ate more trail mix when the room was crowded ($M_{\text{more crowded}} = 44.93$ grams, $SD = 20.15$ vs. $M_{\text{less crowded}} = 30.33$ grams, $SD = 23.07$; $F(1, 49) = 5.46$, $p = .02$), while no such differences emerged in the cognitive condition ($M_{\text{more crowded}} = 21.63$ grams, $SD = 17.72$ vs. $M_{\text{less crowded}} = 21.13$ grams, $SD = 18.34$; $F(1, 49) = .02$, $p = .88$).

We make several theoretical contributions. We extend the prominent literature on retail atmospherics, which has mostly focused on the effects of subtle cues, such as temperature, color, lighting, or sound. Human crowding, on the other hand, is an omnipresent

factor, but has received relatively little attention. We also show how crowding-induced distractions affect consumption decisions.

Our findings also have practical implications. Obesity is a major problem in most industrialized societies with significant associated medical expenses. Increases in consumption is one of the main drivers of obesity (Chandon and Wansink 2007). Increasing the space of restaurants or food courts could reduce consumers' perceived crowding, which in turn might decrease the risk of overeating. Additionally, as we find, merely evoking a crowded mindset can influence consumption. Therefore, from a public policy standpoint, it may be useful to ask consumers to "empty" their minds before ordering from a menu. Perhaps evoking a more cognitive frame of mind might help lower calorie consumption. Our findings are especially important given that the world's population reached a staggering seven billion in 2007, and is steadily on the rise (United States Census Bureau). Global urbanization will unavoidably increase crowding in public consumption settings. Thus, a better understanding of how crowding impacts food consumption decisions may provide one avenue for a healthier lifestyle.

Social Crowding versus Spatial Crowding: Differential Influences on Customers' Preference for Anthropomorphized Self-Service Technologies

EXTENDED ABSTRACT

Crowding is a ubiquitous phenomenon in many services industries with major negative consumption consequences (Eroglu, Machleit, and Barr 2005; Harrell, Hutt, and Anderson 1980; Hui and Bateson 1991). To cope with some of the problems, such as long waiting line, arising from crowding, self-service technologies (SSTs) are increasingly adopted by firms because they are supposed to help firms improve service productivity and help customers reduce the inconvenience and waiting time caused by crowding (e.g., Dabholkar, Bobbitt, and Lee 2003; Gelderman, Paul, and Diemen 2011; Wang, Harris, and Patterson 2012; Weijters et al. 2007). To encourage more customers, particularly those who prefer to interact with service employees, to use SSTs, service organizations start to imbue anthropomorphic features in the design of SSTs. Both anecdotal and academic evidences suggest that anthropomorphism design makes brands or products more likeable and enjoyable (Aggarwal and McGill 2007; Delbaere, McQuarrie, and Phillips 2011). However, existing research has yet directly examined whether anthropomorphizing SSTs, particularly in a crowded environment, is effective.

We argue that the impact of anthropomorphic design in SSTs on consumer response in a crowded situation depends on consumers' attributions of the crowding. Crowding by definition is a bi-dimensional construct with its attribution to either social or spatial causes (Baum and Koman 1976; Baum and Valins 1979). Social crowding refers to the case when the crowding is mainly attributed to the large number of people whereas spatial crowding is mainly attributed to the inadequacy of physical space. We predict that customers are less likely to prefer anthropomorphized SSTs when they attribute the crowded environment to social reasons rather than spatial reasons due to a social withdrawal tendency. We test the hypotheses with one pilot study and four experimental studies using both student and nonstudent samples from Hong Kong and the United States.

The pilot study provides preliminarily support to our prediction that crowding attribution \times anthropomorphism interaction was significant ($F(1,193) = 3.10, p < .05$) on social withdrawal. Specifically, participants in the social crowding condition experience more social withdrawal when the SST was high (vs. low) ($M_{\text{high anthropomorphism}} = 6.50, M_{\text{low anthropomorphism}} = 5.36; t(1, 193) = 1.98, p < .05$) in anthro-

pomorphism. Furthermore, in the high anthropomorphism condition, participants in the social crowding condition ($M_{\text{social crowding}} = 6.50$) reported a higher social withdrawal than those in the spatial ($M_{\text{spatial crowding}} = 5.46; t(1,193) = 1.79, p = .08$) and low crowding conditions ($M_{\text{low crowding}} = 5.05; t(1,193) = 2.61, p < .01$).

Study 1 examines the interaction effect of crowding attribution and SSTs anthropomorphism on customers' behavioral intentions to use the machines ($F(1, 214) = 18.44; p < .001$). We show that when customers attribute the crowding environment at the canteen to social reasons, their intentions to use the anthropomorphized (vs. non-anthropomorphized) self-ordering machine were lower ($M_{\text{high anthropomorphism}} = 5.96; M_{\text{low anthropomorphism}} = 6.77; t(1,214) = 1.70, p = .09$). When customers attribute the crowding to spatial reasons, they actually indicate higher intentions to use the anthropomorphized (vs. non-anthropomorphized) machine ($M_{\text{high anthropomorphism}} = 7.31; M_{\text{low anthropomorphism}} = 6.47; t(1,214) = 1.76, p = .08$). In the low crowding condition, intentions do not differ across the anthropomorphism conditions. Furthermore, in the high anthropomorphism condition, participants in the social crowding condition ($M_{\text{social crowding}} = 5.96$) report lower (higher) intentions to use the machine when they were in the spatial (low) crowding condition ($M_{\text{spatial crowding}} = 7.31, t(1,214) = 2.82, p < .01; M_{\text{low crowding}} = 4.62, t(1,214) = 2.86, p < .01$). In the low crowding condition, there is no significant difference between the social and spatial crowding conditions but intentions in these two conditions are higher than that in the low crowding condition.

Study 2 extends Study 1 by examining the interaction effect of crowding attribution and SSTs anthropomorphism on customers' attitudinal response ($F(1,140) = 3.90, p = .05$). Again, Study 2 shows that anthropomorphizing the SST backfires if the crowding environment is attributed to social reasons ($M_{\text{high anthropomorphism}} = 6.02; M_{\text{low anthropomorphism}} = 6.73; t(1, 140) = 1.826, p = .07$), but this does not matter when the crowding environment is attributed to spatial reasons. Furthermore, in the high anthropomorphism condition, participants showed less favorable attitudes toward the machine when the crowding environment was attributed to social rather than spatial reasons ($M_{\text{social crowding}} = 6.02; M_{\text{spatial crowding}} = 6.67; t(1, 140) = 1.72, p = .09$). In the low anthropomorphism condition, however, attitudes did not differ between the social and spatial crowding conditions.

Study 3 extends the interaction effect to customers' choices between ATM and bank tellers ($F(1,145) = 3.87, p = .05$) as well as perceived service quality of the bank ($F(1,145) = 6.17, p < .05$). Simple contrast results are consistent with Study 2. Furthermore, by ascertaining the mediated moderation process, we confirm that the interaction effects of crowding attribution and anthropomorphism on customers' choice of ATM over bank tellers (index = .20; CI: .01 to .43) and perceived service quality (index = -.07, CI: -.23 to -.00) are accounted by their social withdrawal tendency.

Study 4 is a field experiment in collaborating with a student canteen with natural customer density and real anthropomorphism design of self-ordering machines and we measure customers' real choice of machines ($F(1, 66) = 5.17, p < .05$). With the actual transactional data from the canteen, we confirm that anthropomorphism design reduces customers' adoption of machines during the rush hours (social crowding) ($M_{\text{high anthropomorphism}} = .28; M_{\text{low anthropomorphism}} = .34; t(1, 66) = 4.73, p < .001$). However, whether the machines are anthropomorphized or not does not matter during non-rush hours (low crowding).

Contrary to the prevailing beliefs on the beneficial effects of adopting SSTs, this research shows that customers in a crowded environment do not always prefer SSTs over human staffs and anthropomorphizing SSTs can backfire especially in a social crowding environment. The findings provide significant implications on

crowding management, and the employment and anthropomorphism design of SSTs for service managers.

REFERENCES

- Aggarwal, Pankaj and Ann L. McGill (2007), "Is This Car Smiling at Me? Schema Congruity as Basis for Evaluating Anthropomorphized Products," *Journal of Consumer Research*, 34 (December), 468–79.
- Baum, Andrew and Stuart Koman (1976), "Differential Response to Anticipated Crowding: Psychological Effects of Social and Spatial Density," *Journal of Personality and Social Psychology*, 34(3), 526–36.
- _____ and Stuart Valins (1979), "Architectural Mediation of Residential Density and Control: Crowding and the Regulation of Social Contact," *Advances in Experimental Social Psychology*, 12, 131–75.
- Chandon, Pierre and Brian Wansink (2007), "The Biasing Health Halos of Fast Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions," *Journal of Consumer Research*, 34 (3), 301–14.
- Dabholkar, Pratibha A., L. Michelle Bobbitt, and Eun-Ju Lee (2003), "Understanding Consumer Motivation and Behavior Related to Self-Scanning in Retailing: Implications for Strategy and Research on Technology-Based Self-Service," *International Journal of Service Industry Management*, 14(1), 59–95.
- Delbaere, Marjorie, Edward F. McQuarrie, and Barbara J. Phillips (2011), "Personification in Advertising," *Journal of Advertising*, 40(1), 121–30.
- Epstein, Yakov M. (1981), "Crowding Stress and Human Behavior," *Journal of Social Issues*, 37(1), 126–44.
- Eroglu, Sevgin A., Karen Machleit, and Terri Feldman Barr (2005), "Perceived Retail Crowding and Shopping Satisfaction: The Role of Shopping Values," *Journal of Business Research*, 58 (August), 1146–53.
- Fantz, Robert L. (1963), "Pattern Vision in Newborn Infants," *Science*, 140 (3564), 296–97.
- Friedman, Ronald S., and Jens Förster (2001), "The effects of promotion and prevention cues on creativity," *Journal of Personality and Social Psychology*, 81(6), 1001–13.
- Gelderman, Cees J., Paul W.Th. Ghijsen, and Ronnie van Diemen (2011), "Choosing Self-Service Technologies or Interpersonal Services—The Impact of Situational Factors and Technology-Related Attitudes," *Journal of Retailing and Consumer Services*, 18(5), 414–21.
- Harrell, Gilbert D., Michael D. Hutt, and James C. Anderson (1980), "Path Analysis of Buyer Behavior under Conditions of Crowding," *Journal of Marketing Research*, 17(1), 45–51.
- Hui, Michael K. and John E. Bateson (1991), "Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience," *Journal of Consumer Research*, 18 (September), 174–84.
- Kardes, Frank R., Steven S. Posavac and Maria L. Cronley (2004), "Consumer Inference: A Review of Processes, Bases, and Judgment Contexts," *Journal of Consumer Psychology*, 14(3), 230–56.
- Levav, Jonathan and Rui J. Zhu (2009), "Seeking Freedom through Variety," *Journal of Consumer Research*, 36(4), 600–10.
- Machleit, Karen A., Sevgin A. Eroglu, and Susan Powell Mantel (2000), "Perceived Retail Crowding and Shopping Satisfaction: What Modifies This Relationship?" *Journal of Consumer Psychology*, 9(1), 29–42.
- Maeng, Ahreum, Robin J. Tanner, and Dilip Soman (2013), "Conservative When Crowded: Social Crowding and Consumer Choice," *Journal of Marketing Research*, 50 (December), 739–52.
- _____ and Robin J. Tanner (2013), "Construing in a Crowd: The Effects of Social Crowding on Mental Construal," *Journal of Experimental Social Psychology*, 49(6), 1084–88.
- Mednick, Sarnoff (1962), "The Associative Basis of the Creative Process," *Psychological Review*, 69(3), 220–32.
- O'Guinn, Thomas Clayton, Robin J. Tanner, and Ahreum Maeng (2015), "Turning to Space: Social Density, Social Class, and the Value of Things in Stores," *Journal of Consumer Research*, 42 (August), 196–213.
- Schooler, Jonathan W., Stellan Ohlsson, and Kevin Brooks (1993), "Thoughts Beyond Words: When Language Overshadows Insight," *Journal of Experimental Psychology: General*, 122(2), 166–83.
- Tajfel, Henri, Michael G. Billig, Robert P. Bundy, and Claude Flament (1971), "Social Categorization and Intergroup Behaviour," *European Journal of Social Psychology*, 1(2), 149–78.
- United States Census Bureau (2014), "U.S. and World Population Clock," (accessed January 8, 2017), [available at <http://www.census.gov/popclock/>].
- Wang, Cheng, Jennifer Harris, and Paul G. Patterson (2012), "Customer Choice of Self-Service Technology: The Roles of Situational Influences and Past Experience," *Journal of Service Management*, 23(1), 54–78.
- Weijters, Bert, Devarajan Rangarajan, Tomas Falk, and Niels Schillewaert (2007), "Determinants and Outcomes of Customers' Use of Self-Service Technology in a Retail Setting," *Journal of Service Research*, 10(1), 3–21.
- Zuckerman, Marvin, Sybil B. Eysenck, and Hans J. Eysenck (1978), "Sensation Seeking in England and America: Cross-Cultural, Age, and Sex Comparisons." *Journal of Consulting and Clinical Psychology*, 46(1), 139.

Illusions of Diagnosticity

Chair: Aner Sela, University of Florida, USA

Paper #1: Seeing the Self in Choices: How Intuition Creates Attitude Certainty

Sam Maglio, University of Toronto, Canada
Taly Reich, Yale University, USA

Paper #2: How Self-Control Shapes Inferences from Choice

Aner Sela, University of Florida, USA
Jonah Berger, University of Pennsylvania, USA
Joshua Kim, University of Florida, USA

Paper #3: Not All Bad Apples Spoil the Bunch: Order Effects on the Evaluation of Groups

Janina Steinmetz, Utrecht University, The Netherlands
Maferima Toure-Tillery, Northwestern University, USA
Ayelet Fishbach, University of Chicago, USA

Paper #4: What Two Wrongs Make Alright: Examining the Psychological Factors Underlying the Tendency to Temper Judgments of Intoxicated People

Kelly Goldsmith, Northwestern University, USA
Hal E. Hershfield, UCLA, USA
Chelsea Galoni, Northwestern University, USA

SESSION OVERVIEW

When forming impressions or drawing inferences about people and objects, individuals assign greater weight to information seen as diagnostic while ignoring or discounting less diagnostic information. Indeed, diagnosticity, or the extent to which information is seen as indicative of a certain trait or state, is a key construct in theories of judgment, decision-making, and impression-formation (Schwarz et al. 1991; Trope and Liberman 1996).

But while it is clear that perceived diagnosticity plays an important role, less is known about what *determines* whether a cue is seen as diagnostic in a particular context. What cognitive, affective, and motivational factors determine the extent to which choice, for example, is seen as indicative of individual preference? What situational cues determine whether exemplars are perceived as diagnostic of group traits? And might two consistent behaviors sometimes be seen as less diagnostic of individual traits than each behavior in isolation? The current session provides novel insights into these and related questions as it examines the elusive nature of diagnosticity perceptions.

The first two papers examine conditions under which choice is seen as more vs. less diagnostic of individual preferences. **Maglio and Reich** show that whether people believe their decisions are based on affect vs. cognitive deliberation influences the extent to which they perceive those decisions as reflective of their true self. Decisions based on affect are seen as more diagnostic of the true self, which in turn increases decision certainty and makes those decisions more resilient to change.

Sela, Berger, and Kim show that self-control leads people to see their choices as less diagnostic of their true individual preferences. Further, self-control salience undermines the perceived choice-preference link more generally, which may decrease the tendency to view choice as indicative of preference even in unrelated downstream contexts.

The second two papers examine factors that impact perceived diagnosticity more generally, beyond the context of one's choices. **Steinmetz, Touré-Tillery, and Fishbach** find that diagnosticity may depend on an item's arbitrary location within a sequence: compared

with other items (e.g., middle, last, or random), people perceive the first item as more diagnostic of the entire group. As a result, they over-weigh the traits or the performance of the first item when making inferences, predictions, and decisions about the group.

Lastly, **Goldsmith, Hershfield, and Galoni** examine conditions under which two consistent unethical behaviors are, counterintuitively, seen as *less* diagnostic of individual traits than each unethical behavior in isolation. This, in turn, attenuates negative judgments. Thus, two wrongs can be more permissible than one. The findings have important implications for understanding how certain behaviors, such as sexual violence, may be excused in part due to observers' tendency to rely on the perpetrator's intoxication – another unethical behavior – as a discounting cue.

Taken together, these papers provide novel and potentially provocative insights into when and why certain cues are seen as (non)diagnostic. The session would interest scholars who study attribution, impression-formation, choice, and judgment and decision-making more broadly.

Seeing the Self in Choices: How Intuition Creates Attitude Certainty

EXTENDED ABSTRACT

Feeling-based choice – by which people consult their intuitive, gut feelings in processing information in order to make a decision – has witnessed a surge in empirical attention and prescriptive benefits. Evidence continues to mount in favor of feeling-based approaches in the interest of helping consumers arrive at better choices (Mikels, Maglio, Reed, & Kaplowitz, 2011; Pham, Lee, & Stephen, 2012; Slovic, Finucane, Peters, & MacGregor, 2007) Donald G. </Author><Year>2007</Year><Prefix></Prefix><Suffix></Suffix><Pages></Pages><DisplayText>(Mikels, Maglio, Reed, & Kaplowitz, 2011; Pham, Lee, & Stephen, 2012; Slovic, Finucane, Peters, & MacGregor, 2007. The present investigation draws a pointed line from such prior work, proposing that choices made with feelings seem more diagnostic of who one really is, bearing relevance for attitude certainty.

Affective reactions tend to be, among other things, (1) primary, (2) basic, and (3) characteristic of the self. To illustrate:

“Once a cognitive judgment has been made – for example, that at the forthcoming social hour there will be more scotches drunk than bourbons – one can still be persuaded that it may turn out otherwise ... But we are never wrong about what we like or dislike ... It would be much harder to persuade us that we really like scotch better than bourbon, given that we feel otherwise.” (Zajonc, 1980, p. 157)

Divergent from what one thinks, how one feels (e.g., in making a choice) reflects an automatic, innate property of oneself. In other words, affect-based judgments may reveal what recent investigations have termed the true self (Newman, Bloom, & Knobe, 2014; Schlegel, Hicks, Davis, Hirsch, & Smith, 2013). Still, the relationship between feeling-based choice, diagnosticity of consumers' true self, and strong attitudes remains unexamined.

Our account (1) predicts and finds that the use of feelings in choice fosters attitude certainty, (2) offers an account relating feelings to certainty by way of signaling the decision maker's true self, and (3) documents a robust application of feeling-derived certainty to decision making (resilience in the face of negative feedback).

In an initial consideration of the role of feeling-focused choice in attitudes, Study 1 examined whether consumers would prove less

prone to defer choice upon choosing via feelings (versus deliberation). Participants evaluated four (non-alignable) attributes defining two DVD players using either their “deliberative, rational analysis” or their “intuitive, gut feeling” and then selected the one that they preferred before indicating whether they would, in that situation, make that purchase or defer it to a later date. When participants relied on feelings to guide their choice, 90% opted to purchase; when they relied on deliberation, 73% opted to purchase, $\chi^2(1, N = 80) = 4.02, p = .045$. This suggests that feeling-based choice makes people more likely to take action in a manner reflective of holding a strong attitude toward their preferred product relative to their deliberating counterparts.

Study 2 was designed to target both a more direct measure of attitude strength as well as the mechanism by which a focus on feelings might bolster them. Participants evaluated four (non-alignable) attributes defining three smartphones using either their “deliberative, rational analysis” or their “intuitive, gut feeling” and then chose the one that they preferred. Subsequently, to assess whether the choice was diagnostic of their true self, participants reported the extent to which they thought that their chosen smartphone reflected their true self; to assess attitude certainty, participations reported how certain they felt with regard to their choice. Participants who had chosen based on feelings both felt more certain regarding their choice, $F(1, 108) = 8.35, p = .005$, and appraised their chosen smartphone as more evidential of their true self, $F(1, 108) = 4.36, p = .039$, with the latter statistically accounting for the former $\beta = .49$ (95% CI: .05; 1.07).

Having documented a relationship between feeling-focused choice and strong attitudes, as well as pinpointing the diagnosticity of the true self in accounting for this relationship, our next two studies consider how such feeling-derived attitudes might prove resilient when confronted with negative feedback.

In Study 3, participants evaluated four (non-alignable) attributes defining three digital cameras using, as before, deliberation or gut feelings before choosing the one that they preferred. Next, participants were randomly assigned to a feedback condition, asked to envision buying the chosen camera and then seeing a consumer report on it the following day. The positive feedback condition presented a favorable review of the chosen camera; the negative feedback condition presented an unfavorable review. Thereafter, participants reported how much regret they would feel in this scenario. A significant interaction, $F(1, 124) = 6.146, p = .015$, indicated that, when receiving positive feedback, both deliberative and feeling-focused decision-makers feel very little regret, $F < 1$. But, when receiving negative feedback, feeling-focused decision makers felt less regret than their deliberating counterparts, $p < .001$.

Study 4 precludes the alternative account that choosing on the basis of feelings simply elevates mood in the first place, providing a buffer against negative feedback. Accordingly, participants were randomly assigned to evaluate the same set of smartphones from Study 2 on the basis of either deliberation or their gut feelings, then chose the one that they preferred. To assess their feeling state immediately following the making of their choice, participants indicated how they felt (ranging from very bad to very good). Thereafter, they were randomly assigned to a condition in which they received either positive or negative feedback (in a manner identical to Study 3), then again rated their feelings on the same scale as the initial assessment. Prior to receiving the feedback, all participants reported a similarly positive mood, $F < 1$; after receiving the feedback, the patterns of mood ratings diverged. For those who received positive feedback, choosing on the basis of deliberation or feelings witnessed a nearly identical boost in response to the good news, $p = .65$. Upon receiving negative feedback, though, those who had chosen on the basis

of deliberation felt worse than those who had chosen on the basis of feelings, $p = .023$. Thus, there is nothing inherently positive in choosing based on feelings; instead, feeling-focused choice generates a strongly favorable and resilient attitude that is capable of withstanding external rebuke.

How Self-Control Shapes Inferences from Choice

EXTENDED ABSTRACT

Self-control is an important driver of consumer behavior, helping people regulate their choices, attain their goals, and control their emotions. But while it influences choice, could self-control also change choice’s meaning, making it seem less diagnostic of preference?

Decades of research have shown that preference and choice are often intertwined. Choice is often seen as originating from one’s preferences, goals, and values (Markus and Kitayama 2003). In turn, choice is typically seen as an indication of those same inner states, leading people to infer their preferences and valuations by observing their own choice experiences (Bem 1972; Chaiken and Baldwin 1981; Festinger 1957). Picking a Toyota over a Honda, for example, may lead people to infer they like Toyota, and thus increase subsequent evaluation of the brand.

In contrast, we suggest that when the concept of high self-control is salient, people are less likely to draw inferences about their preferences from their choices. We suggest this possibility based on work suggesting that self-control may override, interrupt, and otherwise alter the link between preference and choice (Baumeister, Vohs, and Tice 2007; Muraven, Tice, and Baumeister 1998). Self-control is defined as “restraint exercised over one’s own impulses, emotions, or desires” (Merriam-Webster.com). Self-control can be used to override personal desires in favor of external constraint (e.g., norms or others’ preferences) or override impulses to pursue long-term personal goals (e.g., delay gratification). In both cases, rather than going with their first instinct, consumers exert inhibitory control to do something else.

We argue that this inhibitory control has important implications for the perceived relationship between choice and preference more generally. Specifically, it weakens the notion that choice is driven by preferences, which once activated, may spillover to affect inferences even in unrelated domains. Five experiments test this possibility, examining whether making self-control salient decreases people’s tendency to see their choices as diagnostic of their preferences

In Experiment 1, participants saw five mainstream sedans and chose their preferred option. Then, we manipulated self-control salience using a sentence unscrambling task containing either high self-control words (e.g., discipline, willpower) or low self-control words (e.g., impulse, spontaneous). In this, and all subsequent studies, the self-control manipulation had no effect on which item participants preferred. Finally, we measured the dependent variable: participants’ perception that their car choice reflected their personal preferences and taste.

As predicted, making self-control salient reduced participants’ belief that the car they chose reflected their preferences.

Experiment 2 uses a different operationalization of self-control salience and examines the downstream consequences for brand attitudes. After selecting their preferred car among the same five options used in Experiment 1, participants made unrelated choices, either: (a) self-control dilemmas (e.g., rich vs. lean entrée), (b) choice unrelated to self-control (e.g., apple vs. pear), or (c) neither (the two latter conditions both served as control groups). Finally, we measured how

much participants felt their car choice reflected their preferences, as well as their attitudes toward the brand more generally.

As predicted, making self-control salient through choice dilemmas reduced participants' perception that their chosen car was diagnostic of their preferences, compared with the two control conditions ($F(2,155)=7.34, p<.001$). This carried over to influence brand attitudes ($-.35, [-.67, -.13]$).

Experiment 3 and 4 test the underlying process. If our theory is correct, these effects should be most pronounced among people who generally associate self-control with preference suppression (i.e., going against the self). Experiment 3 tests this possibility. First, participants chose one of several paintings. Second, we manipulated self-control salience by asking participants to describe a past experience where they used self-control vs. chose impulsively. Third, we measured the extent to which participants felt their chosen painting reflected their personal preferences and taste in art. Finally, we measured our moderator, the extent to which participants believed they used self-control primarily to resist their desires (i.e., going against the self) or to resist external persuasion and stick to their true goals (i.e., going with the self). This measure of individual lay-beliefs was unaffected by condition.

In addition to a main-effect of self-control condition ($B=-.42, SE=.18, p<.02$), results revealed the predicted interaction ($B=-.26, SE=.10, p=.01$): among participants who believed self-control meant suppressing desires, recalling self-control made the chosen painting seem less diagnostic of preference ($B=-.83, SE=.24, p<.001$). Among participants who believed self-control meant sticking to one's goals, the effect disappeared ($B=-.007, SE=.23, p=.97$).

Experiment 4 tests the mediating role of choice-preference correspondence perceptions. Participants completed the artwork choice, self-control salience manipulation, and preference measures from Experiment 3. Finally, participants rated the extent to which their choice in the priming task reflected their preference at that time.

Results indicate that making self-control salient through a self-control recall task decreased perceptions that the chosen painting reflected personal preferences ($F(1,188)=4.84, p<.029$). This effect was mediated by the extent to which the decision recalled in the self-control priming task seemed diagnostic of preference ($-.30, 95\% CI [-.55, -.10]$). Recalling self-control in one domain evoked the notion that choice in that particular situation was less reflective of preferences, which in turn decreased the extent to which the chosen painting was seen as reflecting one's preferences.

Experiment 5 extends the findings to the classic "free choice" spread-of-alternatives effect. Following a standard free-choice paradigm, participants ranked ten songs from most to least preferred. Then, they completed the self-control priming manipulation from Experiment 1. Participants in the free-choice condition subsequently chose between their fifth and sixth ranked songs. Participants in the no-choice condition were given their fifth ranked song. Finally, all participants re-ranked the same ten songs they ranked initially.

As predicted, post-choice rank difference between the chosen/received option and the non-chosen option was larger in the choice compared to the no-choice condition, but only under low self-control ($F(1,268)=9.08, p=.003$). Under high self-control, free choice had no effect on spread-of-alternatives ($F(1,268)=44, p=.51$).

Self-control is an important driver of choice, but these findings suggest it also undermines the perceived choice-preference link, making choice seem less diagnostic of one's preferences. These findings further understanding of inference-making, self-control, and the meaning of choice.

Not All Bad Apples Spoil the Bunch: Order Effects on the Evaluation of Groups

EXTENDED ABSTRACT

Imagine waiting in line at a store with five numbered cash registers. When your turn comes, an automated system instructs you to go to "cashier number one, please." You have a terrible experience checking out: the cashier is slow and accidentally charges you twice for the same item. How would cashier number one's negative performance influence your expectations of the other cashiers and of the store in general?

People often make judgments about an unknown group based on information about one member of the group. Smith and Zarate's (1992) exemplar-based model of social judgment posits that representations of specific individuals (exemplars) influence judgments about others from the same group. In particular, similarity along a salient dimension (e.g., race, gender) often determines the extent to which people see an individual as diagnostic of the group. When an exemplar seems particularly diagnostic, people will use their knowledge about her to make inferences about other group members. For example, one might infer that people from a distant country are kind and welcoming based on a conversation with a particularly friendly visitor from that country. Thus, the diagnosticity of a group member can stem from her similarity to other members. The present research explores another, much less studied factor that influences perceptions of social diagnosticity: position in a sequence.

Research on self-diagnosticity shows the position of an action in a sequence influences the extent to which people consider this action diagnostic for inferences about the performer (Touré-Tillery and Fishbach 2012; 2015). We explore whether there are similar order-effects in the perceived diagnosticity of group members, such that the position of a member in a random sequence of members influences how diagnostic she seems. We propose that, due to learned associations between "first" and concepts such as "leader," "best," and "important," people will expect the first group member in a sequence to be the most diagnostic of the group.

Five studies tested this hypothesis. Notably, in all studies, we told participants that sequences were randomly generated, so they would not infer that the first is the best or the leader or the most important (Carney and Banaji 2012). Furthermore, all studies gave participants information about one group member only, and asked them to make inferences about the others. This paradigm allowed us to rule out primacy and recency memory-effects and prevent effects due comparisons among group members (Page and Page 2009).

In Study 1, participants read that the first (vs. middle vs. last) runner of a relay race performed well or poorly depending on the condition, and predicted how well the rest of the team performed. We found participants expected the rest of the team to have performed better when the first (vs. middle/last) performed well, whereas they expected the rest of the team to have performed worse when the first (vs. middle/last) performed poorly. Thus, information about the first (vs. middle/last) runner influenced predictions more, suggesting that the first runner was deemed more diagnostic.

In the next two studies, participant read that the first (vs. middle vs. last) contestant of a cooking competition performed poorly—as a member of a group of five guys collaborating to compete against other teams (Study 2), or competing against each other (Study 3). Participants then indicated how well they expected the other contestants to have performed. Results show participants predicted the other contestants to be worse after reading about the first (vs. middle/last) contestant's lackluster performance. These results indicate that the first (vs. middle/last) contestant was perceived as more diagnos-

tic of the rest of the group, regardless of whether other contestants would lose (Study 2) or gain (Study 3) from his poor performance. Although we made it clear that all sequences were random, in Studies 1, 2 and 3, people might have assumed the other group members could observe one another's performances. Thus, the first (vs. middle/last) member of the sequence would have more influence on the rest of the group, which might account for the observed assimilation to the first member.

We designed Studies 4 and 5 to rule out this alternative explanation. Participants read about a group of five students whose answers to a multiple-choice test were graded in random order by a computer. Using this paradigm, we eliminated the possibility that grading the first group member influenced the grader's perception of the next group member, since people view machines as unsusceptible to such biases. Participants also learned that the first (vs. middle vs. last) student received an unimpressive grade, and indicated their predictions for the other students' performances. In both studies, we replicated the first-as-more-diagnostic effect. In Study 4, participant expected the other students to have received worse grades when the first (vs. middle/last) student performed poorly. In Study 5, in addition to judgments about the other group members, we also assessed behavioral intentions toward the group. Specifically, we asked participants if they would be willing to bet on the group's future performance in an academic competition. We found that when the first (vs. middle/last) student performed poorly, participants not only expected other members of the group to do worse, but also were less willing to bet on the group's future success. Furthermore, expectations about group member's performances fully mediated the relationship between the focal group member's position in the sequence and participants' willingness to bet on the group.

Taken together, these studies show the important role of random position in a sequence in judgments and behaviors related to groups. These findings have important implications for social judgments, including stereotyping and discrimination, judgment of service personnel and the brands they represent. Although we explored our hypotheses in the social context, we expect our findings to extend to evaluations of numbered objects or products presented in bundles or groups (e.g., numbered combo meals at fast food restaurants). Thus, when assigning numbers to groups of employees or product, companies might benefit from assigning the number one to the highest-performing employee or the highest-quality product.

What Two Wrongs Make Alright: Examining the Psychological Factors Underlying the Tendency to Temper Judgments of Intoxicated People

EXTENDED ABSTRACT

The belief that certain crimes are more likely to be committed when one is intoxicated has been supported by academic research and the popular media. However, the direct role that intoxication plays in the personal costs (i.e., criminal sentencing and social judgment) inherent to deviant behavior has yet to become a central part of the conversation. The current research sheds light on this by offering a theoretical framework to predict conditions under which observers' tendency to view an actor's behavior as diagnostic of his disposition will be attenuated if the actor is described as intoxicated (vs. sober). Specifically, we posit that when the behavior is psychologically distant, intoxication will reduce dispositional attributions, which will consequently temper how the actor is judged. We base this prediction on prior work revealing that psychological distance broadens observers' scope of consideration (Liberman & Trope, 1998), which

should allow intoxication to be incorporated as a discounting cue for dispositional attributions.

We present data that supports this perspective drawn from over ten controlled experiments in addition to actual criminal sentencing trials involving over 1,500 inmates. For example, in one experiment, participants were asked to evaluate a hypothetical, psychologically distant other who committed a deviant behavior (i.e., gambling and losing money) while either intoxicated or sober. We then examined observers' tendency to make dispositional attributions about the actor based on his actions in addition to their tendency to negatively judge the actor. Results revealed that when the actor was described as intoxicated observers were less likely to make dispositional attributions based on his behavior, as compared to when he was described as sober ($p < .001$). In addition, participants' judgments of the actor more tempered (i.e., less negative) if he was described as intoxicated ($p < .001$). The effect of intoxication on negative judgments was mediated by a shift in dispositional attributions.

Another experiment replicated and extended these results by manipulating if the actor was intoxicated (vs. sober) and if the behavior that was committed was deviant (vs. socially acceptable). We then measured dispositional attributions and judgments. We observed convergent results for both deviant and socially acceptable behaviors: when the actor was intoxicated his behavior was seen as less diagnostic as compared to when he was sober ($ps < .05$). Further, when the actor was intoxicated, participants judged his behavior less in a more tempered fashion (i.e., less negatively in the deviant behavior condition and less positively in the social acceptable behavior condition) as compared to when he was sober ($ps < .01$). In both conditions, shift in dispositional attributions mediated the relationship between intoxication and judgment.

In subsequent experiments, we assessed if the observed effects would be altered under conditions of psychological proximity. For example, in one experiment we assessed how intoxication affected dispositional attributions and negative judgments of the self following a deviant behavior. In line with our theorizing, when the focal actor was psychologically proximal (i.e., the self) intoxication had no effect on dispositional attributions ($F < 1$). However, participants still judged themselves less harshly for their behavior if intoxicated (vs. sober; $p = .005$). Thus, the previously observed effects of intoxication on judgments of a hypothetical other were replicated for judgments of the self. However, a shift in dispositional attributions did not mediate the relationship between intoxication and negative judgment.

If observers are more likely to incorporate intoxication as a discounting cue for dispositional attributions when the action is more psychologically distant, as we have suggested, factors that promote psychological distance (e.g., the activation of an abstract level of construal, Trope & Liberman, 2010) should accentuate this effect. We tested for this by randomly assigning participants in a 2 (construal level: abstract vs. concrete) by 2 (intoxicated vs. sober) between-participants design. Construal level was manipulated using a temporal focus manipulation (Wakslak, Trope & Liberman, 2006). All participants then read one of the two vignettes about the self-committing a deviant behavior while either intoxicated or sober.

In line with our prior results, under conditions of psychological proximity (i.e., a concrete construal), the intoxication did not affect dispositional attributions for the self ($F < 1$). However, participants judged themselves less harshly for their deviant behavior if intoxicated (vs. sober; $p = .010$). Importantly, however, a shift in dispositional attributions did not mediate the relationship between intoxication and negative judgment.

Under conditions of psychological distance, however, this pattern of results shifted. Here, we observed that when the self was

described as intoxicated the behavior was seen as significantly less diagnostic of the self, as compared to when the self was described as sober ($p < .001$). In addition, when the self was intoxicated, participants judged themselves less harshly for their behavior as compared to when the self was sober ($p < .001$). Finally, a shift in dispositional attributions mediated the relationship between intoxication and negative judgment. Thus, consistent with our predictions, when evaluations were made to feel more psychologically distant (i.e., through the adoption of an abstract level of construal), intoxication was incorporated as a discounting cue for dispositional attributions, and a shift in dispositional attributions explained why intoxication attenuated negative judgments. A test for moderated mediation also supported the notion that a shift in dispositional attributions mediates the relationship between intoxication and judgment among those who construed the behavior as more psychologically distant, and not those who construed the behavior as more psychologically proximal.

The current research provides novel evidence for the role of psychological distance in attribution processes. In doing so, this research provides an important step toward better understanding the factors that inform the costs inherent to committing deviant behaviors, and offers implications for the understanding of attribution theory, self-signaling theory, construal level theory and beyond. In addition, these findings have practical implications for policy makers and others seeking to curtail the incidence of deviant behaviors linked to alcohol consumption.

REFERENCES

- Baumeister, Roy F., Kathleen D. Vohs, and Dianne M. Tice (2007), "The strength model of self-control," *Current Directions in Psychological Science*, 16 (6), 351-5.
- Bem, Daryl J. (1972), "Self-perception theory," *Advances in Experimental Social Psychology*, 6, 1-62.
- Carney, Dana R. and Mahzarin R. Banaji (2012) "First Is Best," *PLoS ONE* 7(6): e35088.
- Chaiken, Shelly and Mark W. Baldwin (1981), "Affective-cognitive consistency and the effect of salient behavioral information on the self-perception of attitudes," *Journal of Personality and Social Psychology*, 41 (1), 1-12.
- Festinger, Leon (1957), *A theory of cognitive dissonance*, Evanston, IL: Row, Peterson.
- Liberman, N., & Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology*, 75(1), 5-18.
- Markus, Hazel R. and Shinobu Kitayama (2003), "Culture, self, and the reality of the social," *Psychological Inquiry*, 14 (3-4), 277-83.
- Mikels, J. A., Maglio, S. J., Reed, A. E., & Kaplowitz, L. J. (2011). Should I go with my gut? Investigating the benefits of emotion-focused decision making. *Emotion*, 11, 743-753.
- Muraven, Mark, Dianne M. Tice, and Roy F. Baumeister (1998), "Self-control as a limited resource: Regulatory depletion patterns," *Journal of Personality and Social Psychology*, 74 (3), 774-89.
- Newman, G. E., Bloom, P., & Knobe, J. (2014). Value judgments and the true self. *Personality and Social Psychology Bulletin*, 40, 203-216.
- Page, Lionel and Katie Page (2009), "Last shall be first: A field study of biases in sequential performance evaluation on the Idol series," *Journal of Economic Behavior and Organization*, 73 (2), 186-213.
- Pham, M. T., Lee, L., & Stephen, A. T. (2012). Feeling the future: The emotional oracle effect. *Journal of Consumer Research*, 39, 461-477.
- Schlegel, R. J., Hicks, J. A., Davis, W. E., Hirsch, K. A., & Smith, C. M. (2013). The dynamic interplay between perceived true self-knowledge and decision satisfaction. *Journal of Personality and Social Psychology*, 104, 542-558.
- Schwarz, Norbert, Herbert Bless, Fritz Strack, Gisela Klumpp, Helga Rittenauer-Schatka, and Annette Simons. "Ease of retrieval as information: Another look at the availability heuristic." *Journal of Personality and Social Psychology* 61 (2), 195.
- Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2007). The affect heuristic. *European Journal of Operational Research*, 177, 1333-1352.
- Smith, Eliot R. and Michael A. Zarate (1992), "Exemplar-based model of social judgment," *Psychological Review*, 99, 3-21.
- Touré-Tillery, Maferima and Ayelet Fishbach (2012), "The end justifies the means, but only in the middle," *Journal of Experimental Psychology: General*, 141(3), 570-583.
- Touré-Tillery, Maferima and Ayelet Fishbach (2015), "It Was(n't) Me: Exercising Restraint When Choices Appear Self-Diagnostic," *Journal of Personality and Social Psychology*, 109 (6), 1117-1131.
- Trope, Yaacov, & Liberman, Akiva (1996). Social hypothesis testing: Cognitive and motivational mechanisms. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 239-270). New York: Guilford Press.
- Trope Y, & Liberman N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440-463.
- Wakslak, C. J., Trope, Y., & Liberman, N. (2006). Transcending the now: Time as a dimension of psychological distance. In J. Glicksohn & M. Myslobodsky (Eds.), *Timing the Future: A Case for Time-Cued Prospective Memory*. New Jersey-London-Singapore: World Scientific/Imperial College. 171-189.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35, 151-175.

How Past, Present, and Expected Future Resource Scarcity Shapes Decision Making for One's Present and Future Wellbeing

Chairs: Danit Ein-Gar, Tel-Aviv University, Israel
Caroline Roux, Concordia University, Canada

Paper #1: Early-life Scarcity, Life Expectancy, and Decision-Making

Chiraag Mittal, Texas A&M University, USA
Vladas Griskevicius, University of Minnesota, USA

Paper #2: The Food Scarcity Heuristic: People Overestimate the Caloric Content of Scarce Foods

Julio Sevilla, University of Georgia, USA
Anthony Salerno, University of Cincinnati, USA

Paper #3: Acting on Information: Reminders of Resource Scarcity Promote Adaptive Behavior and Flexible Thinking

Kelly Goldsmith, Northwestern University, USA
Caroline Roux, Concordia University, Canada
Anne Wilson, Harvard University, USA

Paper #4: I Don't Have Now, But I Will Make Sure I Have Later; Saving for the Future Under Resource Scarcity Mindset

Danit Ein-Gar, Tel-Aviv University, Israel
Liat Levontin, Israel Institute of Technology, Israel
Angela Y Lee, Northwestern University, USA

SESSION OVERVIEW

"I'd like to live as a poor man with lots of money." Pablo Picasso got it right. Only a poor man can truly value having lots of money, because only when one experiences a scarcity of resources does one feel the need to regain resources and appreciate having them.

This special session seeks to provide an overarching look at the impact of resource scarcity, whether experienced in the past, activated in one's mind in the present, or induced to be associated with one's future, on people's decision making and, consequently, their present and future well-being.

Resource scarcity is the extent to which an individual experiences a shortage of resources (Abrams 1992). Recent literature has drawn our attention to the profound effects that experiencing resource scarcity has on people's decisions and behaviors (e.g., Laran & Salerno 2013; Levontin, Ein-Gar, & Lee 2015; Roux, Goldsmith & Bonezzi 2015; Shah, Mullainathan, & Shafir 2012; Sharma & Alter 2012; Zhu & Ratner 2015). This special session aims to build on and extend this previous work by addressing the following overarching question: How does experiencing resource scarcity throughout one's life impact one's judgments and decision making? What are the short and long term effects of experiencing resource scarcity on consumer well-being? Four papers will attempt to answer these questions.

The first paper, by Mittal and Griskevicius, investigates the impact of resource scarcity experienced in the past. They find that experiencing scarcity during childhood prompts people to hold expectations of a shorter life span, which leads them to save less for retirement. The next two papers look at the immediate consequences of experiencing resource scarcity in the present. Specifically, the second paper by Sevilla and Salerno shows that, when individuals are made to believe that certain foods are scarce, they value that resource more, as evident by their overestimation of the food's caloric value. The third paper by Goldsmith, Roux, and Wilson demonstrates how considerations of scarcity heightens people's information-processing abilities by making them better able to identify information relevant to the costs and benefits inherent to different outcomes, and adap-

tively respond to this information to benefit the self. Finally, the last paper explores how associating resource scarcity with one's future influences people's decision-making. Specifically, Ein-Gar, Levontin and Lee find that a scarcity mindset prompts people to put away less money for saving. However, when people are asked to consider their future-self, a scarcity mindset leads them to allocate more money to savings.

Taken together, these four papers provide a panoramic view, from past to future, of how resource scarcity affects our lives and impacts our present and future well-being. Specifically, the first two papers explore how facing resource scarcity can hinder consumer well-being, due to lower perceptions of longevity and increased food valuation. Conversely, the third and fourth papers demonstrate a positive impact of experiencing scarcity, in terms of greater cognitive flexibility and greater saving to benefit one's future self.

Early-life Scarcity, Life Expectancy, and Decision-Making

EXTENDED ABSTRACT

Disparities in financial outcomes stemming from socioeconomic inequalities are a matter of concern for policy makers, researchers, and the society. Yet why people at the bottom of the pyramid respond by behaving in ways that worsen their situation is an unresolved puzzle. A leading reason offered by recent research is that growing up with less leads to certain psychological tendencies that make it difficult to escape poverty (Haushofer and Fehr 2014). However, very little is known about what these psychological tendencies are and what behaviors they affect. Our goal in this paper is to propose one such tendency and to examine its impact on people's financial decisions.

We propose that financial disparities among people from dissimilar socioeconomic backgrounds are a result of differences in their subjective life expectancy – the age up to which people expect to live. Our predictions are derived from life history theory (Stearns 1992), and we conducted three experiments to test our hypotheses. Results show that people's subjective life expectancies are closely tied to their childhood socioeconomic status. Those who grew up in resource-poor environments expected to live up to a significantly lower age as compared to those who grew up in resource-rich environments. Furthermore, in line with recent research, we find that childhood-rooted differences were most strongly evoked in stressful contexts such as when people faced financial threats in their current environment. Finally, we show how differences in subjective life expectations lead to differences in people's financial decisions such as their retirement allocation.

In Study 1 (N=123), we examined our basic prediction that people's life expectancy varies depending on their childhood resources in response to conditions of financial threat. We experimentally manipulated threat by having participants write three indicators that suggest the economy is becoming increasingly unpredictable and that resources are becoming scarcer (Mittal & Griskevicius 2016). Those in the control condition wrote three indicators that suggest the economy is getting better and that resources are becoming abundant. We then measured the age to which people expected to live up to using a slider scale running from 18 to 100 years, and the level of their current and childhood resources (Rindfleisch et al. 1997). As

predicted, there was a significant Condition X Childhood SES interaction ($F(1, 119)=7.45, p=.007$). Results showed that although subjective life expectations for people from different backgrounds were similar in the control condition ($\beta=.02, p=.863$), they diverged in the resource threat condition. Consistent with our predictions, we found that people who grew up in resource-poor environments expected to live to a significantly lower age than people who grew up in resource-rich environments in the resource constraints condition ($\beta=.50, p<.001$). Importantly, these expectations did not vary as function of respondents' current economic conditions.

Study 2 ($N=101$) conceptually replicated and extended the findings from the first study by examining whether people's childhood resources impacted the number of years they thought their retirement would last. Participants arrived in lab in small groups and were randomly assigned to either the resource abundant control or the resource scarcity threat condition. Same manipulations as in Study 1 were used. Next, participants reported the age to which they expected to live up to using the same measure as in Study 1. In addition, they indicated the number of years they expected their retirement savings to last assuming they retired at the age of 67. Consistent with the results from Study 1, there was a significant Condition x Childhood Resources interaction for subjective life expectancy ($F(1, 97)=16.7, p<.001$). Further analyses showed that people who grew up in resource-poor environments expected to live to a significantly lower age than people who grew up in resource-rich environments in the resource threat condition ($\beta=.49, p<.001$). We also found a significant Condition X Childhood Resources interaction for longevity of retirement ($F(1, 97)=9.03, p=.003$), such that threat led people from poor backgrounds to expect to live a significantly less number of years after retirement as compared to people from richer backgrounds ($\beta=.39, p=.005$). A mediated moderation model ascertained that the observed effect of scarcity and childhood resources on post-retirement longevity was mediated by subjective life expectancy (95% CI [.94, 7.59]).

The goal of Study 3 ($N=259$) was to examine whether different life expectations in response to financial threats would influence people's investment allocation decisions. Financial threat was manipulated using the same methodology as in studies 1 and 2. Next, people indicated the average age to which they thought people lived up to. Additionally, they indicated the percentage of their annual salary that they wished to allocate for their retirement. People's responses were recorded on a slider scale running from 0% to 25%. Results mirrored the basic finding from Studies 1 and 2. There was a significant Condition x Childhood Resources interaction for subjective life expectancy ($F(1, 255)=5.6, p<.05$). In addition, there was a significant Condition x Childhood Resources interaction for desired retirement allocation ($F(1, 255)=6.25, p<.05$). Analyses suggested that people growing up poorer expected to live to a significantly lower age than people who grew up in resource-rich environments in the resource scarcity condition ($\beta=.28, p<.001$) and were willing to invest less towards their retirement ($\beta=.18, p<.05$). A mediated moderation model ascertained that the effect of childhood resources and current threat on retirement allocation was mediated by people's subjective life expectancy (95% CI [0.03, 0.48]).

These studies provide important new insights into why people from resource deprived backgrounds might make decisions that paradoxically end up hurting them even more. We show that people's subjective life expectations are shaped by people's socioeconomic backgrounds and play a crucial role in driving their financial behaviors later in life. We believe this work has important implications for public policy and researchers who wish to better understand and

improve decision making among people from disadvantaged backgrounds.

The Food Scarcity Heuristic: People Overestimate the Caloric Content of Scarce Foods

EXTENDED ABSTRACT

Past work has demonstrated that scarce objects are perceived as being higher in value (Brock 1968; Fromkin 1970; Verhallen 1982). This perception may have an evolutionary basis, as in ancient times valuable objects were scarce due to their instrumentality for survival in harsh living environments (e.g. Ellis et al. 2009). Such scarce and valuable items included foods that were higher in caloric content (e.g. Pochron 2005). In this research, we investigate whether consumers make the inverse inference, that foods that are perceived as scarce are also higher in calories. We hypothesize this will occur as items perceived as scarce lead consumers to feel relatively deprived of resources, which makes them overvalue the item and overestimate its calories. Our theorizing is in line with past work showing that when financially deprived, consumers seek scarce items (Sharma & Alter 2012), and with past work showing that consumers tend to devalue items that are not immediately needed (Brendl, Markman & Messner 2003). Furthermore, we also expect that the effect will be attenuated when people are able to consume the target food, as this will reduce their need for resources. Our hypothesis is analog to past research demonstrating that while we know that consumers find scarce items to be more valuable (e.g. Brock 1968; Cialdini 2009), they also believe that all valuable items are scarce. In this case, we demonstrate that while highly caloric items may be seen as intrinsically more valuable (Laran and Salerno 2013), consumers will also infer that all foods they perceive as scarce also contain more calories.

Three studies test our hypotheses. Study 1 used a two (food frame: common vs. scarce) x two (food type: healthy vs. indulgent) mixed design. Food frame was between-subjects while food type was within-subjects. Participants ($N = 169$) were told that the researchers were working with an online food vendor to learn more about people's perceptions of the foods the vendor sells. Participants then read some information about the food vendor that varied by condition. In the common food frame condition, participants read that the foods sold by the vendor were common and widely available. Participants in the scarce food frame condition read that the foods were scarce and limited in availability. Participants were then shown 12 pictures of different food items and asked to estimate the number of calories of each food. Six of the foods were healthy (kiwi, blackberries, avocado, radish, dragonfruit, jicama) and six were indulgent (dark chocolate, honey, red wine, cheese, peanut butter, caramel). To determine whether the effect of the food frame was specific to healthy (versus indulgent foods), an average calorie estimate was calculated for both the healthy and indulgent foods. Results showed a main effect of food frame regardless of food type: participants in the scarce food condition rated the healthy foods as higher in calories ($M = 113.04$) than participants in the common food condition ($M = 93.97; F(1, 166) = 7.61, p < .01$). Similarly participants in the scarce condition rated the foods as higher in calories ($M = 156.16$) than participants in the common food condition ($M = 133.42; F(1, 166) = 6.77, p = .01$). An ancillary study in which we controlled for the potential effect of price perceptions by setting an identical cost/price to the different items regardless of scarcity frame, replicated this same pattern of results.

Studies 2-3 build on study 1 by showing evidence of the underlying mechanism responsible for the effect of food frame on calorie perceptions. Study 2 used a one factor (food frame: common

vs. scarce) between-subjects design. Participants ($N = 136$) read the same food frame manipulation from study 1 and then estimated the amount of calories shown in a picture of a serving of kiwi. After estimating the number of calories, participants indicated their current perceptions of resource availability (e.g., “my resources are scarce”). Results showed that participants in the scarce food condition rated the kiwi as higher in calories ($M = 82.48$) than participants in the common food condition ($M = 67.37$; $F(1, 134) = 4.36, p < .05$). In addition, participants in the scarce condition indicated perceiving their own resources to be more scarce ($M = 5.04$) than participants in the common condition ($M = 4.16$; $F(1, 134) = 6.19, p = .01$). A mediation analysis revealed that perceptions of resource scarcity mediated the effect of food frame on calorie perceptions.

Study 3 ($N = 211$) provided further support for this process in a design where we used cashews as our stimulus and manipulated as opposed to measured resource availability. We manipulated resource availability by introducing a condition where participants were allowed to consume as opposed to just evaluate the scarce item they were exposed to. We hypothesized that allowing subjects to consume the scarce product would mitigate their lack of resources, which in turn would deactivate the effect. Consistent with this prediction, we found that while the effect replicated in the absence of the manipulation ($M_{scarce} = 118.82$ vs. $M_{common} = 71.25$; $t(92) = 3.36, p = .001$), it did not when it was present ($M_{scarce} = 82.95$ vs. $M_{common} = 75.78$; $t(115) < 1, n.s.$)

This research builds on past work on the relationship between scarcity and value (Brock 1968; Cialdini 2009) to show that not only do participants believe that scarce items are more valuable, but that they also attribute a higher caloric content to this type of items. Furthermore, we demonstrate that this occurs because scarce items make consumers feel deprived of resources, and such deprivation leads to the overvaluation and subsequent caloric overestimation of the product.

Acting on Information: Reminders of Resource Scarcity Promote Adaptive Behavior and Flexible Thinking

EXTENDED ABSTRACT:

Past research demonstrated that reminders of resource scarcity prompt the desire to advance one’s own welfare (Roux, Goldsmith, & Bonezzi 2015). We posit that, as a consequence, reminders of resource scarcity increase cognitive flexibility, which facilitates the ability to (i) identify information in the decision environment that informs how one’s own welfare can be advanced (i.e., information relevant to the costs and benefits inherent to different outcomes), and (ii) adaptively respond to this information. We provide evidence for our proposed mechanism across five experiments. We demonstrate that considerations of resource scarcity (vs. control) increase cognitive flexibility (experiment 1) and prompt more flexible information processing (experiment 2). We further show that participants in a scarcity condition (vs. control) are more likely to adapt how they allocate monetary resources (experiment 3) and expend their actual effort (experiment 4) as a function of information in the decision environment. Finally, we provide evidence that consumers reminded of resource scarcity (vs. control) more adaptively integrate external information that bears on the cost and benefits inherent to different outcomes into their tradeoff perceptions (experiment 5).

In experiments 1–4, scarcity was manipulated by asking participants to list things they would be unable to do if certain resources were unavailable (e.g., water; Roux et al. 2015). Participants in the control condition were asked to list things that they could do with the same resources. In experiment 1, following the scarcity manipula-

tion, participants’ cognitive flexibility was assessed using a 7-item measure (Martin and Rubin 1995). Participants in the scarcity condition showed greater self-reported cognitive flexibility ($p = .03$). Experiment 2 provided convergent support for these results using a category inclusiveness task, where participants had to rate the extent to which strong, intermediate, and weak exemplars belonged in a given category; a validated correlate of cognitive flexibility (Isen et al. 1985; 1987). Exposure to reminders of resource scarcity increased category inclusiveness ($p = .02$).

Experiment 3 tested for the consequences of this theoretical mechanism by examining if reminders of resource scarcity also promote the adaptive allocation of resources. Following the scarcity manipulation, participants played one of two economic games: dictator or ultimatum. In the former, allocating very little money to the other player is the best way to advance one’s own welfare. In the latter, allocating too little money can jeopardize one’s chances of earning anything, making it more strategic to incur some cost (i.e. allocate some money to the other player) in order to increase the chances of benefitting from the game (i.e. retaining some money). Therefore, we utilize game-type as a manipulation of information in the decision environment that is relevant for understanding the costs and benefits of expending one’s resources (here, money). Results indicated that participants in the scarcity condition were more likely ($p < .01$) to adapt their resource allocation to game-type than those in a control condition ($p > .6$; interaction: $p = .01$).

Experiment 4 tested for a similar pattern of results in allocations of actual effort. Following the scarcity manipulation, participants were asked to make a choice between either two comparable or two non-comparable options (Cho et al. 2013). Expending one’s effort evaluating comparable options should improve one’s likelihood of identifying the best option. However, engaging in effortful comparisons between non-comparable options is unlikely to yield such results. Therefore, we utilize choice set comparability as a manipulation of information in the decision environment that is relevant for understanding the costs and benefits of expending one’s effort on the product selection task. Results showed that participants in the scarcity condition were more likely to incorporate this information into their effort allocation ($p < .01$): they spent more time evaluating comparable options than non-comparable options; whereas choice set comparability produced no effect on effort in the control condition ($p > .3$; interaction: $p = .02$). These findings from experiments 3 and 4 are consistent with our prediction that scarcity increases cognitive flexibility, which promotes the ability to adapt one’s behavior to tradeoff-related information in the decision environment.

Experiment 5 provided more direct evidence in support of the notion that reminders of scarcity (vs. control) cause people to adaptively integrate relevant external information into their tradeoff perceptions. Participants in the scarcity condition were first asked to recall times when they felt resources were scarce, whereas those assigned to the control condition were asked to list activities they did in the past week (Roux et al. 2015). Next, participants had the opportunity to win an herbal tea of their choosing, with either a high or low probability of winning (between participants). Therefore, we utilize one’s probability of winning as a manipulation of information in the decision environment that is relevant for understanding the costs and benefits of expending one’s effort on carefully evaluating the teas (i.e., the potential benefit is greater if one’s probability of winning is high vs. low). After choosing from a set of twenty teas, participants were asked to rate their agreement with the statement “The benefit I could get from carefully thinking about the teas did not seem worth the effort.” We observed a main effect of the probability of winning, such that the perceived benefit was greater when the probability of

winning was high ($p < .01$). However, consistent with prior results, this was qualified by an interaction between the probability and the scarcity manipulations ($p = .05$): probability of winning affected tradeoff perceptions among participants in the scarcity condition, but not in the control condition. These results support the notion that when the decision environment presents information that is relevant to informing cost-benefit tradeoffs, participants reminded of resource scarcity (vs. control) are more likely to attend to and incorporate that information into their tradeoff perceptions.

In summary, we proposed and found that reminders of resource scarcity promote a cognitively flexible thinking style which allows consumers to (i) identify information in the decision environment that informs cost-benefit tradeoffs, and (ii) adaptively respond to this information. We believe these findings offer theoretical insights into the psychology of scarcity and beyond, in addition to practical insights into when and why resource scarcity might improve decision outcomes.

I Don't Have Now, But I Will Make Sure I Have Later; Saving for the Future Under Resource Scarcity Mindset

EXTENDED ABSTRACT

Based on data from the Federal Reserve, there has been a noticeable uptick in the growth of total savings deposits since the economic crisis in late 2008. However, despite this positive trend of total saving deposits American households are not saving more (Valuepenguin.com). On the contrary, according to the Google Consumer Survey conducted in October 2015, more than 60% of Americans have less than \$1,000 in savings and over 20% of Americans don't even have a saving account. In a recent survey conducted by Banrate.com, only 17% of Americans said they are more comfortable with their savings today versus a year ago, compared with 31% who said they're less comfortable. Individuals in the lowest income bracket are the ones least likely to have an open savings account in the US (Valuepenguin.com).

When people feel financially deprived, they invest effort to attain financial resources (Karlsson et al 2004; 2005 Shah, Mullainathan & Shafir 2012, Sharma & Alter 2012). In particular, perceived financial deprivation is shown to increase preferences for attaining immediate financial resources (earnings) but not for savings (Sharma & Keller 2017). Put differently, individuals who are poor or feel deprived of financial resources tend to save less than those who are rich or feel rich.

In the current research, we propose that a more general resource deficiency or abundance mindset is sufficient to shift people's behaviors related to financial resources. Past research has shown that activations of resource mindsets shifts individuals' motivations between focusing on themselves and their self-resources and focusing on others and other's resources (Levontin, Ein-Gar & Lee 2015; Roux, Goldsmith & Bonezzi 2015). However, people seem to associate putting money aside with feelings of loss rather than abundance (Karlan, Ratan & Zinman 2014). Building on these past findings, the current work show the influence of resource deficiency or abundance mindsets on saving behavior. In particular, we examine the hypothesis that people will save *less* under a resource deficiency mindset than under a resource abundance mindset. However, we also examine how this effect can be reversed. We show how under a resource deficiency mindset people are *more* likely to save if they focus on their future-self rather than their current-self. Past research has demonstrated that focusing on future self can promote savings (Ersner-Hershfield et al 2009; 2011). Counter to intuition, we show that this effect emerges under a resource deficiency mindset We con-

ceptualize this shift in saving behavior as a shift in focus from self to "others" since future-self is more psychologically distant than one's current-self. We conducted two experiments to test our propositions.

Experiment 1: Participants ($n=85$) watched a short video clip of a bag being emptied (resource deficiency mindset) or filled (resource abundance mindset) with different items (Levontin, et al., 2015). Next, participants were asked to imagine that they received a bonus of \$1,000 at the end of the year and could either spend the money on their current-self (a dream vacation, a luxurious restaurant, maintenance expenses), on others (present for a loved one), or on their futures-self (save the money by putting the money in a saving account, put it in the bank for future use). The amount of money allocated to the future-self (savings) served as our DV. Results show that as expected, participants in the resource deficiency mindset condition assigned less of the bonus money to saving ($M=516.93$, $SD=274.93$) than participants in the resource abundance mindset condition ($M=638.84$, $SD=285.90$; $t(1,82) = 1.99$, $p=0.05$).

Experiment 2: In a 2 X 2 design, following the resource mindset manipulation (as in Experiment 1) participants ($n=140$) wrote a letter to themselves, thinking about who they are now (current-self condition) or who they will be in 10 years (future-self condition; van Gelder, 2013). Finally, they completed the bonus task as in Experiment 1. Results show two main effects qualified by an interaction. In the current-self condition, participants in the resource deficiency condition saved *less* ($M=584.933$, $SD=329.033$) than those in the resource abundance condition ($M=669.36$, $SD=306.99$; $F(1,294) = 2.732$, $p=.099$), replicating the results of Experiment 1. However, in the future-self condition participants in the resource deficiency condition assigned *more* of the bonus money to savings ($M=624.25$, $SD=309.91$) than participants in the resource abundance condition ($M=516.33$, $SD=339.07$; $F(1,294) = 3.95$, $p=.048$).

These results offer theoretical and practical insights by highlighting the wide influence of a general (rather than a specific) resource mindset and its effect on saving behavior. Since resource deficiency mindset is easily activated in every-day life (Levontin et al., 2015), savings will only increase if future-self perceptions are also activated prior to savings decisions.

REFERENCES:

- Abrams, P. A. (1992), "Resource," in *Keywords in evolutionary biology*, eds. Evelyn Fox Keller and Elisabeth A. Lloyd, Cambridge, MA: Harvard University Press, 282–85.
- Brendl, C. M., Arthur B. Markman, and Claude Messner (2003), "The devaluation effect: Activating a need devalues unrelated objects", *Journal of Consumer Research*, 29 (4), 463–73.
- Brock, Timothy C. (1968), "Implications of Commodity Theory for Value Change," in *Psychological Foundations of Attitudes*, eds. Anthony G. Greenwald, Timothy C. Brock, and Thomas M. Ostrom, New York: Academic Press, 243–75.
- Cho, Eunice Kim, Uzma Khan, and Ravi Dhar (2013), "Comparing Apples to Apples or Apples to Oranges: The Role of Mental Representation in Choice Difficulty," *Journal of Marketing Research*, 50 (4), 505–16.
- Cialdini, Robert B. (2009), *Influence: Science and Practice*, 5th ed. Boston: Allyn & Bacon.
- Ellis, Bruce J., Aurelio J. Figueredo, Barbara H. Brumbach, and Gabriel L. Schlomer (2009), "Fundamental dimensions of environmental risk," *Human Nature*, 20 (2), 204–68.

- Ersner-Hershfield Hal, Tess M. Garton, Kacey Ballard, Gregory R. Samanez-Larkin, and Brian Knutson (2009), "Don't stop thinking about tomorrow: Individual differences in future self-continuity account for saving," *Judgment and Decision Making*, 4(4), 280-286.
- Ersner-Hershfield Hal, Danitel G. Goldstein, William F Sharpe, Jesse Fox, Leo Yeykelis, Laura L Carstensen, Jeremy N Bailenson (2011) "Increasing Saving Behavior Through Age-Progressed Renderings of the Future Self," *Journal of Marketing Research*, 48, 23-37.
- Fromkin, Howard L. (1970), "Effects of Experimentally Aroused Feelings of Undistinctiveness upon Valuation of Scarce and Novel Experiences," *Journal of Personality and Social Psychology*, 16 (3), 521-29.
- Haushofer, Johannes, and Ernst Fehr (2014), "On the Psychology of Poverty," *Science*, 344 (6186), 862-67.
- Isen, Alice M. and Kimberly A. Daubman (1984), "The Influence of Affect on Categorization," *Journal of Personality and Social Psychology*, 47 (6), 1206-17.
- Karlan, Dean, Aishwarya Ratan, and Jonathan Zinman (2014), "Savings by and for the Poor: A Research Review and Agenda," *Review of Income and Wealth*, 60 (1), 36-78.
- Karlsson, Niklas, Peter Dellgran, Birgitta Klingander, and Tommy Garling (2004), "Household Consumption: Influences of Aspiration Level, Social Comparison, and Money Management," *Journal of Economic Psychology*, 25 (6), 753-69.
- Karlsson, Niklas, Tommy Garling, Peter Dellgran, and Birgitta Klingander (2005), "Social Comparison and Consumer Behavior: When Feeling Richer or Poorer than Others Is More Important than Being So," *Journal of Applied Social Psychology*, 35 (6), 1206-22.
- Laran, Julianio, and Anthony Salerno (2013), "Life-history strategy, food choice, and caloric consumption," *Psychological Science*, 24 (2), 167-73.
- Levontin, Liat, Danit Ein-Gar, and Angela Y. Lee (2015), "Acts of Emptying Promote Self-Focus: A Perceived Resource Deficiency Perspective," *Journal of Consumer Psychology*, 25 (2), 257-67.
- Martin, Matthew M. and Rebecca B. Rubin (1995), "A New Measure of Cognitive Flexibility," *Psychological Reports*, 76 (2), 623-26.
- Mittal, Chiraag, and Vidas Griskevicius (2016), "Silver Spoons and Platinum Plans: How Childhood Environment Affects Adult Healthcare Decisions," *Journal of Consumer Research*, 43 (4), 636-56.
- Pochron, Sharon. T. (2005), "Does relative economic value of food elicit purposeful encounter in the yellow baboons (*Papio hamadryas cynocephalus*) of Ruaha National Park, Tanzania?," *Primates*, 46 (1), 71-4.
- Rindfleisch, Aric, James E. Burroughs, and Frank Denton (1997), "Family Structure, Materialism, and Compulsive Consumption," *Journal of Consumer Research*, 23 (4), 312-25.
- Roux, Caroline, Kelly Goldsmith, and Andrea Bonezzi (2015), "On the Psychology of Scarcity: When Reminders of Resource Scarcity Promote Selfish (and Generous) Behavior," *Journal of Consumer Research*, 42 (4), 615-31.
- Shah, Anuj K., Sendhil Mullainathan, and Eldar Shafir (2012), "Some Consequences of Having Too Little," *Science*, 338 (6107), 682-85.
- Sharma, Eesha and Punam A. Keller (2017), "A Penny Saved Is Not a Penny Earned: When Decisions to Earn and Save Compete for Consumer Resources," *Journal of the Association for Consumer Research*, 2 (1), 64-77.
- Sharma, Eesha, and Adam L. Alter (2012), "Financial Deprivation Prompts Consumers to Seek Scarce Goods," *Journal of Consumer Research*, 39 (3), 545-60.
- Stearns, Stephen C. (1992), *The Evolution of Life Histories*, New York, N.Y.: Oxford University Press.
- Verhallen, Theo M. (1982), "Scarcity and Consumer Choice Behavior," *Journal of Economic Psychology*, 2 (4), 299-322.
- Zhu, Meng, and Rebecca K. Ratner (2015), "Scarcity polarizes preferences: The impact on choice among multiple items in a product class," *Journal of Marketing Research*, 52 (1), 13-26.

New Insights on the Role of Aesthetics in Consumer Behavior

Chairs: Martin Reimann, University of Arizona, USA

C. Clark Cao, University of Arizona, USA

Paper #1: Say It or Show It: Logo Aesthetics and Consumer-Brand Relationship Development

Samuel Carter Morgan, University of Miami, USA

Tatiana Fajardo, Florida State University, USA

Claudia Townsend, University of Miami, USA

Paper #2: Meaningfulness versus Happiness: The Psychological Impact of High and Low Art

Henrik Hagtvedt, Boston College, USA

Kathleen D. Vohs, University of Minnesota, USA

Paper #3: Muji versus Maharaja: When (and Why) Minimalist versus Maximalist Design Differentially Influence Consumer Self-Brand Connection

Ngoc (Rita) To, University of Houston, USA

Vanessa M. Patrick, University of Houston, USA

Paper #4: Beauty and Control in Collecting: How Desire for Control Drives the Aesthetic Pursuit of Complete Collections

C. Clark Cao, University of Arizona, USA

Merrie Brucks, University of Arizona, USA

Martin Reimann, University of Arizona, USA

SESSION OVERVIEW

Systematic empirical research on consumer aesthetics used to be “largely ignored by consumer psychologists” (Hoegg and Alba 2008, p. 748), and only emerged in consumer psychology journals in recent years. Aesthetics plays crucial roles in some important aspects of marketing: product creations, package designs, and website layouts, to list a few. As a result, the perception of beauty can serve as an important driver of consumer behavior such as product choices, willingness to pay, quality perception, etc. (e.g., Hoegg, Alba, and Dahl 2010; Page and Herr 2002; Reimann et al. 2010). The purpose of this session is to shed new lights on consumer aesthetics by bringing in new insights and perspectives from recent consumer research. In doing so, we hope to enhance our understanding of how consumers perceive beauty (or the lack thereof) and how they respond to it. The four papers included discuss different aspects of aesthetics and will therefore contribute to a diversified and vivid discussion. The papers are summarized as follows:

In Paper #1, Morgan, Fajardo, and Townsend examine the effect of image-based logos. Contrary to the traditional wisdom that image-based logos should outperform their less aesthetically pleasing and attention-grabbing text-based counterparts, the effect of image-based logos depends *de facto* on brand-awareness. Before brand-awareness is established, text-based logos outperform image-based logos in brand attitude and the likelihood to purchase. Only when brand-awareness is established are image-based logos more effective than text-based logos. Apart from its theoretical significance, this finding is of great importance to the application of aesthetic designs in marketing practices.

Paper #2 by Hagtvedt and Vohs investigates the appreciation of complex and challenging artworks (i.e., high art) as compared to their less complicated counterparts (i.e., low art). The authors demonstrate that whereas low art provides viewers with happiness via process fluency, high art elicits interestingness, which in turn imbues life with meaningfulness. These findings provide a theory that accounts for the appreciation of both low-art and high-art images, and

therefore engender novel insights into our understanding of art appreciation.

In Paper #3, To and Patrick demonstrate the interesting connection between package design and self-brand connections. The authors distinguish between minimalist (clean and simple) and maximalist (ornate and decorative) packaging designs, and argue that while minimalist designs elicit value-expressive attitudes, maximalist designs can give rise to socially-adjustive attitudes. As a result, high(low)-power consumers experience greater self-brand connection when minimalist (maximalist) packages designs are used for the brand, because the brand is perceived to serve a value expressive (socially-adjustive) function.

In Paper #4, Cao, Brucks, and Reimann examine a particular form of aesthetics-pursuing consumer behavior: collecting. Using this context, the authors show that seeking beauty can be more than a form of leisure or entertainment. Specifically, completing a collection can satisfy the very fundamental human desire for control, because collecting's pattern-seeking nature -- also a contributor to the aesthetic experience in collections -- helps satisfy desire for control. This finding identifies a major motive of collecting, and contributes to bridge aesthetic experience and very basic human needs.

Say It or Show It: Logo Aesthetics and Consumer-Brand Relationship Development

EXTENDED ABSTRACT

One of the most fundamental decisions for a brand is whether to have a primarily text- or image-based logo. Aesthetics research suggests that image-based logos should perform better than text-based logos as images are more aesthetically pleasing, attention-grabbing, and easier to process than text (Hsee and Rottenstreich 2004; Carr et al. 1982; Lee, Amir, and Ariely 2009; Townsend and Kahn 2013). However, we find a surprising moderator to the positive benefits of images over text in the brand logo context, brand name awareness.

Brand logos contribute to a distinct corporate image (Henderson and Cote 1998) and create brand equity (Bharadwaji and Menon 1993; Park et al. 2013). Broadly, positive customer-based brand equity (CBBE) develops when consumers acquire two types of brand knowledge: brand awareness and brand image (Agarwal and Rao 1996; Keller 1993; Mackay 2001). Brand awareness involves cognitive knowledge of the brand's core identity (e.g., brand name; Tolba and Hassan 2009). While brand image refers to unique brand associations that determine the overall valence of brand attitude and affect (Aaker 1991; Agarwal and Rao 1996; Keller 1993). Importantly, CBBE-models propose a sequential order to the development of these knowledge types wherein consumer acquisition of brand awareness precedes the formation of brand image (Aaker 1991, 1996; Keller 1993).

Prior research suggests that text provides knowledge central to acquiring brand awareness better than images. For example, compared to images, text provides more cognitively-based information about a brand's identity (Carr et al. 1982; Lieberman et al. 2002) by offering less ambiguous and more certain meaning than images (Scott 1994). As such, we hypothesize that, in the absence of brand name awareness, consumers will (a) respond more favorably to text-based than to image-based logos, and (b) this effect will be mediated by perceptions of brand name certainty. Conversely, research sug-

gests that, compared to text, images more effectively evoke personal feelings that contribute to a positive brand image. Images do so by offering a more emotional response than text (Aron et al. 2005; Mikulincer and Shaver 2003). Of note, brand attachment occurs when a brand feels personal (Bhattacharya and Sen 2003; Thomson, Macinnis, and Park 2005; Malär et al. 2011). We therefore hypothesize that, in the presence of brand name awareness, consumers will (a) respond more favorably to image-based logos than to text-based logos, and (b) this effect will be mediated by feelings of brand attachment. We tested our predictions in six studies: five laboratory experiments and an analysis of independently collected secondary data on real-world brand performance.

Using a real brand, study 1 examined actual consumer purchase behavior. Consumers reviewed an advertisement for a real product – Kicker’s Energy Spray – and were given a chance to purchase it. As predicted, sales results revealed a significant interaction ($Wald \chi^2(1) = 6.90, p = .01$) whereby consumers without brand name awareness were more likely to make a purchase when shown the ad with a text-based logo (36.7%) than an image-based logo (16.1%; $\chi^2(1) = 3.32, p = .06$), while those with brand name awareness were more likely to purchase in response to an ad with an image-based (42.5%) versus a text-based logo (20%; $\chi^2(1) = 3.93, p = .04$).

Studies 2A and 2B used a joint versus separate evaluation design (Hsee et al. 1999). In the separate evaluation mode, when text- and image-based logos were rated individually and without explicit brand name information provided, the text-based logo ($M = 3.11, SD = 1.43$) was rated higher than the image-based logo ($M = 2.42, SD = 1.32; t(79) = 2.23, p = .03$). However, in the joint evaluation task, participants chose the image-based (75.6%) more than the text-based logo (24.4%; $\chi^2(1) = 10.76, p < .01$). Presumably, in joint evaluation mode, the simultaneous display of both logo formats for the same brand increased choice of the image-based logo because the text-based logo ensured brand name awareness amongst all participants. Study 2B replicates these results on a different population (students rather than Mturk workers), using a different (fictitious) brand name and corresponding logos.

Study 3 provided evidence of our proposed processes. As predicted, there was a significant interaction between brand name awareness and logo format on consumers’ brand attitude ($F(1, 185) = 11.96, p < .01$). Additionally, we found that in the absence of brand name awareness consumers’ positive response to text-based logos was mediated by brand name certainty (95% BC bootstrap CI of .01 to .36). Feelings of brand attachment, conversely, mediated the positive effect of image-based logos on brand attitudes when brand name awareness was present (95% BC bootstrap CI of -.64 to -.02). Study 4 replicated the results from study 3 (interaction effect, $F(1, 169) = 7.78, p < .01$), while controlling for the abstractness of logos; ruling out alternative explanations and expanding managerial implications.

Finally, Study 5 generalized our findings using a secondary dataset (Brand Finance 2016) of 441 existing brands. On a composite brand attitude measure ($\alpha(4) = .87$), we found a significant interaction between brand familiarity (a conservative proxy of brand name awareness) and logo format ($F(1, 436) = 5.84, p = .02$). At one SD below the mean of brand familiarity, firms with primarily text-based logos received higher consumer brand attitude ratings than firms with primarily image-based logos ($b = -.13, SE = .08, t(436) = -1.71, p = .09$). At one SD above the mean, firms with image-based logos received higher consumer brand ratings than firms with text-based logos ($b = .12, SE = .07, t(436) = 1.74, p = .08$).

This research is the first to consider text- versus image-based logos, and their differential impact on consumer-brand relationship. We offer a surprising moderator, brand name awareness, to common

empirical findings that images evoke a more beneficial response than text, and in doing so, we validate a critical assumption in branding and advertising research which suggests that brand awareness precede the development of brand image and attachment. Moreover, our findings provide brand managers specific recommendations on how to optimize logo design and use throughout the consumer-brand relationship.

Meaningfulness versus Happiness: The Psychological Impact of High and Low Art

EXTENDED ABSTRACT

Art has been a central component of human cultures around the world throughout recorded history (Dutton 2009). Today, governments and private citizens alike expend time, effort, and money on the creation and presentation of artworks. Consumers support a flourishing art business, and school children are even taught about art and brought to art museums, with the apparent notion that these activities provide some special value.

But how does art contribute value to people’s lives? Specifically, what is the value of complex, ambiguous, or challenging art (Belke, Leder, and Carbon 2015; Berlyne 1971; Zeki 2001) if ease of processing determines aesthetic pleasure (Reber, Schwarz, and Winkielman, 2004)? We propose that processing fluency encourages happiness but that the interest sparked by challenging art engenders a sense that life has meaning.

Although happiness and meaningfulness may have substantial overlap, there are also clear differences between them (Baumeister et al. 2013; Diener 2000). Meaningfulness depends less on pleasure than it does on growth and learning, often through the interpretation of culturally significant stimuli. As such, the concept of interest—central in work on the psychology of art (Tan 2000; Silvia 2006)—may be particularly relevant to meaningfulness.

People assess art as interesting when they feel they understand the work’s complexity (Silvia 2005). This notion is related to integrative complexity, which is defined in terms of two cognitive structural variables: differentiation and integration (Tetlock, Bernzweig, and Gallant 1985). At the simple end of the integrative complexity continuum, people rely on rigid, one-dimensional thinking, whereas at the complex end, they combine disparate pieces of information into unified, higher-order representations. We predict that integrative complexity associated with art determines the degree to which the art is deemed interesting, which in turn encourages a sense that life is meaningful. Last, while we expect processing fluency to engender happiness, we also expect that the rewarding nature of an interesting art experience (Lacey et al. 2011) may contribute to a sense of happiness (Baumeister et al. 2013; Silvia 2006).

To test our hypotheses, we took advantage of a distinction known in the art world as high versus low art. High art contains challenging, complex qualities, whereas low art tends to be simple, straightforward depictions (Levine 1988; Shrum 1996). Consistent with prior work, images (depicting the same subject matter) were evaluated by study participants as high versus low art (Hagtvedt and Patrick 2008a; Lacey et al. 2011).

In Studies 1a and 1b, participants rated the high-art versus low-art images on ease of processing and interestingness, as well as the degree to which they perceived their life to change in terms of happiness and meaningfulness from seeing that type of image. As predicted, we found that low (vs. high) art contributed more to happiness, but high (vs. low) art contributed more to meaningfulness. In both studies, interest mediated the effect of artwork on life’s meaningfulness, whereas both interest and fluency mediated the effect of artwork on happiness.

In Studies 2a – 3, we focused on deepening our understanding of the influence of art on meaningfulness. As discussed, the role of complex, challenging art in imbuing life with meaning is arguably the least well understood aspect of the current investigation. In Study 2a, we demonstrated the capacity for high (vs. low) art to stimulate integrative complexity. In Study 2b, we demonstrated a three-step mediational process, in that integrative complexity stimulated by high (vs. low) art leads to the experience of interest, which in turn encourages a sense that life has meaning. Study 3 followed up these findings by testing the notion that appreciation of the artwork may depend on the viewer's capacity to generate complex, integrated thought patterns. This experiment demonstrated that participants with high (low) need for closure—encouraged via a time-constraint manipulation—exhibited a preference for the high art (low-art) image.

Taken together, these results shed light on how and why both high-art and low-art images are appreciated. Further, this research reconciles seemingly contradictory perspectives on fluency, interest, and features such as novelty and complexity, while providing detailed insights into how art contributes meaning to consumers' lives.

Muji versus Maharaja: When (and Why) Minimalist versus Maximalist Design Differentially Influence Consumer Self-Brand Connection.

EXTENDED ABSTRACT

Recent research in consumer behavior has identified a broad set of aesthetic features in packaging design that impact consumption experiences (Hagtvedt and Patrick 2008; Deng and Srinivasan 2013; Sundar and Noseworthy 2014). The current research investigates how a specific design style—how simple (minimalist) or ornate (maximalist)—can influence consumer self-brand connection (SBC).

We define minimalist and maximalist designs as follows. Minimalist design (Meyer 2000) is characterized by simplicity through basic geometric shapes, limited decoration, and abundant white space. In contrast, maximalist design (Rivers 2007) is characterized by richness and a profusion of decorative patterns with minimal white space. Although their visual elements diverge, some of the most successful brands have utilized minimalist and maximalist designs to convey luxury appeal. For instance, Apple's minimalist design represents a brand image of luxury and high fashion, as does Versace, whose brand image is epitomized by ornate decorative patterns.

Why is it that some people adore gilded ornate objects, while others can only find comfort in nearly empty blank canvas? We propose that certain types of aesthetics, such as minimalist vs. maximalist, arouse distinct functional attitudes. Functional theories of attitudes (Katz 1960) suggest that people hold attitudes because they are useful. Certain attitudes serve important social functions, including allowing people to express their own values (value-expressive attitudes) and facilitate self-presentation (social-adjustive attitudes).

We posit that minimalist design elicits more value-expressive attitudes. When people view minimalist art, the “traditional gallery-going experience” is often transformed into one where the viewer can engage with the work by supplying their own interpretation (Kleiner and Mamiya 2005). Similarly, when minimalist design is used in brand communication, consumers supply their own meaning of the brand instead of simply receiving a message. For instance, the Japanese retail brand MUJI employs the concept of “emptiness” in its marketing which emphasizes simplicity and white space. Thus, MUJI creates a capacious vessel that consumers can fill with their own beliefs and perceptions of the brand, from “simplicity”

to “refinement” (Hara 2011). Given the freedom of self-expression inherent in its visual aesthetics, we predict that minimalist design enhances SBC through facilitating value-expressive attitudes.

In contrast, we hypothesize that maximalist design elicits more social-adjustive attitudes. We draw from people's direct experience with maximalist aesthetics, which often occur in social settings that make self-presentation-related goals salient. For instance, people often encounter intricate pattern moldings when going to cathedrals or extravagant decor in a five-star hotel. Thus, consumers seem to have developed the predisposition for maximalist designs when they seek to present desirable self-image. Further, people tend to associate maximalist design with impression-management motives, such as signaling social prestige. Throughout history, authoritative figures often use astounding creations to represent their stature, such as the grandiose exterior of Saint Peter's Basilica in Vatican City or the ornate interior in the Palace of Versailles (Kleiner and Mamiya 2005). Given that maximalist aesthetics are frequently used for gaining social approval, we predict that maximalist design enhances SBC through eliciting social-adjustive attitudes.

Because of the differences in attitudes elicited by minimalist and maximalist designs, we propose power as a moderator for our effects. Defined as “asymmetric control over valued resources in social relations” (Rucker et al. 2012), power can foster agentic or communal orientations. Feeling powerful leads people to become more agency-oriented (i.e. focus on one's self) because being higher in social hierarchy gives people the freedom to pursue their own values. In contrast, feeling powerless makes people more communal-oriented (i.e. focus on others) because being lower in social hierarchy means people need to depend on others for valued resources. As such, we predict that minimalist design will enhance SBC for high-power consumers, while maximalist design will enhance SBC for low-power consumers.

We tested our hypotheses across five studies. Packaging design was manipulated by varying only the decorative elements while keeping all other features constant. In study 1, participants evaluated the minimalist versus maximalist packaging design of a fictional tea brand and assessed their value-expressive and social-adjustive attitudes. As predicted, we found that minimalist design elicits more value-expressive attitudes while maximalist design elicits more social-adjustive attitudes. Interestingly, both packaging designs are perceived as equally attractive and luxurious. We also found that value-expressive attitudes mediated the effect of minimalist packaging design on SBC (95% CI: [-1.65, -.22]), whereas social-adjustive attitudes mediated the effect of maximalist packaging design on SBC (95% CI: [.03, 1.32]).

In study 2, we found evidence for the moderating effect of power. We found significant interaction effect ($F(2,272) = 27.93, p < .001$) where high-power participants felt stronger SBC to minimalist design while low-power participants felt stronger SBC to maximalist design. Study 3 replicated the interaction effect using a different product category (laptop cover) and also provided evidence for our proposed processes. As predicted, there was a significant interaction ($F(2,227) = 29.77, p < .001$). Additionally, our moderated mediation analysis revealed that value-expressive attitudes explained why high-power participants experienced greater SBC for minimalist design (95% CI: [-1.81, -.70]), while social-adjustive attitudes explained why low-power participants experienced greater SBC for maximalist design (95% CI: [1.79, 4.13]). Study 4 bolstered our findings by manipulating participants' value-expressive and social-adjustive attitudes.

Finally, Study 5 extended the observed effects of minimalist and maximalist designs into the service settings (hotels) and tested

a boundary condition in which high-power consumers might prefer maximalist design when impression-management (IM) motives are made salient. Participants were given a choice between minimalist and maximalist hotel suite after having read a high IM vs. low IM scenario. As expected, we found 61% (39%) of the high-power participants chose the maximalist (minimalist) room in the high-impression condition, compared to 16% (88%) of the high-power participants in the low-impression condition. IM conditions did not have an effect on low-power participants ($p=.25$)

In sum, the current research demonstrates the complexity of brand aesthetics by identifying how minimalist versus maximalist designs elicit different attitudes towards the brand. Further, we contributed to the aesthetics literature by providing some insights into the influence of power on consumer responses to aesthetic elements.

Beauty and Control in Collecting:

How Desire for Control Drives the Aesthetic Pursuit of Complete Collections

EXTENDED ABSTRACT

Collecting is a well-observed consumer behavior that is often related to aesthetic experience, and the completion of a collection serves as a representative moment of beauty (e.g., Danet and Katriel 1989; Pomian and Wiles-Portier 1990). However, little is known about why consumers crave the beauty of complete collections. In this research, we propose a novel hypothesis that completing a collection – the fulfillment of the aesthetic experiences in collecting – serves to restore personal control, the sense that consumers can successfully manage the events and outcomes in their lives.

Desire for control (DC henceforth) is a crucial human motivation. To affirm that important aspects of their lives are under control, consumers need to be convinced that outcomes are not generated randomly. Therefore, consumers high in DC tend to reject the idea of a random/chaotic world (Kay, Moscovitch, and Laurin 2010; Legare and Souza 2014) and favor structured items/patterns (Cutright 2012; Whitton and Galinsky 2008).

Aesthetic literature has documented the relationship between beauty and structure. Structured items' nature of being easy to process (i.e., processing fluency) gives rise to aesthetic pleasure (e.g., Forster, Leder, and Ansorge 2013; Reber, Schwarz, and Winkielman 2004). Of relevance here, completing a collection is a human endeavor creating a structure that both produces aesthetic experience and repels chaos and randomness. This characteristic of collection completion should render a complete collection more desirable for individuals high (vs. low) in DC.

More formally, we hypothesize that consumers are more likely to complete a collection when they are high (vs. low) in DC. This theoretical lens provides insights on how aesthetic pursuit such as completing a collection can serve consumer needs as fundamental as DC. Across five experiments, we provide convergent evidence supporting this hypothesis. We also explore key psychological processes underlying this central effect.

Experiments 1A and 1B examine the moderating role of DC in the tendency of completing a collection in real choice sets. In Experiment 1A, 177 undergraduates were endowed with a three-place holder and an incomplete set of magnetic clips. Participants in the experimental condition were endowed with two clips that were thematically related while the control participants were endowed with unrelated clips. All participants were then offered a third clip (to fill in the three-place holder) from a choice set including a target item and three thematically unrelated clips. Choosing the target item would create a thematic set of three clips for the experimental group, but not

the control group. DC was measured as a personality trait on a scale adapted from Burger and Cooper (1979). As predicted, the interaction between trait DC and experimental condition was significant ($B = 1.89$, $SE = 0.76$, $Wald = 6.15$, $p < .05$). A floodlight analysis indicates that as trait DC increases, participants in the experimental condition become more likely to choose the target item to complete their sets, compared to controls (Johnson-Neyman Point = 4.60, $B = 1.06$, $SE = 0.54$, $p = .05$, $CI = [0, 2.11]$). Experiment 1B replicated this finding with three important differences: (1) DC was experimentally manipulated (rather than measured) and (2) a collection set of four rather than three items; and (3) stamp collecting served as the context. Data from 178 student participants replicate the interaction ($B = 1.33$, $SE = 0.67$, $Wald = 3.92$, $p < .05$) and pattern reported for Experiment 1A.

In Experiment 2, we simultaneously manipulated (as a state) and measured (as a trait) DC to further test the role of DC. Undergraduates ($N = 296$) collected seashells that were framed as a completable set. Apart from the significant main effects of both state ($B = 3.49$, $t(292) = 3.15$, $p < .01$) and trait DC ($B = 0.36$, $t(292) = 2.33$, $p < .01$) that replicate the findings from Experiment 1A and 1B, a significant interaction ($B = -0.67$, $t(292) = -3.18$, $p < .01$) between state and trait DC reveals DC as the process underlying the found effect. Specifically, consumers whose DC was experimentally manipulated high demonstrated an increased desire to complete their collections as their trait DC increases. When the state DC was low, however, this pattern was reserved. This experiment shows that DC is the process underlying the tendency to complete a collection.

Experiment 3 examines the link between collecting and aesthetics, namely the structure underlying collections. mTurkers ($N = 184$) were asked to imagine that they were hypothetically collecting of €1 euro coins. We manipulated theme (present, absent) and appearance of set completeness (yes, no) and measure DC as a trait. As predicted, the three-way interaction was significant ($B = 1.72$, $SE = 0.87$, $Wald = 3.87$, $p < .05$). Results show that the opportunity to merely extend the collection (theme condition) does not affect choice when the collection was depicted as only partially complete in size. High DC participants chose the "matching" item only when it was possible to fully complete the collection.

Experiment 4 supports the process underlying previous experiments with real collectors and their collections of experiences. For consumers collecting experiences with US national parks, DC indeed predicted how many parks they checked off a list ($N = 324$, $B = 4.06$, $t(323) = -2.62$, $p < .005$).

In sum, across five studies, we demonstrate that the structure underlying complete collections, which is also a source of aesthetic experiences in collecting, can satisfy DC. As a result, DC becomes a crucial motivator for the aesthetic pursuit of collection completion. This conclusion is robustly obtained via various contexts, set sizes (from three to 60), two ways to operationalize DC (measure and manipulation), and three ways to operationalize collections (hypothetical, actual endowment, and collections that collectors already possess). Together, our findings contribute to aesthetics literature by demonstrating that the pursuit of beauty can serve to fulfill very fundamental human needs such as DC. Also, contributing to literature of collecting, we identify control as an important motivation of collecting (more specifically, the complete thereof), adding to other established motivations such as justification (Gao, Huang, and Simonson 2014) or productivity (Keinan and Kivetz 2011).

REFERENCES

- Aaker, David A. (1991), *Managing Brand Equity*. New York: Free Press.
- _____ (1996), *Building Strong Brands*. New York: The Free.

- Agarwal, Manoj K., and Vithala R. Rao (1996), "An Empirical Comparison of Consumer-Based Measures of Brand Equity," *Marketing Letters*, 7 (3), 237-47.
- Aron, Arthur, Helen Fisher, Debra J. Mashek, Greg Strong, Haifang Li, and Lucy L. Brown (2005), "Reward, Motivation, and Emotion Systems Associated with Early-Stage Intense Romantic Love," *Journal of Neurophysiology*, 94 (1), 327-37.
- Baumeister, Roy F., Kathleen D. Vohs, Jennifer L. Aaker, and Emily N. Garbinsky (2013), "Some Key Differences between a Happy Life and a Meaningful Life," *The Journal of Positive Psychology*, 8(6), 505-16.
- Belke, Benno, Helmut Leder, and Claus Christian Carbon (2015), "When Challenging Art Gets Liked: Evidences for a Dual Preference Formation Process for Fluent and Non-Fluent Portraits," ed. Satoru Suzuki, *PLoS ONE*, 10(9), e0131796.
- Berlyne, Daniel E. (1971), *Aesthetics and Psychobiology*, New York, NY: Appleton-Century-Crofts.
- Bharadwaji, Sundar G., and Anil Menon (1993), "Determinants of Success in Service Industries: A PIMS-based Empirical Investigation," *Journal of Services Marketing*, 7 (4), 19-40.
- Bhattacharya, Chitrabhan and Sankar Sen (2003), "Consumer-Company Identification: A Framework for Understanding Consumers' Relationships with Companies," *Journal of Marketing*, 67 (2), 76-88.
- Brand Finance (2016), "Global 500 2016: The Most Valuable Brands of 2016," (accessed July 20, 2016), [available at http://brandirectory.com/league_tables/table/global-500-2016].
- Burger, Jerry M. and Harris M. Cooper (1979), "The Desirability of Control," *Motivation and Emotion*, 3 (4), 381-93.
- Carr, Thomas H., Charles McCauley, Richard D. Sperber, and C. M. Parmelee (1982), "Words, Pictures, and Priming: On Semantic Activation, Conscious Identification, and the Automaticity of Information Processing," *Journal of Experimental Psychology: Human Perception and Performance*, 8 (6), 757-77.
- Cutright, Keisha M. (2012), "The Beauty of Boundaries: When and Why We Seek Structure in Consumption," *Journal of Consumer Research*, 38 (5), 775-90.
- Danet, Brenda and Tamar Katriel (1989), "No Two Alike: Play and Aesthetics in Collecting," *Play & Culture*, 2 (3), 253-77.
- Deng, Xiaoyan and Raji Srinivasan (2013), "When Do Transparent Packages Increase (or Decrease) Food Consumption?" *Journal of Marketing*, 77(4), 104-17.
- Diener, Ed (2000), "Subjective Well-Being: The Science of Happiness and a Proposal for a National Index," *The American Psychologist*, 55(1), 34-43.
- Dutton, Denis (2009), *The Art Instinct: Beauty, Pleasure, and Human Evolution*, New York, NY: Bloomsbury Press.
- Forster, Michael, Helmut Leder, and Ulrich Ansorge (2013), "It Felt Fluent, and I Liked It: Subjective Feeling of Fluency Rather Than Objective Fluency Determines Liking," *Emotion*, 13 (2), 280-89.
- Gao, Leilei, Yanliu Huang, and Itamar Simonson (2014), "The Influence of Initial Possession Level on Consumers' Adoption of a Collection Goal: A Tipping Point Effect," *Journal of Marketing*, 78(6), 143-56.
- Hagtvedt, Henrik and Vanessa M. Patrick (2008a), "Art and the Brand: The Role of Visual Art in Enhancing Brand Extendibility," *Journal of Consumer Psychology*, 18(3), 212-22.
- _____ (2008b), "Art Infusion: The Influence of Visual Art on the Perception and Evaluation of Consumer Products," *Journal of Marketing Research*, 45(3), 379-89.
- Hara, Kenya (2011), *Designing Design*, Switzerland: Lars Müller.
- Henderson, Pamela W. and Joseph A. Cote (1998), "Guidelines for Selecting or Modifying Logos," *Journal of Marketing*, 62 (2), 14-30.
- Hoegg, JoAndrea and Joseph W. Alba (2008), "A Role for Aesthetics in Consumer Psychology," in *Handbook of Consumer Psychology*, ed. Curtis P. Haugtvedt, Paul M. Herr, and Frank R. Kardes, New York: Lawrence Erlbaum Associates, 733-54.
- Hoegg, JoAndrea, Joseph W. Alba, and Darren W. Dahl (2010), "The Good, the Bad, and the Ugly: Influence of Aesthetics on Product Feature Judgments," *Journal of Consumer Psychology*, 20(4), 419-30.
- Hsee, Christopher K., George F. Loewenstein, Sally Blount, and Max H. Bazerman (1999), "Preference Reversals between Joint and Separate Evaluations of Options: A Review and Theoretical Analysis," *Psychological Bulletin*, 125 (5), 576-90.
- Katz, Daniel (1960), "The Functional Approach to the Study of Attitudes," *Public Opinion Quarterly*, 24(2), 163-204.
- Kay, Aaron C., David A. Moscovitch, and Kristin Laurin (2010), "Randomness, Attributions of Arousal, and Belief in God," *Psychological Science*, 21 (2), 216-18.
- Keinan, Anat and Ran Kivetz (2011), "Productivity Orientation and the Consumption of Collectable Experiences," *Journal of Consumer Research*, 37(6), 935-50.
- Keller, Kevin Lane (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (1), 1-22.
- Kleiner, Fred S. and Christin J. Mamiya (2005), *Gardner's Art through the Ages*, 12th ed., Belmont, CA: Wadsworth.
- Lacey, Simon, Henrik Hagtvedt, Vanessa M. Patrick, Amy Anderson, Randall Stilla, Gopikrishna Deshpande, Xiaoping Hu, João R Sato, Srinivas Reddy, and K Sathian (2011), "Art for Reward's Sake: Visual Art Recruits the Ventral Striatum," *NeuroImage*, 55(1), 420-33.
- Lee, Leonard, On Amir, and Dan Ariely (2009), "In Search of Homo Economicus: Cognitive Noise and the Role of Emotion in Preference Consistency," *Journal of Consumer Research*, 36 (2), 173-87.
- Legare, Cristine H. and André L. Souza (2014), "Searching for Control: Priming Randomness Increases the Evaluation of Ritual Efficacy," *Cognitive Science*, 38 (1), 152-61.
- Levine, Lawrence W. (1988), *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America*, Boston, MA: Harvard University Press.
- Lieberman, Matthew D., Ruth Gaunt, Daniel T. Gilbert, and Yaacov Trope (2002), "Reflection and Reflexion: A Social Cognitive Neuroscience Approach to Attributional Inference," *Advances in Experimental Social Psychology*, 34, 199-249.
- Mackay, Marisa Maio (2001), "Evaluation of Brand Equity Measures: Further Empirical Results," *Journal of Product & Brand Management*, 10 (1), 38-51.
- Malär, Lucia, Harley Krohmer, Wayne D. Hoyer, and Bettina Nyffenegger (2011), "Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self," *Journal of Marketing*, 75 (4), 35-52.
- Meyer, James Sampson (2000), *Minimalism*, London: Phaidon.
- Mikulincer, Mario and Phillip R. Shaver (2003), "The Attachment Behavioral System in Adulthood: Activation, Psychodynamics, and Interpersonal Processes," in *Advances in Experimental Social Psychology*, Mark P. Zanna, ed. New York: Academic Press, 53-152.

- Page, Christine and Paul M. Herr (2002), "An Investigation of the Processes by Which Product Design and Brand Strength Interact to Determine Initial Affect and Quality Judgments," *Journal of Consumer Psychology*, 12(2), 133–47.
- Park, C. Whan, Andreas B. Eisingerich, Gratiana Pol, and Jason Whan Park (2013), "The Role of Brand Logos in Firm Performance," *Journal of Business Research*, 66 (February), 180-87.
- Reber, Rolf, Norbert Schwarz, and Piotr Winkielman (2004), "Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience?," *Personality and Social Psychology Review*, 8 (4), 364-82.
- Reimann, Martin, Judith Zaichkowsky, Carolin Neuhaus, Thomas Bender, and Bernd Weber (2010), "Aesthetic Package Design: A Behavioral, Neural, and Psychological Investigation," *Journal of Consumer Psychology*, 20(4), 431–41.
- Rucker, Derek D., Adam D. Galinsky, and David Dubois (2012), "Power and Consumer Behavior: How Power Shapes Who and What Consumers Value," *Journal of Consumer Psychology*, 22(3), 352–68.
- Rivers, Charlotte (2007), *Maximalism: The Graphic Design of Decadence & Excess*, Mies, Switzerland: RotoVision.
- Scott, Linda M. (1994), "The Bridge from Text to Mind: Adapting Reader-Response Theory to Consumer Research," *Journal of Consumer Research*, 21 (3), 461-80.
- Shrum, Wesley M. (1996), *Fringe and Fortune: The Role of Critics in High and Popular Art*, Princeton, NJ: Princeton University Press.
- Silvia, Paul J. (2005), "Emotional Responses to Art: From Collation and Arousal to Cognition Emotion," *Review of General Psychology*, 9, 342—357.
- Silvia, Paul J. (2006), *Exploring the Psychology of Interest*, New York, NY: Oxford University Press.
- Sundar, Aparna and Theodore J. Noseworthy (2014), "Place the Logo High or Low? Using Conceptual Metaphors of Power in Packaging Design," *Journal of Marketing*, 78(5), 138–51.
- Thomson, Matthew, Deborah MacInnis, and C. Whan Park (2005), "The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachment to Brands," *Journal of Consumer Psychology*, 15 (1), 77–91.
- Tan, Ed S. (2000), "Emotion, Art, and the Humanities," in *Handbook of Emotions*, 2nd ed. Michael Lewis and Jeannette M. Haviland-Jones, New York, NY: Guilford Press, 116–34.
- Tolba, Ahmed H., and Salah S. Hassan (2009), "Linking Customer-Based Brand Equity with Brand Market Performance: A Managerial Approach," *Journal of Product & Brand Management*, 18 (5), 356-66.
- Townsend, Claudia, and Barbara E. Kahn (2014), "The "Visual Preference Heuristic": The Influence of Visual versus Verbal Depiction on Assortment Processing, Perceived Variety, and Choice Overload," *Journal of Consumer Research*, 40 (February), 993-1015.
- Whitson, Jennifer A. and Adam D. Galinsky (2008), "Lacking Control Increases Illusory Pattern Perception," *Science*, 322 (5898), 115-17.
- Wiles-Portier (1990), *Collectors and Curiosities: Paris and Venice, 1500-1800*, Cambridge: Polity Press.
- Zeki, Semir (2001), "Artistic Creativity and the Brain," *Science*, 293(5527), 51–52.

The Role of Authenticity in Consumer Behavior

Chairs: Katherine M. Crain, Duke University, USA

Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria

Paper #1: The Entity-Referent Correspondence Framework of Authenticity

Julie Guidry Moulard, Louisiana Tech University, USA
Randle D. Raggio, University of Richmond, USA
Judith Anne Garretson Folse, Louisiana State University, USA

Paper #2: The Curse of the Original: When Product Change Undermines Authenticity

Rosanna K. Smith, University of Georgia, USA
George E. Newman, Yale University, USA
Ravi Dhar, Yale University, USA

Paper #3: Signal with Cost: When and Why Identity Signals Are Perceived to Be Authentic

Katherine M. Crain, Duke University, USA
James R. Bettman, Duke University, USA
Mary Frances Luce, Duke University, USA

Paper #4: Self-controlled but Not Myself: When Restraint versus Indulgence Undermines Consumers' Authenticity and Decision Satisfaction

Michail D. Kokkoris, WU Vienna University of Economics and Business, Austria
Erik Hoelzl, University of Cologne, Germany
Carlos Alós-Ferrer, University of Cologne, Germany

SESSION OVERVIEW

The quest for authenticity plays an important role in consumers' lives. Some marketers have even called authenticity "the 'it' word of the decade" (Byron 2016). As an illustration, the hashtag "liveauthentic" is associated with over sixteen million photos on Instagram, and a Google search for "how to be authentic" returns over 800,000 results.

Given consumers' obsession with authenticity, it is no surprise that it is a way to their wallets. Consumers are willing to pay more for products that they perceive to be authentic (Newman and Dhar 2014) and are more willing to buy works of arts when they perceive their creators to be authentic (Moulard et al. 2014). But just as authenticity positively affects firms' well-being, authenticity can also positively affect consumers' well-being. For instance, feelings of authenticity are associated with higher self-esteem (Davis et al. 2015; Heppner and Kernis 2007; Kernis and Goldman 2006; Schlegel and Hicks 2011; Wood et al. 2008), life satisfaction (Boyraz, Waits, and Felix 2014), subjective well-being (Sheldon et al. 1997), and decision satisfaction (Schlegel et al. 2013), and being perceived as authentic is associated with healthy social relationships (Brunell et al. 2010; Lopez and Rice 2006).

The four papers in this session explore the important role of authenticity in consumer behavior through questions concerning the definition, antecedents, and consequences of authenticity both at the brand level (what makes brands look authentic) and the consumer level (what makes consumers look and feel authentic).

The first paper (Moulard, Raggio, and Folse) explores the meaning of authenticity. These authors present the Entity-Referent Correspondence Framework of Authenticity. This framework results in an overarching definition of authenticity and outlines three authenticity types that are consistent with the overarching definition.

The second paper (Smith, Newman, and Dhar) explores inferences of brand authenticity. How might brands maintain perceptions

of authenticity? These authors find that products authentic due to their history are met with consumer backlash when they are updated—a cost of authenticity—but this backlash can be prevented when consumers perceive the change to be connected to the initial conceptualization of the product.

The third paper (Crain, Bettman, and Luce) explores inferences of consumer authenticity. How might consumers maintain perceptions of authenticity? These authors combine insights from attribution theory and signaling theory to propose and exhibit that observers discern the authenticity of a signaling consumer by inferring the consumer's willingness to accept the costs of their signal.

The final paper (Kokkoris, Hoelzl, and Alós-Ferrer) explores feelings of consumer authenticity. How might consumers maintain feelings of authenticity? These authors demonstrate that acts of self-control may enhance or undermine feelings of authenticity depending on consumers' lay rationalism.

Despite the public's interest in authenticity, it is a relatively nascent topic area in consumer research. Together, these four papers, which are comprehensive in approach (theoretical and empirical) and topic (brand and consumer authenticity), advance our understanding of the role of authenticity in consumer behavior.

The Entity-Referent Correspondence Framework of Authenticity

EXTENDED ABSTRACT

While consumer researchers agree that authenticity contains various meanings, little consensus exists concerning the number of meanings and what those meanings entail (Beverland and Farrelly 2010). Thus, the purpose of this research is to introduce the Entity-Referent Correspondence (ERC) Framework of Authenticity that (1) suggests a unifying meaning of authenticity beyond synonyms such as "real" or "true," (2) delineates three authenticity types that are consistent with our overarching authenticity definition, and (3) proposes specific theories that explain how consumers form perceptions of each type.

Based on the correspondence theory of truth (Newman 2002), the ERC Framework proposes that authenticity is the degree to which an entity (e.g., object, person, performance, claim) is *true to* or matches up with something else. We label this "something else" a referent—the point of reference to which the entity is compared. For instance, a bowl of gumbo (entity) is authentic if it is *true to* a traditional gumbo recipe (referent). Thus, we assert that *authenticity is the degree to which an entity corresponds to a referent. Perceived authenticity is a consumer's perception of this entity-referent correspondence. Additionally, the framework proposes three distinct authenticity types: true-to-ideal, true-to-fact, and true-to-self.*

True-to-ideal authenticity is defined as the extent to which an entity corresponds with a socially determined standard. The closer the entity matches up with an accepted archetype, the more the entity is true to ideal. This prescribed ideal is a *social construct* as described by social constructivism theory (Guba and Lincoln 1994; Wartofsky 1968). Social constructs are human inventions; they are not absolutely occurring phenomena that are independent of human thought. As such, an ideal is not fixed and, thus, may change and is often debated.

These ideas are best exemplified by Brown, Kozinets, and Sherry's (2003) finding that some *Star Wars* fans thought the *Phantom Menace* prequel was inauthentic, as the prequel (i.e., entity) did not correspond with the *Star Wars*' brand essence (i.e., the ideal). The fact that fans disagreed on the brand essence underscores the notion that an ideal is a social construct that is not fixed and may differ across consumers. In addition to adhering to brand essence (Spiggle et al. 2012), prior work suggests to remain authentic, a brand's products (i.e., entities) should match the brand's traditional or classical design and style (i.e., ideals) (Beverland and Luxton 2005; Morhart et al. 2015; Spiggle et al. 2012). Socially determined ideals also exist at the product category level. Real wine (i.e., the ideal) is expected to be that which is "old world" (e.g., from France) and is bottled with a cork (Moulard et al. 2015). Such expectations also exist at more specific category levels (e.g., Abbey beer [see Beverland et al. 2008]), may have stronger consensus, and often specify particular production methods (e.g., champagne's "méthode champenoise"). Thus, to appear authentic, a brand may emphasize its use of a traditional production method and its origin (e.g., "heritage") (Beverland and Luxton 2005; Napoli et al. 2014; Spiggle et al. 2012), as these conform to the product category ideal. Categorization theory (Cohen and Basu 1987) can be used to understand perceived true-to-ideal authenticity, as an ideal is analogous to a consumer's category structure.

True-to-fact authenticity is defined as *the extent to which that which is stated or implied about an entity corresponds with the actual state of affairs*. The state of affairs, or a fact, is something that is the case—what has occurred or what is (Wittgenstein 1922). Thus, true-to-fact authenticity entails the extent to which information communicated about the entity corresponds with the entity's actual characteristics or with events that actually occurred. In contrast to the fluctuating ideal, a fact is static—unable to change. Thus, a fact is consistent with notions of realism, which suggests that phenomena exist independent of the mind—that there is an underlying reality (Halverson 1976; Stump 1996; Wartofsky 1968).

A gold-colored necklace, implying it is made of gold, is only true-to-fact authentically gold if it is actually gold (see Grayson and Martinec 2004). Yet true-to-fact authenticity extends beyond whether objects are originals versus imitations. It also refers to the degree to which one is being transparent about their activities and outputs (e.g., products). Audi's emissions cover up and plagiarism are examples of true-to-fact inauthenticity, as are fake foods, fake news, and fake Match.com profiles. Interestingly, one may be true-to-fact inauthentic about the other types of authenticity; a "champagne" brand may claim its grapes are from the Champagne region (suggesting true-to-ideal authenticity) when, in fact, they are not. The truth effect (Hawkins and Hoch 1992) and reality monitoring (Johnson 2006) can explain how consumers may perceive a claim as real, whereas the expectancy-violation model (Bond et al. 1992) can explain how they perceive a claim as fake.

True-to-self authenticity is defined as *the extent to which an entity's behaviors correspond with its intrinsic motivations as opposed to its extrinsic motivations*. Self-determination theory posits that being true to self involves intrinsically motivated activities—those that are innately enjoyable—as opposed to extrinsically motivated activities—those that are motivated by external rewards or punishments (Ryan and Deci 2000). Like a fact referent, one's true self is proposed to be a fixed entity rather than a socially constructed one, as laypersons perceive the true self as a collection of immutable, innate attributes (Jung 1953; Rogers 1959). Nonetheless, a self is distinguished from a fact due to its psychological nature.

Prior research has proposed brand authenticity entails producers who are passionate about producing their products (intrinsically

motivated) as opposed to caving in to market demands and, thus, becoming too commercial (extrinsically motivated) (Beverland et al. 2008; Moulard et al. 2014; Moulard et al. 2016). This type is consistent with existential authenticity, yet that term has focused the consumer's self rather than another's self (Leigh, Peters, and Shelton 2006). Attribution theory (Kelley 1973) can be used to explain how consumers form perceptions of another's true-to-self authenticity (Moulard et al. 2015, 2016), as it addresses whether individuals attribute another's behaviors to one's dispositions versus situational factors.

The Curse of the Original: When Product Change Undermines Authenticity

EXTENDED ABSTRACT

One strategy brands employ to enhance product appeal is through highlighting a product's history or origin. Indeed, information about a product's heritage is often an antecedent of perceptions of authenticity and value (Beverland et al. 2008; Grayson and Martinec 2004; Newman and Dhar 2014). While prior work has focused on the benefits of this "heritage branding" (Wuestefeld et al. 2012), this article explores a potential cost of making history an important part of a product's identity. Specifically, companies often meet consumer backlash when these kinds of products are changed, even when the product is functionally or materially improved. For instance, Converse's Chuck Taylors has benefited from its well-known history, with a design touted to have been unchanged for 100 years; at the same time, this positioning has made it challenging for the company to make desired improvements to the shoe. Perhaps most infamously, the consumer backlash Coke received with the release of "New Coke" crystallized the problem these kinds of authentic products face.

We theorize that when consumers value or are informed of a product's heritage, changes to the product, even those that functionally improve it, decrease product value relative to the original product. This is because the product origin is seen as core to the product's identity (or essence). Changes from the origin are thus seen as a violation of the product's authenticity and subsequently the product is less desirable. Thus, products known for their history can find themselves stuck at an impasse, wherein, the very quality that are valued for—their connection to origin—is the same quality that prevents them from being able to be improved upon. In the following studies, we show that this backlash is driven by specifically by authenticity perceptions as opposed to quality inferences or inferences related to time or product longevity.

Study 1 tested whether highlighting a product's history, while having an initial positive effect on authenticity perceptions and valuation, decreases product value when the original product is changed relative to the same product where no history is mentioned. Participants viewed an ad for a restaurant that specializes in burgers. Product history was manipulated by either having indexical cues (e.g., est. date, lineage of founder, historically accurate font, etc.) (Beverland et al. 2008; Grayson and Martinec 2004) present or not in the ad. Further, participants were randomly assigned to rate a burger that was unchanged or changed from the original. Results revealed the predicted interaction on willingness to purchase the burger ($F(2, 395) = 16.25, p < .001$). Specifically, the original burger was rated as more appealing in the history condition ($M = 7.07, SD = 1.89$) compared to the original burger in the no-history condition ($M = 5.93, SD = 2.44; t(172) = -3.41, p = .001, d = .52$). However, the changed burger in the history condition ($M = 5.25, SD = 2.58$) was rated as less appealing relative to the changed burger in the no-history con-

dition ($M = 6.08$, $SD = 2.57$; $t(223) = 2.42$, $p < .016$, $d = .32$). This interaction was mediated by authenticity [95% CI for indirect effect = -1.17 to $-.39$] but not quality [95% CI for indirect effect = $-.66$ to $.17$].

Study 2 ruled out a salient alternative explanation. Specifically, the backlash could be driven by the fact the original is seen as having “stood the test of time,” and hence is rationally inferred to be of higher quality than the updated product. In all conditions, participants viewed the same backpack. Between-subjects, participants learned that the company had been making the backpack for 50 versus 5 years and, that the backpack had either changed or not changed from the original design. Further, the history of the product was otherwise held constant across all four conditions. Results revealed a main effect of change, with the original ($M = 5.62$, $SD = 2.32$) valued more than the changed bag ($M = 5.12$, $SD = 2.44$; $F(1, 382) = 4.56$, $p = .033$). Importantly, there was no main effect of time ($F(1, 382) = .79$, $p = .374$), or an interaction between time and change ($F(2, 382) = 1.58$, $p = .210$). In other words, the fact that the company was around for a long versus short time did not interact with the backlash against the changed product. In addition, mediation analysis revealed that this drop in value was mediated by perceptions of authenticity [95% CI for indirect effect = $-.72$ to $-.26$] and not perceptions of quality [95% CI for indirect effect = $-.40$ to $.13$].

Study 3 examined how to shut off the backlash effect. We hypothesized that a change to the original would be accepted to the extent to which consumers perceive it to be connected to the initial conceptualization of the product. To manipulate this, participants watched a clip from a classic animated movie (*The Lion King*). In all conditions, participants were told that the version they would view had been changed from the original. Between-subjects, participants were told either that the change was a bonus scene, added to the film after the original production (less connected to origin), or a deleted scene, made during the original production of the film (more connected to origin), but withheld from the original release. As predicted, the deleted scene ($M = 6.20$, $SD = 1.42$) was rated as more enjoyable than the bonus scene ($M = 5.37$, $SD = 1.75$; $F(1, 131) = 9.00$, $p = .003$, $d = .52$). Further, authenticity perceptions significantly mediated the relationship between condition and enjoyment [95% CI for indirect effect = $-.73$ to $-.04$].

This article explored one cost of products valued for their authenticity. Specifically, products authentic by dint of their history run into challenges when they are changed or updated. In these cases, consumers use the origin to define the essence of the product. Thus changes, even those that would otherwise improve or enhance the product, result in lower perceptions of authenticity and decrease value. Changes believed to be connected to the product’s origin attenuate this backlash.

Signal with Cost: When and Why Identity Signals Are Perceived to Be Authentic

EXTENDED ABSTRACT

Signaling is a common consumer behavior. However, signals are sometimes not perceived as true. We examine when and why identity-signaling consumers are perceived to be authentic, or acting in accordance with their true self (Kernis and Goldman 2006).

Prior research finds that effort is perceived to be negatively correlated with ability (Kum and Weiner 1973), and spontaneity is associated with meaning (Morwedge, Giblin, and Norton 2014), which may suggest that consumers who obtain their signals easily will be perceived as the most authentic. Signaling theory, however, suggests that “true types,” or agents who truly have the trait that a signal rep-

resents, engage in costlier signaling than “false types” (e.g., Spence 1973). Furthermore, attribution theory, a psychological theory of causal inferences, suggests that the role of a given cause in producing a given action is augmented if inhibitory forces, like costs, are also present (e.g., Kelley 1973). Combining insights from these theories, we suggest that consumers who intentionally engage in costly signaling (e.g., buy an expensive team jersey or wear that jersey to a rival team’s home game) will be perceived as more authentic (e.g., an authentic team fan) due to their apparent willingness to accept the cost (“WTAC”) of that signal. Six studies test this theory.

Studies 1A – 1C tested the basic premise that costly signals are perceived to be more authentic. Study 1A tested this proposition with temporal costs. Participants ($N = 201$) read a story about a consumer who was wearing a fictional band (“Blue Lightning”) t-shirt. The consumer drove 15 minutes or 6 hours to see the band perform. As expected, the consumer was perceived to be a more authentic band fan (e.g., “Indicate the extent to which this consumer is an authentic ‘Blue Lightning’ fan”) when he engaged in the more ($M = 8.04$) vs. less ($M = 6.92$) costly behavior ($p < .001$). Studies 1B and 1C generalized this result using monetary and social costs and different identities. These effects were mediated by inferences of the consumer’s WTAC (e.g., “How willing is this consumer to accept the potential costs of seeing ‘Blue Lightning?’”).

Study 2 extends the finding of Study 1 by exploring relative costs. Participants ($N = 216$) read about a consumer who either had more or less free time. Then, similar to Study 1A, participants learned that this consumer was wearing a fictional band’s t-shirt and drove 3 hours to see the band perform. Suggesting that cost is relative to resources, the consumer was perceived to be a more authentic band fan when he was low ($M = 7.95$) versus high ($M = 7.66$) in resources ($p = .05$). This effect is mediated by inferences of the consumer’s WTAC of their signal.

If WTAC drives perceptions of authenticity, only intentional costly signaling should be seen as authentic. If costly signaling is unintentional, it should not promote authenticity perceptions because the critical “willingness” element of WTAC is absent. In Study 3, we tested intent as a moderator. Participants ($N = 410$) were randomly assigned to a 2 (price paid: high vs. low) \times 2 (intent: yes vs. no) between-subjects design. Participants read a story about a consumer who purchased an environmentally-friendly all-purpose cleaner. In the intent condition, the consumer intentionally paid a \$5.99 regular price (high price) or a \$2.99 sale price (low price) for the cleaner. In the unintentional, low price condition, the consumer thought that the product was regular price at the time of purchase but was surprised to find on her receipt when she got home that the product was on sale. In the unintentional, high price condition, the consumer thought that the product was sale price at the time of purchase but was surprised to find on her receipt when she got home that the product was regular price.

As expected, intent moderated the effect of signal cost ($p < .001$). The consumer who intentionally paid a high price ($M = 6.11$) was perceived to be a more authentic environmentalist than the consumer who intentionally paid a low price ($M = 5.44$; $p < .001$). The consumer who unintentionally paid the low price (i.e., expected to pay the high price; $M = 6.37$) was perceived to be more authentic than the consumer who unintentionally paid the high price (i.e., expected to pay the low price; $M = 5.34$; $p < .001$). Moderated mediation analysis indicated that the effects were mediated by WTAC and moderated by intent.

Study 4 explored liking and purchase intent as downstream consequences of perceptions of authenticity. Participants ($N = 362$) were randomly assigned to a 3 (cost: low, moderate, high) \times continuous

(participant's experience) between-subjects design. They read the same scenario as in Studies 1A and 2. In this study, the consumer drove 10 minutes (low), 1 hour (moderate), or 10 hours (high) to see the fictional band. Participant's then rated the consumer's authenticity as a band fan, how much they liked the consumer, and how likely they would be to download one of the band's songs for \$0.99. They also reported the longest (in hours) they've traveled to see a band. We predicted and found that cost increases perceptions of authenticity ($b = .38, p < .001$), which was not moderated by the participant's experience ($p = .92$).

The consumer's willingness to accept the costs of being a fan may be intimidating to people who themselves are not willing to accept that cost. Therefore, we expected that liking and purchase intent would diverge from perceptions of authenticity for participants who had not traveled far to see a band. As expected, the distance the participant had traveled themselves moderated the effect of signal cost ($p < .01$). For participants who had not traveled far (-1 SD), cost decreased liking ($b = -.40, p < .01$). For participants who had traveled far (+1 SD), cost did not affect liking ($b = .13, p = .36$). For participants who had traveled farther (+2 SD), cost increased liking ($b = .49, p < .01$). Results for purchase intent mimicked these results.

Self-controlled but Not Myself: When Restraint versus Indulgence Undermines Consumers' Authenticity and Decision Satisfaction

EXTENDED ABSTRACT

Although the benefits of self-control for psychosocial adjustment and subjective well-being have been extensively demonstrated (Hofmann et al. 2014; Tangney et al. 2004), much less is known about its potential detriments (Kivetz and Keinan 2006). We contribute to this understudied topic by introducing the idea that self-control may undermine decision satisfaction for some consumers by making them feel less authentic.

Research shows that authenticity, i.e., the subjective experience of acting in accord with one's true self (Kernis and Goldman 2006; Schlegel and Hicks 2011; Wood et al. 2008), is a determinant of decision satisfaction (Schlegel et al. 2013). However, not all people feel authentic under the same conditions; whereas for some the true self is revealed through reason, for others it is revealed through feelings (Newman et al. 2014). Thus, we argue that individual differences in lay rationalism, i.e., the relative reliance on reason versus feelings in decision making (Hsee et al. 2015), determine whether exerting or losing self-control makes consumers feel more true to themselves and thereby more satisfied with their decisions. We predicted that consumers would experience lower decision satisfaction after restraint (vs. indulgence) if they are low in lay rationalism, but lower decision satisfaction after indulgence (vs. restraint) if they are high in lay rationalism. We explain this effect in terms of state authenticity (Sedikides et al. 2017): consumers low (high) in lay rationalism should experience restraint (indulgence) as temporary suppression of their true selves.

In Study 1 ($N = 265$), we first assessed individual differences in lay rationalism ($\alpha = .80$; Hsee et al. 2015). We then asked participants to imagine experiencing a conflict between the desire to buy a cheesecake and the conflicting personal goal to lose weight, and randomly assigned them to imagine finally either buying it (indulgence) or not (restraint). We then asked them to assess their anticipated satisfaction with their decision (single item). Results indicated a significant interaction between decision (0 = indulgence, 1 = restraint) and lay rationalism ($B = 1.01, SE = 0.23, p < .001$). As predicted, restraint yielded lower anticipated decision satisfaction among consumers

low in lay rationalism, whereas indulgence yielded lower satisfaction among consumers high in lay rationalism.

Study 2 ($N = 252$) replicated Study 1 in another consumer domain (a conflict between the desire to buy a sweater and the conflicting personal goal to save money) and further examined the underlying mechanism (authenticity). We measured state authenticity ($\alpha = .91$), that is, authenticity in a specific situation (Kifer et al. 2013), decision satisfaction (single item), and lastly lay rationalism ($\alpha = .77$) to avoid consistency effects. Results for decision satisfaction showed the same interaction pattern as in Study 1 ($B = 1.22, SE = 0.23, p < .001$). Moreover, a moderated mediation analysis (model 8; Hayes 2013) revealed that the interaction effect was mediated by authenticity (95% CI = [.269, .673]). Consumers low (high) in lay rationalism were less satisfied with restraint (indulgence) because this decision made them feel less authentic.

Study 3 ($N = 248$) replicated Study 2 by adding a measure of trait self-control to rule out the possibility that lay rationalism is confounded with self-control. Controlling for trait self-control, the interaction on decision satisfaction remained statistically significant ($B = 0.91, SE = 0.23, p < .001$), and so did the moderated mediation through authenticity (95% CI = [.254, .813]).

Study 4 ($N = 403$) tested whether this effect generalizes to real-life consumer conflicts by asking participants to recall the most recent self-control conflict they had experienced in a shopping context and report whether they resolved this conflict by buying (indulgence) or not buying (restraint) the desired item. We measured again authenticity ($\alpha = .88$), decision satisfaction, and lay rationalism ($\alpha = .79$). Results for decision satisfaction showed the same interaction pattern between decision and lay rationalism ($B = 0.61, SE = 0.19, p = .001$). The moderated mediation through authenticity was also statistically significant (95% CI = [.212, .582]). Thus, the proposed effect does not concern only anticipated satisfaction with hypothetical decisions but also satisfaction with past decisions in real-life consumer conflicts.

Finally, Study 5 ($N = 265$) examined whether this effect drives compensatory authenticity seeking to restore authenticity deficits. Building on compensatory mechanisms (Mandel et al. 2017), we predicted that consumers low (high) in lay rationalism would respond more favorably to an ad with an authenticity claim following restraint (indulgence). After presenting participants with the same scenario as in Studies 2 and 3, we asked them in an ostensibly unrelated study to evaluate an ad of a brand of tea advertised with an authenticity slogan ("Be true to yourself"). We created a favorability index ($\alpha = .95$) by combining measures of attitude to the ad, attitude to the brand, identification with the slogan, and purchase intention (all loading on one factor). The interaction effect was significant ($B = -0.36, SE = 0.16, p = .028$), indicating that participants low (high) in lay rationalism who imagined restraint (indulgence) responded more favorably to authenticity advertising.

Taken together, results of five studies show that restraint decreases decision satisfaction for consumers low in lay rationalism, whereas indulgence decreases decision satisfaction for consumers high in lay rationalism. Moreover, this effect is driven by feelings of authenticity and motivates compensatory authenticity seeking affecting attitudes toward products advertised with authenticity claims. Our research advances a nuanced understanding of the psychological consequences of self-control and warns against the pitfalls of "one-size-fits-all" approaches that treat self-control as unconditionally beneficial. Moreover, our research has practical implications for policy making, and especially current discussions on nudging and choice architecture. In designing welfare-maximizing interventions (e.g., with regards to eating, spending, or saving), policy makers

need to take a global approach to consumer welfare by taking into account not only the normative, instrumental effects of increased self-control, but also by attending to the welfare value of consumers' subjective experiences.

REFERENCES

- Beverland, M., and Farrelly, F. J. (2010). The quest of authenticity in consumption: Consumers' purposive choice of authentic cues to shape experienced outcomes. *Journal of Consumer Research*, 36(5), 838-856.
- Beverland, M., and Luxton, S. (2005). Managing integrated marketing communication (IMC) through strategic decoupling: How luxury wine firms retain brand leadership while appearing to be wedded to the past. *Journal of Advertising*, 34(4), 103-116.
- Beverland, M., Lindgreen, A., and Vink, M. W. (2008). Projecting authenticity through advertising: Consumer judgments of advertisers' claims. *Journal of Advertising*, 37(1), 5-15.
- Bond, C. F., Jr., Omar, A., Pitre, U., Lashley, B. R., Skaggs, L., and Kirk, C. T. (1992). Fishy-looking liars: Deception judgment from expectancy violation. *Journal of Personality and Social Psychology*, 63(6), 969-977.
- Boyratz, Güler, J., Waits, B., and Felix, V. A. (2014). Authenticity, life satisfaction, and distress: A longitudinal analysis. *Journal of Counseling Psychology*, 61(3), 498-505.
- Brown, S., Kozinets, R. V., and Sherry, J. F. Jr. (2003). Teaching old brands new tricks: Retro branding and the revival of brand meaning. *Journal of Marketing*, 67(3), 19-33.
- Brunell, A. B., Kernis, M. H., Goldman, B. M., Heppner, W., Davis, P., Cascio, E. V., and Webster, G. D. (2010). Dispositional authenticity and romantic relationship functioning. *Personality and Individual Differences*, 48(8), 900-905.
- Byron, J. (2016, March 23). Brand authenticity: Is it for real?. Retrieved from <http://adage.com/article/digitalnext/brand-authenticity-real/303191/>.
- Cohen, J. B., and Basu, K. (1987). Alternative models of categorization: Toward a contingent processing framework. *Journal of Consumer Research*, 13(4), 455-472.
- Davis, W. E., Hicks, J. A., Schlegel, R. J., Smith, C. M., and Vess, M. (2015). Authenticity and self-esteem across temporal horizons. *Journal of Positive Psychology*, 10(2), 116-126.
- Grayson, K., and Martinec, R. (2004). Consumer perceptions of iconicity and indexicality and their influence on assessments of authentic market offerings. *Journal of Consumer Research*, 31(2), 296-312.
- Guba, E. G., and Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage Publications.
- Halverson, W. H. (1976). *A concise introduction to philosophy* (3rd edition). New York, NY: Random House.
- Hawkins, S. A., and Hoch, S. J. (1992). Low-involvement learning: Memory without evaluation. *Journal of Consumer Research*, 19(2), 212-225.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Heppner, W. L. and Kernis, M. H. (2007). 'Quiet ego' functioning: The complementary roles of mindfulness, authenticity, and secure high self-esteem. *Psychological Inquiry*, 18(4), 248-251.
- Hofmann, W., Luhmann, M., Fisher, R. R., Vohs, K. D., and Baumeister, R. F. (2014). Yes, but are they happy? Effects of trait self-control on affective well-being and life satisfaction. *Journal of Personality*, 82(4), 265-277.
- Hsee, C. K., Yang, Y., Zheng, X., and Wang, H. (2015). Lay rationalism: Individual differences in using reason versus feelings to guide decisions. *Journal of Marketing Research*, 52(1), 134-146.
- Johnson, M. K. (2006). Memory and reality. *American Psychologist*, 61(8), 760-771.
- Jung, C. G. (1953). *Two essays in analytical psychology*. New York, NY: Pantheon.
- Kelley, H. H. (1973). The processes of causal attribution. *American Psychologist*, 28(2), 107-128.
- Kernis, M. H. and Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (283-357). New York, NY: Academic Press.
- Kernis, M. H., and Goldman, B. M. (2004). Authenticity, social motivation, and wellbeing. In J. P. Forgas, K. D. Williams and S. Laham (Eds.), *Social motivation: Conscious and unconscious processes* (pp. 210-227). New York, NY: Cambridge University Press.
- Kifer, Y., Heller, D., Perunovic, W. Q. E., and Galinsky, A. D. (2013). The good life of the powerful: The experience of power and authenticity enhances subjective well-being. *Psychological Science*, 24(3), 280-288.
- Kivetz, R., and Keinan, A. (2006). Repenting hyperopia: An analysis of self-control regrets. *Journal of Consumer Research*, 33(2), 273-282.
- Kun, A., and Weiner, B. (1973). Necessary versus sufficient causal schemata for success and failure. *Journal of Research in Personality*, 7(3), 197-207.
- Leigh, T. W., Peters, C., and Shelton, J. (2006). The consumer quest for authenticity: The multiplicity of meanings within the MG subculture of consumption. *Journal of the Academy of Marketing Science*, 34(4), 481-493.
- Lopez, F. G. and Rice, K. G. (2006). Preliminary development and validation of a measure of relationship authenticity. *Journal of Counseling Psychology*, 53(3), 362-371.
- Mandel, N., Rucker, D. D., Levav, J., and Galinsky, A. D. (2017). The Compensatory Consumer Behavior Model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology*, 27(1), 133-146.
- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., and Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200-218.
- Moulard, J. G., Babin, B. J., and Griffin, M. (2015). How aspects of a wine's place affect consumers' authenticity perceptions and purchase intentions: The role of country of origin and technical terroir. *International Journal of Wine Business Research*, 27(1), 23-39.
- Moulard, J. G., Garrity, C. P., and Rice, D. H. (2015). What makes a human brand authentic? Identifying the antecedents of celebrity authenticity. *Psychology and Marketing*, 32(2), 173-186.
- Moulard, J. G., Raggio, R. D., and Folse, J. A. G. (2016). Brand authenticity: Testing the antecedents and outcomes of brand management's passion for its products. *Psychology and Marketing*, 33(6), 421-436.

- Moulard, J. G., Rice, D. H., Garrity, C. P., and Mangus, S. M. (2014). Artist authenticity: How artists' passion and commitment shape consumers' perceptions and behavioral intentions across genders. *Psychology and Marketing, 31*(8), 576-590.
- Morewedge, C. K., Giblin, C. E., and Norton, M. I. (2014). The (perceived) meaning of spontaneous thoughts. *Journal of Experimental Psychology: General, 143*(4), 1742.
- Napoli, J., Dickinson, S. J., Beverland, M. B., and Farrelly, F. (2014). Measuring consumer-based brand authenticity. *Journal of Business Research, 67*(6), 1090-1098.
- Newman, A. (2002). *The correspondence theory of truth: An essay on the metaphysics of predication*. Cambridge, UK: Cambridge University Press.
- Newman, G. E., Bloom, P., and Knobe, J. (2013). Value judgments and the true self. *Personality and Social Psychology Bulletin, 40* (2), 203-216.
- Newman, G. E. and Dhar, R. (2014). Authenticity is contagious: Brand essence and the original source of production. *Journal of Marketing Research, 51*(3), 371-386.
- Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of science* (pp. 184-256). New York: McGraw Hill, 184-256.
- Ryan, R. M. and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.
- Schlegel, R. J., and Hicks, J. A. (2011). The true self and psychological health: Emerging evidence and future directions. *Social and Personality Psychology Compass, 5*(12), 989-1003.
- Schlegel, R. J., Hicks, J. A., Davis, W. E., Hirsch, K. A., and Smith, C. M. (2013). The dynamic interplay between perceived true self-knowledge and decision satisfaction. *Journal of Personality and Social Psychology, 104*(3), 542-558.
- Sedikides C., Slabu L., Lenton A., and Thomaes S. (2017). State authenticity. *Current Directions in Psychological Science*.
- Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., and Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology, 73*(6), 1380-1393.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87*(3), 355-374.
- Spiggle, S., Nguyen, H. T., and Caravella, M. (2012). More than fit: Brand extension authenticity. *Journal of Marketing Research, 49*(6), 967-983.
- Stump, D. J. (1996). Epistemology and metaphysics. In P. Galison and D. J. Stump (Eds.) *The disunity of science: Boundaries, contexts, and powers*. Stanford, CA: Stanford University Press.
- Tangney, J. P., Baumeister, R. F., and Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271-324.
- Wartofsky, M. W. (1968). *Conceptual foundations of scientific thought: An introduction to the philosophy of science*. London: Macmillan Company.
- Wittgenstein, L. (1922). *Tractatus logico-philosophicus: Logisch-philosophische abhandlung*. London: Kegan Paul.
- Wood, A. M., Linley, P. A., Maltby, J., Baliouis, M., and Joseph, S. (2008). The authentic personality: A theoretical and empirical conceptualization and the development of the Authenticity Scale. *Journal of Counseling Psychology, 55*(3), 385-399.
- Wuestefeld, T., Hennigs, N., Schmidt, S., and Wiedmann, K. (2012). The impact of brand heritage on customer perceived value. *International Journal of Marketing, 51*(2-3), 51-61.

It is All in the Pitch: New Insights into How the Framing of a Charitable Appeal Influences Giving

Chair: Anthony Salerno, University of Cincinnati, USA

Paper #1: Charitable Giving to Teachers with the Same Name: An Implicit Egotism Field Experiment

Kurt P. Munz, New York University, USA
Minah H. Jung, New York University, USA
Adam L. Alter, New York University, USA

Paper #2: Giving to Versus on Behalf of: Charitable Gift Requests Lead to Less Generous Giving

Adriana Samper, Arizona State University, USA
Cindy Chan, University of Toronto, Canada
Ryan Hamilton, Emory University, USA

Paper #3: "You Saved a Life": How Past Donation Use Increases Donor Reactivation via Impact and Warm Glow

Edlira Shehu, University of Southern Denmark, Denmark
Michel Clement, Universität Hamburg, Germany
Karen P. Winterich, Pennsylvania State University, USA
Ann-Christin Langmaack, Universität Hamburg, Germany

Paper #4: Prevention versus Treatment: How Negative Emotion and Charitable Appeal Affect Donation Behavior

Tatiana Fajardo, Florida State University, USA
Anthony Salerno, University of Cincinnati, USA

SESSION OVERVIEW

The act of giving to those in need is a fundamental value held by American consumers (Bendapudi, Singh, and Bendapudi 1996). However, it is not fully known what motivates consumers to donate to charitable organizations (Liang, Chen, and Lei 2016; Small and Verrochi 2009). This lack of understanding is evidenced by the fact that charities in the United States lose out on an estimated \$47 billion in donations every year from failing to meet the needs of potential donors (Camber Collective 2015). In this session, we will focus specifically on understanding how the framing of different *charitable appeals* (i.e., messaging used in the donation solicitation) influences consumer giving. Four papers provide new insights into when charitable appeals are effective at encouraging giving based on the underlying needs of the donor.

The first paper (Munz, Jung, and Alter) shows that donors give more when the charitable appeal highlights that the recipient of the donation shares (versus does not share) the same surname as the donor. The beneficial effect of a donor/recipient surname match was said to be driven by implicit egotism, whereby people inherently gravitate towards others who resemble themselves. The second paper (Samper, Chan, and Hamilton) examines giving when the charitable appeal is made on a recipient's gift registry (i.e., donating to a charity in lieu of gifts to the recipient). Their results show that charitable appeals made on gift registries result in significantly less given by donors compared to gifts directly to the recipient, even if the recipient has explicitly asked that the donation be their gift. The decreased giving was shown to be driven by the donor's perception that their donation to a charity is not an actual gift to the recipient. The third paper (Shehu, Clement, Winterich, and Langmaack) shows how donor reactivation rates increase when a charitable appeal highlights the use of the prior donation (versus appeals that simply acknowledge the prior donation or detail future donation use). The beneficial effect of an appeal based on prior donation use on reactivation rates was found to be serially-mediated by the donor's sense of having

an impact and warm glow. The fourth and final paper (Fajardo and Salerno), explores how negative emotions influence giving depending on the type of charitable appeal used. Specifically, they find that anger (sadness) increases giving when the charitable appeal emphasizes the prevention (treatment) of its cause. Furthermore, the beneficial effect of anger (sadness) is shown to be driven by a need to take corrective action (need to foster social bonding).

Thus, the objective of this session is to address two key questions: (1) what are the ways in which the framing of a charitable appeal influences giving and (2) through what psychological mechanisms do such effects occur? Four papers demonstrate that consumers vary dramatically in their giving depending on how the charitable appeal is framed. We expect ACR attendees interested in the topics of prosocial behavior and consumer well-being to be our primary audience with the session also being of general interest given the scope of theoretical constructs covered.

Charitable Giving to Teachers with the Same Name: An Implicit Egotism Field Experiment

EXTENDED ABSTRACT

We examined the external validity of name effects and implicit egotism by conducting a large field experiment.

Implicit egotism is the tendency for people to like identifiers associated with themselves, including their own names and the numbers of their birthday, and to apply these positive associations to decisions, objects, and other people that resemble them. Researchers have documented implicit egotism in areas such as altruistic behavior (Burger et al. 2004; Chandler, Griffin, and Sorensen 2008; Garner 2005; Guéguen, Pichot, and Dreff 2005; Oates and Wilson 2002) a first name (Study 2, consumer decision making (Brendl et al. 2005; Garner 2005; Kachersky 2011) a choice phenomenon we call "name letter branding." We propose that during a first stage an active need to self-enhance increases the positive valence of name letters themselves and that during stage 2 positive name letter valence transfers to product-specific attributes (e.g., taste of a beverage, decisions about whom to marry (Jones et al. 2004; Pelham and Carvallo 2015), where to live (Pelham, Mirenberg, and Jones 2002), and organizational behaviors (Anseel and Duyck 2008; Nelson and Simmons 2007; Pelham and Carvallo 2015; Pelham et al. 2002; Polman, Pollmann, and Poehlman 2013).

However, there is significant controversy as to whether these effects hold in the real world, or instead may be artifacts of analysis (Dyjas et al. 2012; Gallucci 2003; McCullough and McWilliams 2010; Simonsohn 2011a, 2011b). Specifically, most of the evidence for real world effects comes from archival data collected for other purposes. The challenges (typical of correlational research) include the potential for reverse causality (Simonsohn 2011a), cherry-picking in selecting variables or data sets to analyze (McCullough and McWilliams 2010), third-variable explanations (Simonsohn 2011a), and failing to perform the correct analysis (Dyjas et al. 2012; Gallucci 2003). In the face of these major challenges, some have claimed, "the current state of empirical evidence for implicit egotism, as indicated by the most recent publications in two of psychology's top journals is that it holds up in the lab but seems to be spurious in the field" (Pelham and Carvallo 2015, 693).

We helped address these challenges by conducting a large field experiment. We partnered with DonorsChoose.org, an online charitable giving platform that connects primary and secondary school teachers requesting funding for projects in their classrooms with potential donors who can browse and donate any amount desired to a project of their choosing. DonorsChoose owns an email list of past donors, some of whom we sent an email request for donation to aid either a teacher with the same surname as the donor or a teacher whose name did not match.

We implemented a form of two-group yoked design. From the population of potential donors whose name matched at least one teacher and who were not family relatives, potential donors were randomly assigned to one between-subjects condition. *Teachers* appeared exactly once in *each* condition. Thus the teachers (used as stimuli) were the same in each condition. All that varied between conditions was whether or not the teacher surname matched the donor surname. In order to facilitate this design, we first had to randomly reduce the size of the list to achieve a two-to-one ratio of donors to teachers. No deception was employed in our field experiment; all of the teachers were actual teachers requesting funding.

We sent an email including the teacher's name in the subject line to participants in each condition. The email asked donors to support a project led by the subject teacher, who shared a surname with the donor in the match condition but not in the non-match condition. The dependent measures were the count who opened the email, clicked on the link, and donated, and the donation amount.

The name match manipulation positively affected all measured outcomes. Name match email recipients were significantly more likely to open the email (35.1% vs. 27.6%; $\chi^2(1, N = 30,302) = 196.0, p < .001$) and to click on the link in the email (6.9% vs. 4.6%; $\chi^2(1, N = 30,302) = 69.4, p < .001$). Conditional on opening the initial email, the likelihood of clicking on the link was significantly greater in the name match condition (19.6% vs. 16.8%; $\chi^2(1, N = 9,497) = 12.1, p < .001$). Those in the name match condition were significantly more likely to donate than those in the non-name match condition ($\chi^2(1, N = 30,302) = 3.4, p = .004$), and on average they donated more than twice as much ($M = \$0.20, SD = \7.98) as those in the non-name match condition after a natural-log transformation ($M = \$0.09, SD = \$5.46; F(1, 30295) = 8.02, p = .005$).

However, as suggested elsewhere (Simonsohn 2011a), observed effects attributed to name matching could alternatively be due to in-group favoritism. That is, certain names convey lots of information about ethnicity, and people may be favoring their own ethnic group rather than favoring their own surname. While our data do not contain information about ethnicity, to attempt to control for this possibility we used data from the 2000 US census. The data set provides the percentage likelihood that each surname belongs to a particular ethnicity, including percentages for six ethnicities. We appended these percentages to our data for both the potential donor's surname and the corresponding teacher's surname.

To attempt to control for ethnicity matching, we examined the 88.8% of cases for which the most likely ethnicity of the potential donor matched the most likely ethnicity of the teacher. All our reported outcomes were robust to this selection criterion (all $ps < .02$). We found similar results when instead utilizing all ethnicity information in the census data and calculating Euclidean distances for each name-pair.

Within the non-match condition we also checked for name letter effects (Nuttin 1985), a standard paradigm of implicit egotism. By chance, 742 (6.1%) donor surnames in the non-match condition shared a first letter with the teacher. After selecting for ethnicity matching as above, the results provide consistent directional evi-

dence for small name letter effects on all variables and significant differences on opening the email ($\chi^2(1, N = 11,789) = 5.2, p = .023$) and average donation ($F(1,11787) = 3.93, p = .048$). By testing for name-letter effects in a randomized field experiment and controlling for ethnicity matching, we provide the most unbiased test of implicit egotism in the field to date.

Giving to Versus on Behalf of: Charitable Gift Requests Lead to Less Generous Giving

EXTENDED ABSTRACT

Gift registries requesting charitable donations in lieu of gifts have gained popularity, adding a new layer of magnanimity to the prosocial act of gift giving. At first glance, this seems like an optimal way to make both givers and receivers happy while raising a substantial amount of money for a good cause. First, since the recipients explicitly ask for a donation, one avoids the pitfall of a prosocial gift being underappreciated by receivers (Cavanaugh, Gino and Fitzsimons 2015). Further, by giving recipients exactly what they have requested (Gino and Flynn 2011) and not diverging from the registry (Ward and Broniarczyk 2016), recipients will be happier while givers have an easier task.

Yet how do givers respond to these requests? Does the type of registry influence how much money they give? One might assume that the amount a giver decides to spend on a gift should not be determined by the type of gift requested by the recipient—that is, whether the gift is *to* or *on behalf of* a recipient should not rationally influence the amount allotted to a wedding gift. However, this research demonstrates that gift givers give less money to charity registries than to cash registries. We propose that despite people explicitly considering contributions as their gift to a recipient, givers are less likely to view such a contribution as a true gift and therefore give an amount commensurate with what they consider a typical charitable donation. We test this effect across four studies.

In study 1, participants were asked to imagine they were invited to a close friend's wedding an hour away. They were told that the couple had requested no boxed wedding gifts, and instead had a cash registry fund and a charity registry fund. Participants were asked how much money they would give to each fund, allocating the money as they wished. We found that participants gave much less to the charity registry than to the cash registry ($M_{\text{Charity}} = \$61.10, M_{\text{Cash}} = \$130.08; F(1, 62) = 36.88, p < .0001$).

In study 2, we conceptually replicate the finding that participants give less to charity gift registries using a 2 (gift registry: charity, cash) \times 2 (recognition: public, not stated) between-subjects design. In a similar wedding scenario, participants imagined that they had been invited to a wedding and that the couple had registered for either donations for renovations to their local homeless shelter (charity registry) or cash for renovations to their home (cash registry). We also tested whether the effect would persist even when participants knew that their name and the amount of money they chose to give would be emailed to the couple (public recognition) to rule out perceived accountability to the couple as an alternative explanation. We found only a main effect of registry type ($F(1,184) = 11.59, p = .0008$). The effect of public recognition and the registry by recognition interaction were not significant ($ps > .61$). Charity registry participants gave less ($M_{\text{Public}} = \$57.45$ and $M_{\text{Not stated}} = \51.86) than those in the cash registry conditions ($M_{\text{Public}} = \$78.70$ and $M_{\text{Not stated}} = \77.26).

In study 3, we moderate our focal effect. We propose that people give less to charity (vs. cash) registries because they do not think of their donation as an actual wedding gift. Thus, we aimed to see if people would give more to the charity registry if we reminded

them of the amount of cash they typically give as a wedding gift beforehand. Participants were assigned to a 2 (gift registry: charity, cash) \times 2 (intervention: control, reminder) between-subjects design. In the control condition, participants read about a similar scenario as in study 2. Participants in the intervention condition were first presented with either a charity or cash reminder prior to the study: "How much do you think a person should give when they give a one-time charitable donation / wedding gift." Results revealed a significant interaction ($F(1, 291)=5.68, p=.02$). In the control condition, replicating prior studies, participants gave significantly less to the charity (vs. cash) registry ($M_{\text{Charity}}=\$59.29, M_{\text{Cash}}=\85.53). Yet, in the reminder condition, there was no longer a difference ($M_{\text{Charity}}=\$82.13, M_{\text{Cash}}=\76.97).

Finally, in study 4, we extend our effects to a baby shower registry and examine how registries that donate a proportion of money given (e.g., ECHOage) may influence the amount given. We also explicitly test for process. Participants were randomly assigned to one of five conditions in a between-subjects design that varied the amount going to charity: 0% (pure cash gift), 25%, 50%, 75% and 100% (pure charity gift). Participants imagined that their friend was having a baby and had put together a registry. For conditions 25% and above, participants learned that a certain percentage of their gift would go to a charity fund for the research and treatment of birth defects, an organization chosen by their friend. Participants were asked how much they intended to give and, to further test our proposed process that participants' perception that the amount given was a gift to the recipient (rather than a charitable donation), rated the extent to which they would feel like they were giving a gift. A one-way ANOVA revealed a marginal effect of amount ($F(4,591)=2.22, p<.07$): $M_{0\%}:\$43.96, M_{25\%}:\$44.96, M_{50\%}:\$48.98, M_{75\%}:\$44.98, M_{100\%}:\$36.52$). Replicating prior studies, participants gave marginally less in the pure cash (0%) vs. pure charity (100%) conditions ($p=.09$). Moreover, this difference was mediated by the degree to which they felt like they were giving a gift ($CI_{95\%} -9.06, -2.34$). Participants were also more willing to part with their money in the 50% versus pure charity (100%) condition ($p=.004$), revealing a quadratic effect ($p=.02$) as the charity amount increases.

Across these four studies, we find robust evidence that givers give less when a gift registry requests charitable donations than when they request cash. This effect persists even when it is clear that the couple will know how much givers had contributed and can be moderated by reminding participants that the donation is a form of a gift or by linking the gift amount to the charity amount.

"You Saved a Life": How Past Donation Use Increases Donor Reactivation via Impact and Warm Glow

EXTENDED ABSTRACT

Increasing competition and demographic changes are forcing non-profit organizations (NPOs) to focus on reactivation strategies for lapsed donors. Due to the pro-social nature of donations, NPOs cannot use monetary incentives which are usually used for customer win-back in commercial contexts (Homburg, Hoyer, and Stock 2007; Thomas, Blattberg, and Fox 2004; Tokman, Davis, and Lemon 2007). Research has demonstrated that in pro-social contexts, monetary incentives lead to crowding out of donor motivations (Benabou and Tirole 2006; Frey and Jegen 2001; Heyman and Ariely 2004). Consequently, NPOs need reactivation strategies that do not impair, but trigger motives that lead lapsed donors to re-donate. The need for reactivation strategies is high as donors are difficult to retain. For example, data from the German Red Cross Blood Donation Services show that dropout rates or active donors may go up to 17.8%.

In practice, NPOs often use mailings that acknowledge lapsed donors' past donations. Indeed, such practices are supported by literature on charitable behavior which has shown that recognition is an important motivator of donation behavior in general (Fisher and Ackerman 1998; Karlan and McConnell 2014; Supphellen and Nelson 2001; Wang and Tong 2015; Winterich, Mittal, and Acquino 2013). However, we still know little how recognition of past donations may affect donor reactivation. On the one hand, informing lapsed donors of the past donation use may increase transparency, and hence, donation impact, leading to higher reactivation. One of the main motivations for many donors is to help others, as evidenced by both the warm glow theory of giving (Andreoni 1990), as well as the impact theory of philanthropy (Duncan 2004). NPOs act as intermediaries and manage the transfer between donors and donation recipients, such that donors oftentimes are unsure of what happens with their donation (i.e., whether it was really used to help a person in need). On the other hand, information of past donation use may lead to licensing (Mazar and Zhong 2010). Literature on donor reactivation shows also limited insights on how information from past donation use may influence reactivation. Most of the studies investigate personalization of reactivation mailings based on information from past donations (e.g., amount of money donated). In some settings, such as after disasters, suggested donation amounts based on a lapsed donors' previous donation backfires (Ryzhov, Han, and Bradic 2016), whereas in general reactivation attempts such as giving requests, using the last donation amount in reactivation mailings increases reactivation behavior (Verhaert and Van den Poel 2011). However, there are no insights on how including the use (rather than personalized information from) past donations affects reactivation.

We propose that informing lapsed donors of their past donation use influences reactivation behavior positively, and that this effect is transmitted through a serial mediation via donation impact and warm glow. In a field experiment conducted in cooperation with the German Red Cross, we investigate the effectiveness of past donation use on reactivation behavior. We compare the influence of appeals based on past donation use to a best-practice mailing which simply acknowledges the past donation, as well as to a mailing based on future donation use. The results indicate that providing information on past donation use increases the probability of re-donation compared to both other appeal types.

In two online studies we replicate this effect for blood and monetary donations and investigate the psychological transmission mechanism behind it. We propose and demonstrate that the influence of past donation use on the intention to re-donate is transmitted through increased *warm glow*. Specifically, the transmission is a serial mediation, in which past donation use increases the perceived donation impact, then induces warm glow which translates into a higher intention to donate in future. Our results support the serial mediation for blood and monetary donations.

Our work provides much needed academic evidence and our results are relevant for managers and researchers alike. Our work contributes to the literature on donor reactivation, and more generally to literature on pro-social behavior. With respect to donor reactivation, we start first by linking literature on warm glow and donation impact with the literature on lapsed donor reactivation to show that warm glow is an important driver of donor reactivation. Specifically, we show that for donor reactivation purposes, it is not sufficient to merely incorporate personalized information from the past donation history, or acknowledge a past donation. NPOs should rather incorporate information that is able to increase the perceived donation impact, and the warm glow. Second, we add to the theoretical understanding of how different types of reactivation appeals work, and

expand the literature on how donation appeals can be utilized for reactivation strategies.

With respect to the literature on pro-social behavior, this study adds to the current stream of literature on the role of warm glow in pro-social processes. Current studies have shown how warm glow mediates service satisfaction for participants in a green program (Giebelhausen et al. 2016). We show that warm glow is an important motivator of re-donation behavior in reactivation campaigns and for pro-social behavior. In addition, our findings are also relevant for literature on recognition effects (Wang and Tong 2015; Winterich et al. 2013). We show how recognition should be framed in the reactivation context and describe the underlying process.

Lastly, our research also relates to the current research on customer win-back (Kumar, Bhagwat, and Zhang 2015; Pick et al. 2016), and shows how win-back strategies work in the pro-social context. Consequently, besides the academic relevance, our work is highly relevant for NPO managers. Our proposed strategy, which informs lapsed donors of their past donation use can be easily implemented by NPOs. Many NPOs rely on donor relationship systems, so that information from past donation use is easily available. In fact, blood donation services in Sweden have implemented this strategy (although not exclusively for lapsed donors) and inform donors on the use of their last donation.

Prevention versus Treatment: How Negative Emotion and Charitable Appeal Affect Donation Behavior

EXTENDED ABSTRACT

A consumer's decision of whether to donate to a charity is oftentimes driven by emotion (Andreoni 1990; Batson 1990). Prior research has focused largely on the role of negative emotion in shaping donation behavior, although a consensus has not been reached as to whether its effect is beneficial or detrimental (Andrade and Cohen 2007; Fisher, Vandenbosch, and Antia 2008).

We propose that these divergent findings are because most donations research has (1) examined negative emotion using a valence-based approach (i.e., negative mood) rather than an emotion-specific approach and (2) not considered how the charitable appeal (i.e., messaging used in a donation solicitation) may be received differently depending on a person's emotional state. This research is the first to examine each of these two factors concurrently. We chose to focus our efforts specifically on the effects of anger and sadness based on prior research showing that anger discourages helping (Polman and Kim 2013), whereas sadness encourages helping (Small and Verrochi 2009). Thus, prior research suggests that anger (sadness) will discourage (encourage) donations.

The current research challenges this conclusion by considering how each emotion might influence donations differently, depending on the type of charitable appeal used. We find that both anger and sadness potentially encourage donations. However, for this to occur, the charitable appeal must be framed in a way that matches the underlying function of each emotion. Specifically, we propose that anger should encourage donation behavior when the appeal emphasizes the prevention of the charitable cause (what is being done to stop victimization from occurring). This effect occurs because an underlying function of anger is to empower consumers to take corrective action (Frijda 2005). By contrast, we propose that sadness will encourage donation behavior when the appeal emphasizes the treatment of the cause (i.e., what is being done to manage the consequences of victimization). This effect occurs because an underlying function of sadness is to motivate consumers to foster social bonding (Keller and Nesse 2006). We tested these predictions in four studies.

Study 1 used a 3 (donors' emotional state: neutral, anger, sadness) x 2 (charitable appeal: prevention, treatment) between-subjects design. All participants read about histiocytosis (a life-threatening health disease). Emotion was manipulated via emotional contagion (Small and Verrochi 2009). Specifically, participants saw a picture and quote from a histiocytosis victim who either expressed anger, sadness, or neutrality about the diagnosis. Participants then received a donation solicitation from the Histiocytosis Association that either appealed to the prevention ("sponsoring medical research that would ultimately prevent this disease from claiming new victims") or treatment ("providing life-saving treatment and care to improve the well-being of victims") of histiocytosis. Donation behavior was assessed via the actual amount of money donated by participants (\$0-\$4). Results showed a significant interaction between the emotion and appeal factors ($F(2, 129) = 5.12, p < .01$). Participants in the anger (sadness) envy condition donated significantly more money when the appeal was framed in terms of the prevention (treatment) of the disease.

Study 2 provided process evidence for the hypothesized psychological mechanisms driving the interactive effect of a donor's emotional state and charitable appeal on donations. A 2 (donors' emotional state: anger, sadness) x 2 (charitable appeal: prevention, treatment) between-subjects design was used. The procedure was identical to study 1, except that once participants indicated their willingness to donate, they were asked two questions about the decision: (1) whether their decision was driven by the need to fix what is wrong (need for corrective action) and (2) whether their decision was driven by the need to feel close to others (need for social bonding). A significant interaction emerged between the emotion and appeal factors ($F(1, 137) = 11.44, p < .01$), replicating the results of study 1. Moderated mediation analyses revealed that the beneficial effect of anger (sadness) on donation behavior framed in terms of prevention (treatment) was mediated by a need for corrective action (need for social bonding).

We hypothesized that anger encourages donations under a prevention appeal because the act of donating addresses the need to take corrective action. If this is so, an opportunity to partake in corrective action prior to a solicitation may attenuate the positive effect of anger on donations. Study 3 examined this possibility using a 2 (need for corrective action: control, addressed) x 3 (donors' emotional state: neutral, anger, sadness) x 2 (solicitation orientation: prevention, treatment) between-subjects design. Emotions were manipulated by having participants watch a video pretested to either elicit anger, sadness, or neutrality. Next, participants in the need addressed condition wrote a letter to the university about a problem at their university and how it could be solved (control condition did not complete this task). Participants then received a donation solicitation that either focused on the prevention or treatment of Isiolo fever (described as a life-threatening fever). Results revealed a significant three-way interaction ($F(2, 290) = 3.15, p < .05$). The control condition replicated studies 1-2. In the action addressed condition, angry participants no longer donated more under a prevention (versus treatment) appeal.

Study 4 examined whether an opportunity to reaffirm one's social belongingness prior to a solicitation may attenuate the positive effect of sadness on donations. A 2 (need for belongingness: control, addressed) x 3 (donors' emotional state: neutral, anger, sadness) x 2 (solicitation orientation: prevention, treatment) between-subjects design was used. Emotion manipulation was identical to study 3. In the need addressed condition, participants wrote about a friendship they currently have and value (control condition did not complete this task). Results revealed a significant three-way interaction ($F(2, 289) = 3.26, p < .05$). The control condition replicated studies 1-2.

In the action addressed condition, sad participants no longer donated more under a treatment (versus prevention) appeal.

Collectively, this research contributes to the literatures on emotion, donation behavior, and prosociality. The findings illustrate how negative emotion has a more nuanced influence on donation behavior than previously thought. Finally, this research also highlights the importance of considering how the donation behavior of consumers may vary based on the appeal used by the charity.

REFERENCES

- Andrade, Eduardo B. and Joel B. Cohen (2007), "Affect-Based Evaluation and Regulation as Mediators of Behavior: The Role of Affect in Risk-Taking, Helping and Eating Patterns," in *Do Emotions Help or Hurt Decision Making: A Hedgefoxian Perspective*, ed. Kathleen Vohs, Roy Baumeister, and George Loewenstein, New York, NY: Russel Sage, 35–68.
- Andreoni, James (1990), "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving," *Economic Journal*, 100 (June), 464–77.
- Anseel, Frederik and Wouter Duyck (2008), "Unconscious Applicants: A Systematic Test of the Name-Letter Effect," *Psychological Science*, 19 (October), 1059–61.
- Batson, C. Daniel (1990), "How Social an Animal? The Human Capacity for Caring," *American Psychologist*, 45 (March), 336–346.
- Benabou, Roland and Jean Tirole (2006), "Incentives and Prosocial Behavior," *American Economic Review*, 96 (December), 1652–78.
- Bendapudi, Neeli, Surendra N. Singh, and Venkat Bendapudi (1996), "Enhancing Helping Behavior: An Integration Framework for Promotion Planning," *Journal of Marketing*, 60 (July), 33–49.
- Brendl, C. Miguel, Amitava Chattopadhyay, Brett W. Pelham, and Mauricio Carvallo (2005), "Name Letter Branding: Valence Transfers When Product Specific Needs Are Active," *Journal of Consumer Research*, 32 (December), 405–15.
- Burger, Jerry M, Nicole Messian, Shebani Patel, Alicia del Prado, and Carmen Anderson (2004), "What a Coincidence! The Effects of Incidental Similarity on Compliance," *Personality and Social Psychology Bulletin*, 30 (January), 35–43.
- Camber Collective (2015), *Money for Good 2015: Revealing the Voice of the Donor in Philanthropic Giving*, Seattle, Washington: Camber Collective.
- Cavanaugh, Lisa A., Francesca Gino, and Gavan J. Fitzsimons (2015), "When Doing Good Is Bad in Gift-Giving: Mispredicting Appreciation of Socially Responsible Gifts," *Organizational Behavior and Human Decision Processes*, 131 (November), 178–89.
- Chandler, Jesse, Tiffany M. Griffin, and Nicholas Sorensen (2008), "In the 'I' of the Storm: Shared Initials Increase Disaster Donations," *Judgment and Decision Making*, 3 (June), 404–10.
- Duncan, Brian (2004), "A Theory of Impact Philanthropy," *Journal of Public Economics*, 88 (August), 2159–80.
- Dyjas, Oliver, Raoul P. P. Grasman, Ruud Wetzels, Han L. J. van der Maas, and Eric-Jan Wagenmakers (2012), "What's in a Name: A Bayesian Hierarchical Analysis of the Name-Letter Effect," *Frontiers in Psychology*, 3 (September), 1–14.
- Fisher, Robert J. and David Ackerman (1998), "The Effects of Recognition and Group Need on Volunteerism: A Social Norm Perspective," *Journal of Consumer Research*, 25 (December), 262–75.
- Fisher, Robert J., Mark Vandenbosch, and Kersi D. Antia (2008), "An Empathy-Helping Perspective on Consumers' Responses to Fund-Raising Appeal," *Journal of Consumer Research*, 35 (October), 519–31.
- Frey, Bruno S. and Reto Jegen (2001), "Motivation Crowding Theory," *Journal of Economic Surveys*, 15 (December), 589–611.
- Frijda, Nico H. (2005), "Emotion Experience," *Cognition & Emotion*, 19 (June), 473–97.
- Gallucci, Marcello (2003), "I Sell Seashells by the Seashore and My Name Is Jack: Comment on Pelham, Mirenberg, and Jones (2002)," *Journal of Personality and Social Psychology*, 85 (November), 789–99.
- Garner, Randy (2005), "What's in a Name? Persuasion Perhaps," *Journal of Consumer Psychology*, 15 (2), 108–16.
- Giebelhausen, Michael, HaeEun Helen Chun, Joseph J. Cronin, and G. Tomas. M. Hult (2016), "Adjusting the Warm-Glow Thermostat: How Incentivizing Participation in Voluntary Green Programs Moderates Their Impact on Service Satisfaction," *Journal of Marketing*, 80 (July), 56–71.
- Gino, Francesca and Francis J. Flynn (2011), "Give Them What They Want: The Benefits of Explicitness in Gift Exchange," *Journal of Experimental Social Psychology*, 47 (September), 915–22.
- Guéguen, Nicolas, Nathalie Pichot, and Gwènaëlle Le Dreff (2005), "Similarity and Helping Behavior on the Web: The Impact of the Convergence of Surnames Between a Solicitor and a Subject in a Request Made by E-Mail," *Journal of Applied Social Psychology*, 35 (February), 423–29.
- Heyman, James and Dan Ariely (2004), "Effort for Payment: A Tale of Two Markets," *Psychological Science*, 15 (November), 787–93.
- Homburg, Christian, Wayne D. Hoyer, and Ruth Maria Stock (2007), "How to Get Lost Customers Back?," *Journal of the Academy of Marketing Science*, 35 (December), 461–74.
- Jones, John T., Brett W. Pelham, Mauricio Carvallo, and Matthew C. Mirenberg (2004), "How Do I Love Thee? Let Me Count the Js: Implicit Egotism and Interpersonal Attraction.," *Journal of Personality and Social Psychology*, 87 (November), 665–83.
- Kachersky, Luke (2011), "Do Moniker Maladies Afflict Name Letter Brands? A Dual Process Theory of Name Letter Branding and Avoidance Effects," *Journal of Experimental Social Psychology*, 47 (May), 642–46.
- Karlan, D. and M. A. McConnell (2014), "Hey Look at Me: The Effect of Giving Circles on Giving," *Journal of Economic Behavior & Organization*, 106 (October), 402–12.
- Keller, Matthew C. and Randolph M. Nesse (2006), "The Evolutionary Significance of Depressive Symptoms: Different Adverse Situations Lead to Different Depressive Symptom Patterns," *Journal of Personality and Social Psychology*, 91 (August), 316–30.
- Kumar, V., Yashoda Bhagwat, and Xi (Alan) Zhang (2015), "Regaining "Lost" Customers: The Predictive Power of First-Lifetime Behavior, the Reason for Defection, and the Nature of the Win-Back Offer," *Journal of Marketing*, 79 (July), 34–55.
- Liang, Jianping, Zengxiang Chen, and Jing Lei (2016), "Inspire me to Donate: The Use of Strength Emotion in Donation Appeals," *Journal of Consumer Psychology*, 26 (April), 283–88.

- Mazar, Nina and Chen-Bo Zhong (2010), "Do Green Products Make Us Better People?" *Psychological Science*, 21 (April), 494–98.
- McCullough, B. D. and Thomas McWilliams (2010), "Baseball Players with the Initial 'K' Do Not Strike out More Often," *Journal of Applied Statistics*, 37 (6), 881–91.
- Nelson, Leif D. and Joseph P. Simmons (2007), "Moniker Maladies: When Names Sabotage Success," *Psychological Science*, 18 (December), 1106–12.
- Nuttin, Jozef M. (1985), "Narcissism beyond Gestalt and Awareness: The Name Letter Effect," *European Journal of Social Psychology*, 15 (July/September), 353–61.
- Oates, Kerris and Margo Wilson (2002), "Nominal Kinship Cues Facilitate Altruism," *Proceedings of the Royal Society B: Biological Sciences*, 269 (January), 105–9.
- Pelham, Brett W. and Mauricio Carvalho (2015), "When Tex and Tess Carpenter Build Houses in Texas: Moderators of Implicit Egotism," *Self and Identity*, 14 (6), 692–723.
- Pelham, Brett W., Matthew C. Mirenberg, and John T. Jones (2002), "Why Susie Sells Seashells by the Seashore: Implicit Egotism and Major Life Decisions.," *Journal of Personality and Social Psychology*, 82 (April), 469–87.
- Pick, Doreen, Jacquelyn S. Thomas, Sebastian Tillmanns, and Manfred Krafft (2016), "Customer Win-Back: The Role of Attributions and Perceptions in Customers' Willingness to Return," *Journal of the Academy of Marketing Science*, 44 (March), 218–40.
- Polman, Evan and Sharon H. Kim (2013), "Effects of Anger, Disgust, and Sadness on Sharing with Others," *Personality and Social Psychology Bulletin*, 39 (December), 1683–92.
- Polman, Evan, Monique M. H. Pollmann, and T. Andrew Poehlman (2013), "The Name-Letter-Effect in Groups: Sharing Initials with Group Members Increases the Quality of Group Work," *PLoS ONE*, 8 (11): e79039.
- Ryzhov, Ilya O., Bin Han, and Jelena Bradic (2016), "Cultivating Disaster Donors Using Data Analytics," *Management Science*, 62 (March), 849–66.
- Simonsohn, Uri (2011a), "Spurious? Name Similarity Effects (Implicit Egotism) in Marriage, Job, and Moving Decisions," *Journal of Personality and Social Psychology*, 101 (July), 1–24.
- (2011b), "Spurious Also? Name-Similarity Effects (Implicit Egotism) in Employment Decisions," *Psychological Science*, 22 (August), 1087–89.
- Small, Deborah A. and Nicole M. Verrochi (2009), "The Face of Need: Facial Emotion Expression on Charity Advertisements," *Journal of Marketing Research*, 46 (December), 777–87.
- Supphellen, Magne and Mark R. Nelson (2001), "Developing, Exploring, and Validating a Typology of Private Philanthropic Decision Making," *Journal of Economic Psychology*, 22 (October), 573–603.
- Thomas, Jacquelyn S., Robert C. Blattberg, and Edward J. Fox (2004), "Recapturing Lost Customers," *Journal of Marketing Research*, 41 (February), 31–45.
- Tokman, Mert, Lenita A. Davis, and Katherine N. Lemon (2007), "The WOW Factor: Creating Value Through Win-Back Offers to Reacquire Lost Customers," *Journal of Retailing*, 83 (1), 47–64.
- Verhaert, Griet Alice and Dirk Van den Poel (2011), "Improving Campaign Success Rate by Tailoring Donation Requests along the Donor Lifecycle," *Journal of Interactive Marketing*, 25 (February), 51–63.
- Wang, Xia and Luqiong Q. Tong (2015), "Hide the Light or Let it Shine? Examining the Factors Influencing the Effect of Publicizing Donations on Donors' Happiness," *International Journal of Research in Marketing*, 32 (December), 418–24.
- Ward, Morgan K. and Susan M. Broniarczyk (2016), "Ask and You Shall (Not) Receive: Close Friends Prioritize Relational Signaling Over Recipient Preferences in Their Gift Choices," *Journal of Marketing Research*, 53 (December), 1001–18.
- Winterich, Karen Page, Vikas Mittal, and Karl Aquino (2013), "When Does Recognition Increase Charitable Behavior? Toward a Moral Identity-Based Model," *Journal of Marketing*, 77 (May), 121–34.

Depends on Your Frame of Mind: The Wide-Ranging Effects of Framing on Judgments, Decisions, and Behaviors

Chairs: Michael O'Donnell, University of California, Berkeley, USA

Alice Moon, Disney Research, USA

Paper #1: Elicitation Dependent Preference Reversals Over Consumer Goods

Michael O'Donnell, University of California, Berkeley, USA

Ellen R.K. Evers, University of California, Berkeley, USA

Paper #2: Attribute Matching Increases Confidence

Hannah Perfecto, Washington University in St. Louis, USA

Jeff Galak, Carnegie Mellon University, USA

Joseph P. Simmons, University of Pennsylvania, USA

Leif D. Nelson, University of California, Berkeley, USA

Paper #3: Psychological Framing as an Effective Approach to Real-life Persuasive Communication

Sandra Matz, University of Cambridge, USA

Michal Kosinski, Stanford University, USA

David Stillwell, University of Cambridge, USA

Gideon Nave, University of Pennsylvania, USA

Paper #4: Choosing or Creating? Framing Choices as Design Processes Increases Perceived Customization of Products

Alice Moon, Disney Research, USA

Maarten Bos, Disney Research, USA

SESSION OVERVIEW

Our session looks at novel framing effects in consumer decision-making. The first paper demonstrates that depending on how questions about consumer preference are framed, consumers seem to express contradictory preferences for hedonic and utilitarian goods. The second paper provides evidence that framing decision types to match decision domains allows consumers to feel more confident in their decisions. The latter two papers apply framing effects to marketplace settings. In the third paper, the authors illustrate that framing Facebook advertisements to match a consumer's personality profile increases advertisement effectiveness. Finally, the fourth paper demonstrates that framing decisions over pre-assembled choice sets as design processes can increase consumer utility.

In both hypothetical and incentive-compatible settings, O'Donnell and Evers demonstrate that consumers indicate different preferences for hedonic and utilitarian goods depending on the elicitation method (i.e., how they are asked). Specifically, consumers choose hedonic goods, but pay more for utilitarian goods. These findings indicate that varying elicitation methods can induce consumers to maximize on distinct product dimensions, yielding fundamentally different expressed preferences.

Perfecto, Galak, Simmons, & Nelson demonstrate that consumer confidence can be affected by whether a decision is framed in an attribute-consistent (e.g., choose positive or reject negative) or -inconsistent (e.g., choose negative or reject positive) way. That is, consumers who choose from positive or reject from negative options feel more confident about their decisions. On the other hand, consumers who are asked to make an attribute-inconsistent decision express less confidence about their decisions. Critically, these findings demonstrate that by merely framing a decision in an attribute consistent way, consumer can feel significantly more confident about their decisions.

Matz, Bos, Stillwell, and Kosinski show that framing based on personality predictions from digital footprints can increase the ef-

fectiveness of Facebook advertising campaigns. When marketing messages were framed to match the audience's personality, conversion rates (number of purchases) were up to 100% higher. Beyond personality-matched messages, Matz and colleagues also show that one can predict the appeal of images for individuals with different personalities using automated feature extraction and machine learning algorithms. These estimates of personality appeal can then predict liking of new images as well as brand attitudes and purchase intentions.

Moon and Bos demonstrate that choice framing can also influence consumer judgments. Consumers enjoy customization. The authors investigated whether product decisions can be framed to make consumers feel as though their product is customized, even when it is not. Across several studies, presenting decisions as a design process (versus a simple choice) leads to greater perceived customization. The authors distinguish between several explanations and find that multi-stage processes increase the feeling that the consumer designed the product themselves, thereby increasing perceived customization.

Taken together, this session demonstrates the powerful effects of framing in the consumer decision-making process at multiple critical junctures. From the development and elicitation of preferences (O'Donnell & Evers) to evaluating decision outcomes (Perfecto et al.) and within digital (Matz et al.) and physical marketplaces (Moon & Bos), differential decision frames can be used to elicit more desirable outcomes.

Elicitation Dependent Preference Reversals Over Consumer Goods

EXTENDED ABSTRACT

If a person is willing to pay more for trash bags than for ice cream, the axiom of procedure invariance in preference elicitation holds that, if given a choice between the two, she should also choose the trash bags. These procedures should yield the same result – they are thought to be tapping an intrinsic preference, with differences in procedure representing different frames of the same decision. To choose otherwise implies a preference reversal, and a violation of procedure invariance (Tversky, Slovic, & Kahneman, 1990).

Despite this violation of rational choice theory, we find that participants show preference reversals in numerous studies, seven of which we detail here. Specifically, we find that when a decision is framed as a choice between two goods, participants appear to mostly rely on their affective responses to the choice options (Slovic et al., 2007), while they engage in a more deliberative weighting strategy when a decision is framed as one requiring them to indicate WTP. These reversals cannot be explained by scale compatibility, which has been cited as the mechanism for other instances of preference reversals (Tversky, Slovic, & Kahneman, 1990).

In Study 1a-c, we randomly assigned participants to indicate WTP or choose between different pairs of consumer goods (in 1a, trash bags and ice cream; 1b, a pen and chocolate; 1c, toilet paper and ice cream). In Study 1a, 82.6% of participants in the WTP condition preferred the trash bags, while only 27.7% did so in the choice condition. This difference is significant, $X^2(1, 289) = 87.13, p < .001$. In Study 1b, 25.6% of participants in the WTP condition prefer the pen, whereas 12.5% in the choice condition prefer the pen. This differ-

ence is significant, $X^2(1, 186) = 5.18, p = .02$. In Study 1c, 89.59% of participants in the WTP condition prefer the toilet paper, whereas 49.48% in the choice condition prefer the toilet paper. This difference is significant, $X^2(1, 193) = 36.55, p < .001$. Together, through Studies 1a-1c, we consistently demonstrate that participants show preference reversals, with expressed preferences depending on whether preference elicitation is framed as choice or willingness to pay.

Next, we carried out an experiment in an incentive compatible setting, using real money and real products. In Study 2, we recruited 612 participants; half of the participants were given \$2 cash, and we used the BDM method to elicit WTP for a tube of toothpaste and a chocolate bar. The other half of the participants chose between toothpaste and chocolate. In this incentivized study we still find evidence for preference reversals – whereas 52.4% of participants preferred toothpaste in the WTP condition, only 40.6% did in the choice condition, $X^2(1, 564) = 7.86, p = .005$.

We then sought to test whether differences in expressed preference are due to expressing preference a binary decision in the choice condition versus indicating a continuous measure of price in the WTP condition. To rule out this explanation, and bolster support for our affect driven hypothesis, we added two new conditions. In addition to choice and WTP, we added an attractiveness condition and a WTP-dichotomous condition. In the attractiveness condition, participants rate each product on a 20-point continuous measure of attractiveness; while in the WTP-dichotomous condition participants selected the good they would be willing to pay more for. We expected results in the attractiveness condition to resemble the choice condition, and, results in the WTP-dichotomous condition to resemble the WTP condition. Participants in the choice and attractiveness conditions preferred trash bags the least, 26.72% and 16.55%, respectively. However, participants in the WTP and WTP-dichotomous conditions preferred trash bags at a greater rate than either of the affect-driven conditions, 84.35% and 50% respectively. Replicating the basic preference reversal effect, the comparison between the choice and WTP conditions is significant, $X^2(1, N = 278) = 93.99, p < .001$. Moreover, the WTP-dichotomous condition differs significantly from the WTP $X^2(1, N = 283) = 38.22, p < .001$, choice $X^2(1, N = 267) = 15.27, p < .001$, and attractiveness conditions, $X^2(1, N = 281) = 35.65, p < .001$. The attractiveness condition differs from the WTP $X^2(1, N = 292) = 134.25, p < .001$, pay more $X^2(1, N = 281) = 35.65, p < .001$, and choice conditions $X^2(1, N = 276) = 4.23, p = .04$. Taken together, we see that preference elicitation methods that are framed as affective responses yield stronger preferences for hedonic goods, whereas elicitation methods that are less affective tend not to see as strong a preference for hedonic products.

Finally, we tested our hypothesis that participants utilize a more elaborative process when indicating WTP (as compared to making choices) by asking participants to deliberate. We expected this to attenuate the difference between the WTP and choice conditions. In Study 3, we recruited 402 participants from MTurk and assigned them to one of four conditions in this 2 (WTP vs. choice) \times 2 (control vs. deliberation) between subjects design. Using a logistic regression, we found a main effect of elicitation method, $z = 7.76, p < .001$. Consistent with our prediction, we found an interaction between elicitation method and deliberation, $z = 1.89, p = .059$. Probing this, we find that in the WTP conditions, participants did not differ based on whether they deliberated, 81% of participants in the non-deliberation condition and 82.9% in the deliberation condition preferred the trash-bags, $X^2(1) = .13, p = .72$. However, in the choice conditions, participants who deliberated were more likely to choose the trash bags (44.2%) compared to participants who did not deliberate (27.3%), $X^2(1) = 11.39, p = .001$.

These studies question the idea that consumers have stable preferences that are insensitive to elicitation method. At a minimum, the results indicate that WTP and choice are not equivalent measures of preference, despite their usage in research. More significantly, they indicate that when consumers indicate preferences over goods; differential framing of a decision-making task yields fundamentally different preferences.

Attribute Matching Increases Confidence

EXTENDED ABSTRACT

A wide variety of factors affect consumers' confidence in their decisions. Some of these are more objective—such as the quality and quantity of information available—whereas others are more subjective, involving feelings coming from how the decision was made. This latter category has spawned a number of literatures investigating these psychological determinants of confidence. Work on fluency, for example, has shown that making a decision feel easier increases confidence (e.g., Kelley & Lindsay 1993). Similarly, work on regulatory fit, suggests that using a decision strategy that “fits” with one's current mode of thinking increases motivation and certainty regarding one's choice (e.g., Higgins 2000).

In the present paper, we expand upon these two literatures and propose that attribute matching can also elicit these psychological effects on confidence. Rather than focusing primarily on how people approach the stimuli (as does regulatory fit) or on the stimuli themselves (as does fluency), we suggest this “feeling of rightness” that increases confidence can be more general, coming from either source, or both. Across five studies, we manipulate salient attributes of the decision frame and options so that participants do or do not experience attribute matching, and find higher reported confidence when they do. In addition, we show this increase in confidence has downstream consequences for consensus estimates, and is mediated by metacognitive ease.

Study 1 (N=306) demonstrates this basic effect. Participants were shown 16 pairs of women's faces—8 were pretested to be attractive (positive valence), 8 were pretested to be unattractive (negative valence)—and asked to select a face from each pair for a hypothetical advertising campaign. To make this choice, half of participants were asked which face of the pair they would choose (positive valence) and half were asked which face of the pair they would reject (negative valence; Shafir 1993). After each choice, participants reported how confident they were in their preference on a 9-point scale and what percentage of other respondents would also make that choice. The predicted interaction obtained: when the valence of the stimuli matched the valence of the decision frame (i.e., for both attractive/choose and unattractive/reject), confidence was significantly higher than in mismatched conditions ($t_s > 12.11, p_s < .001$), with confidence mediating consensus.

Study 2 (N=302) extends this phenomenon to multiple levels of attribute intensity, again with valence. Participants evaluated 20 pairs of words that were pretested to be very positive (e.g., love), slightly positive, slightly negative, or very negative (e.g., vomit). As in Study 1, half were asked which word they would choose and half were asked which they would reject. Again, after each choice, participants reported their confidence and consensus estimates. Replicating Study 1 and in line with our predictions, we found a strong linear relationship between the intensity of the attribute match and confidence and consensus ($t_s > 16.67, p_s < .001$), as well as confidence mediating consensus.

Study 3 (N=406) moves beyond valence and preferences to a more objective domain. Participants evaluated 6 pairs of foods, pre-

tested to be perceived as very high or very low in calories. Half of participants were asked which food has more calories and half were asked which food has fewer calories. As in Studies 1-2, participants reported their confidence and consensus estimates after each trial. In line with previous results, on matched trials (i.e., reporting which high-calorie food has more calories or which low-calorie food has fewer), participants reported higher confidence and consensus estimates than on mismatched trials ($t_s > 4.70$, $p_s < .001$), with confidence mediating consensus.

Having established the basic effect and one downstream consequence, in Studies 4 and 5, we move to confirm our “feeling right” mediator. Study 4 ($N=300$) replicates Study 2, but with only the 10 very positive and very negative word pairs. Additionally, participants reported how easy the choice seemed on a 7-point scale before reporting confidence and consensus ratings. In addition to replicating our matching effect on confidence and consensus ($t_s > 9.77$, $p_s < .001$), we found these feelings of ease fully mediating both effects.

Study 5 ($N=500$) employs an alternative approach to test our proposed mediator: debiasing. If participants are alerted to this irrelevant source of decision ease, then they should correctly attribute it to the manipulation, rather than their own confidence. Using the 10 positive and negative word pairs and choose/reject manipulation from Study 1, half of participants were told that the valence of the question and choices may impact how easy choosing felt, after choosing but before providing confidence and consensus estimates. Control participants did not receive this additional text and replicated our standard matching effect in confidence and consensus. Critically, debiased participants did not, and, in fact, showed an unpredicted reversal (3-way interaction: $t_s > 9.0$, $p_s < .001$).

Together, these five studies show a highly consistent pattern: attribute matching increases confidence ratings (which, in turn, increase consensus estimates) because matched-attribute decisions foster metacognitive ease, a sense of “feeling right.” We find this pattern emerges not only for questions of preference, where intuition would be leaned on the most, but also for questions that have a correct answer. We look forward to future research investigating other types of matching effects in judgment.

Psychological Framing as an Effective Approach to Real-life Persuasive Communication

EXTENDED ABSTRACT

Past research suggests that persuasive communication is more effective when messages are tailored to a consumer’s psychological profile (e.g. Hirsh, Kang, and Bodenhausen 2012). For example, matching computer-generated advice to consumers’ dominance level elicited higher ratings of source credibility, and increased the likelihood of consumers changing their initial opinions in response to the advice (Moon 2002). While the effectiveness of using psychological matching in persuasive communication is well-established in controlled laboratory studies, the questionnaire-based nature of psychological assessment has hindered the application and evaluation of such technologies in the real world. Consequently, the effectiveness and practical feasibility of psychographic persuasion outside the lab is questionable.

Recent research, however, suggests that consumers’ psychological traits can be predicted from digital records such as personal websites, Twitter messages or Facebook profiles (e.g. Kosinski, Stillwell, and Graepel 2013; Park et al. 2014). Hence, our digital records might disclose information that goes beyond merely *what we do*, and provide insights into *who we are*, making questionnaire measures obsolete.

Capitalizing on this new form of *digital psychometrics*, we conducted two large-scale field experiments showing that matching marketing messages to consumers’ dominant personality trait increases clicks and conversions. Our experiments were conducted using the Facebook advertising platform. As of now, the Facebook advertising platform does not allow marketers to directly access Facebook users’ digital footprints or to target them based on their psychological traits. However, it does so indirectly by offering the possibility to target users based on their Facebook Likes. Suppose, for example, that liking “Lady Gaga” on Facebook correlates with the personality trait of extroversion, and liking “Philosophy” goes hand-in-hand with introversion. By targeting consumers associated with each of these Likes, one can, in fact, target extroverted and introverted consumer segments.

We used the outlined approach to target individuals based on their psychological traits of Extroversion in Study 1 and Openness-to-experience in Study 2 (McCrae and John 1992). Using the mypersonality.org database (Kosinski et al. 2015), which contains the Facebook Likes of millions of users alongside their scores on the 100-item IPIP personality questionnaire, we selected 10 Likes characterized by the highest and 10 Likes characterized by the lowest aggregate extroversion and openness scores. These Like-sets were then used in the “Interest” section of the Facebook advertising platform to define our consumer segments (we validated the feasibility of this approach).

We used psychographic targeting to promote the online shop of a large UK-based beauty retailer in Study 1 and two apps available on the Google play store in Study 2. Professional content creators developed ads that were specifically tailored to the psychological characteristics and needs of our target audiences. Using a 2 (Ad personality: low vs. high trait) \times 2 (Audience personality: low vs. high trait) between-subjects, full-factorial design, we promoted the products in real Facebook advertising campaigns

Together, the campaigns reached 3,214,169 users and attracted 11,476 clicks, and 890 conversions (either purchases on the beauty retailer’s website or downloads from the Google Play store). For both studies, we conducted hierarchical logistic regression analyses for clicks (click = 1, no click = 0) and conversions (conversion = 1, no conversion = 0), using the Audience personality, the Ad personality and their two-way interaction as predictors. Confirming our hypothesis, the interaction between Audience personality and Ad personality was highly significant for conversions in both studies (Study 1: $z = 4.30$, $p < 0.001$; Study 2: $z = 3.35$, $p < 0.001$). These effects were robust after controlling for age and its interactions with ad personality, indicating that psychographic targeting adds value above and beyond demographic targeting. Averaged across the two studies, users in the congruent conditions were 1.43 times more likely to convert (purchase from the online store or download the app) than users in the incongruent conditions. While there was a significant interaction effect on CTR in Study 2 ($z = 3.35$, $p < 0.001$), there was no significant interaction effect in Study 1 ($z = 0.07$, $p = 0.943$).

The results of the two studies provide converging evidence for the practical feasibility and effectiveness of psychographic targeting in the real world. By tailoring the marketing messages for the exact same product to the psychological characteristics and needs of user groups, we were able to significantly increase the number of conversions and clicks (in the Openness campaign only) of two marketing campaigns on Facebook. Although we focused on only two psychological traits, namely extroversion and openness, previous laboratory studies suggest that similar results could be achieved with other psychological characteristics such as regulatory focus (Cesario, Grant, and Higgins 2004) or need for cognition (Wheeler, Petty, and Bizer 2005).

The capacity to carry out psychographic targeting in the real world highlights several opportunities as well as ethical challenges. On one hand, personalized communication in the form of psychographic targeting offers a way to alleviate the problem of choice overload (Schwartz and Ward 2004) by prioritizing content that is likely to be of interest to individual users. In addition, there is plenty of evidence that psychologically-customized health messages are effective in changing behaviors among patients and groups that are at risk (Noar, Benac, and Harris 2007) it is currently not known if or to what extent tailoring works. The current study provides a meta-analytic review of this literature, with a primary focus on the effects of tailoring. A comprehensive search strategy yielded 57 studies that met inclusion criteria. Those studies-which contained a cumulative $N = 58,454$ -were subsequently meta-analyzed. The sample size-weighted mean effect size of the effects of tailoring on health behavior change was found to be $r = .074$. Variables that were found to significantly moderate the effect included (a. On the other hand, psychographic targeting could be used to exploit “weaknesses” in a person’s character. For example, the same technique that we used could be applied to identify and target individuals who are prone to compulsive or addictive behavior, e.g. targeting online casino advertisements at individuals who have psychological traits associated with pathological gambling.

Choosing or Creating? Framing Choices as Design Processes Increases Perceived Customization of Products

EXTENDED ABSTRACT

Consumers enjoy customization (e.g., Valenzuela, Dhar, & Zetelmeyer, 2009; Huffman & Kahn, 1998). However, producing customized products can be costly for companies. As a solution, many companies have opted for mass customization (mass producing different versions of a product to suit individual wants and needs), which allows consumers to choose a personal product while still keeping the number of options - and therefore production costs - low. Is mass customization a successful strategy? That is, can mass produced products *feel* customized?

Past research has shown that physically building products (e.g., IKEA furniture) allows consumers to feel as though their product is uniquely theirs, thus increasing valuation of their built products (Norton, Mochon, & Ariely, 2012). Extending this research, we hypothesized that merely framing decisions in certain ways could lead consumers to feel as though their product is uniquely made for them. Specifically, we examined whether framing a product decision as a multi-stage selection process (choosing one attribute then another) versus a simple choice would lead to increases in perceived customization. We conducted a series of studies in a context in which customization is particularly valued: the realm of gift-giving (e.g., Moreau, Bonney, & Herd, 2011).

Study 1

One hundred ninety-nine participants were asked to imagine that they were purchasing a gift for a friend. In the Choice condition, participants were asked to choose between 6 mugs that varied by 3 colors and by 2 designs. In the Create condition, participants were first shown a blank mug. They were then asked to choose one of the 3 colors for the mug, followed by one of the 2 designs for the mug. The available options were the exact same options as in the Choice condition. The dependent variable was how customized the mug seemed on an 11-point scale (0=Not at all customized; 10=Extremely customized).

Results

Supporting our hypothesis that a multi-stage selection process would increase perceived customization, participants in the Create condition felt that their mug was more customized ($M=5.88$; $SD=2.58$) than participants in the Choice condition ($M=3.95$; $SD=2.79$), $t(197)=5.06$, $p<.001$.

Study 2

One difference between the Choice and Create conditions in Study 1 is that the Create condition required making more than one choice (color then design). Although we believed that the increased perceived customization was due to feeling like they were creating the mug, we tested this alternative hypothesis in Study 2 ($N=301$) by including a third condition (Filter condition) in which participants filtered the options (i.e., *rejected* by color, then by design) they did not want. The Filter condition thus included the action of making multiple choices, but rather than engendering the feeling of creating a product, the Filter condition was intended to engender the feeling of discarding products. We used the same stimuli as in Study 1, and in the Filter condition, participants were asked to reject 2 of the 3 colors for the mug, then reject one of the 2 designs of the mug. Again, the available options were the exact same options as in the other two conditions, and the dependent variable was how customized the mug seemed on an 11-point scale.

Results

Replicating Study 1, participants in the Create condition felt that their mug was more customized ($M=6.09$; $SD=2.44$) than participants in the Choice condition ($M=3.06$; $SD=2.69$), $t(200)=8.39$, $p<.001$. Participants in the Filter condition ($M=5.12$; $SD=2.78$) fell in between the Create condition, $t(198)=2.62$, $p<.01$, and the Choice condition, $t(198)=5.33$, $p<.001$. This suggests that although making multiple choices increases perceived customization, the multi-stage selection process increased perceived customization beyond simply making multiple choices.

Study 3

Why does this creation process increase perceived customization? Past research on customization has pointed to one particular mechanism: the “I designed it myself” feeling (e.g., Franke, Schreier, & Kaiser, 2010). Study 3 ($N=199$) aimed to replicate our effect and investigate our proposed mechanism: how much participants felt they had designed the product themselves on a 7-point scale (1=Not at all; 7=Very much).

Results

Replicating Studies 1 and 2, participants in the Create condition felt that their mug was more customized ($M=5.52$; $SD=2.69$) than participants in the Choice condition did ($M=2.83$; $SD=2.71$), $t(197)=7.06$, $p<.001$.

Consistent with our hypotheses, participants in the Create condition felt more like they designed the mug themselves ($M=4.41$; $SD=1.62$) compared to participants in the Choice condition ($M=2.82$; $SD=1.90$), $t(197)=6.36$, $p<.001$. Importantly, feeling as though they designed the product themselves partially mediated the influence of the condition on perceived customization – that is, the indirect effect was significant (95% CI: [1.12, 2.37]).

When shopping for products, consumers are increasingly valuing not only a wealth of options but also options that feel customized to their wants and needs. We find that merely changing the way choice options are presented influences consumers’ perceived customization. Across three studies, we found that framing a product decision as a multi-stage selection process (versus a simple choice)

increased how much people felt they designed the product themselves, which in turn, increased their perceived customization of the product. Discussion will focus on consequences of perceived customization for consumers and marketers.

REFERENCES

- Cesario, Joseph, Heidi Grant, and E Tory Higgins (2004), "Regulatory fit and persuasion: transfer from 'Feeling Right'.", *Journal of personality and social psychology*, 86 (3), 388–404.
- Franke, N., Schreier, M., & Kaiser, U. (2010). The "I designed it myself" effect in mass customization. *Management science*, 56, 125-140.
- Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist*, 55, 1217-1230.
- Hirsh, Jacob B, Sonia K Kang, and Galen V Bodenhausen (2012), "Personalized persuasion: tailoring persuasive appeals to recipients' personality traits.," *Psychological science*, 23 (6), 578–81.
- Huffman, C., & Kahn, B. E. (1998). Variety for sale: Mass customization or mass confusion?. *Journal of retailing*, 74, 491-513.
- Kelley, C. M., & Lindsay, D. S. (1993). Remembering mistaken for knowing: Ease of retrieval as a basis for confidence in answers to general knowledge questions. *Journal of Memory and Language*, 32, 1-24.
- Kosinski, Michal, Sandra C Matz, Samuel D Gosling, Vess Popov, and David Stillwell (2015), "Facebook as a Research Tool for the Social Sciences," *American Psychologist*, 70 (6), 543–56.
- McCrae, R R and O P John (1992), "An introduction to the five-factor model and its applications.," *Journal of personality*, 60 (2), 175–215.
- Mochon, D., Norton, M. I., & Ariely, D. (2012). Bolstering and restoring feelings of competence via the IKEA effect. *International Journal of Research in Marketing*, 29(4), 363-369.
- Moon, Youngme (2002), "Personalization and Personality: Some Effects of Customizing Message Style Based on Consumer Personality," *Journal of Consumer Psychology*, 12 (4), 313–26.
- Moreau, C. P., Bonney, L., & Herd, K. B. (2011). It's the thought (and the effort) that counts: How customizing for others differs from customizing for oneself. *Journal of Marketing*, 75(5), 120-133.
- Noar, Seth M, Christina N Benac, and Melissa S Harris (2007), "Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions.," *Psychological bulletin*, 133 (4), 673–93.
- Norton, M. I., Mochon, D., & Ariely, D. (2012). The 'IKEA effect': When labor leads to love. *Journal of Consumer Psychology*, 22, 453-460.
- Park, Gregory, Ha Schwartz, Jc Eichstaedt, Margaret L. Kern, Michal Kosinski, David Stillwell, Lyle H Ungar, and Martin E P Seligman (2014), "Automatic Personality Assessment Through Social Media Language.," *Journal of personality and social psychology*, 108 (6), 934–52.
- Schwartz, Barry and Andrew Ward (2004), "Doing better but feeling worse: The paradox of choice," in *Positive psychology in practice*, A. P. Linley and S. Joseph, eds., Hoboken, NJ: John Wiley & Sons, Inc, 86–104.
- Shafir, E. (1993). Choosing versus rejecting: Why some options are both better and worse than others. *Memory & Cognition*, 21, 546-556.

Your Money or Your *Time*: How Consumers Perceive and Respond to Constraints and Tradeoffs in Money and Time

Chairs: Christopher Y. Olivola, Carnegie Mellon University, USA
John J. Han, Carnegie Mellon University, USA
Yana Litovsky, Carnegie Mellon University, USA

Paper #1: Consumers Overestimate Others' Willingness to Pay AND Wait for Goods: New Findings and Insights Concerning the "X-Effect" Bias

Christopher Y. Olivola, Carnegie Mellon University, USA
John J. Han, Carnegie Mellon University, USA

Paper #2: Subjective Resource Deprivation: Consumers Feel More Constrained For Spare Resources Than Similar Others

Jonathan Z. Berman, London Business School, UK
Nazli Gurdamar, London Business School, UK

Paper #3: The Resource Focus Effect Nudging Consumer Preferences in Time-Money Tradeoffs

Yana Litovsky, Carnegie Mellon University, USA
Christopher Y. Olivola, Carnegie Mellon University, USA

Paper #4: How Do Wealth and Time Horizon Affect Investors' Risk Tolerance? Evidence from the Field

Ethan Pew, Stony Brook University, USA

SESSION OVERVIEW

Time and money are two of the most important, yet frustratingly scarce, resources that consumers have at their disposal. In fact, most of the tradeoffs we face involve expenditures or savings of time and/or money. For example, we spend money purchasing desired goods and time enjoying those purchases. Conversely, we save money by switching to cheaper products and time by paying others to do time-consuming things for us (e.g., food delivery services). We therefore need to understand how consumers perceive their (relative) access to these two resources. An equally important goal, given their scarcity, is understanding how consumers approach trade-offs involving money and time.

The four papers in this session present a variety of new findings and novel insights into consumers' beliefs, attitudes, and preferences regarding time and money as scarce resources. At the same time, they all address the same broad, yet important, questions: Do consumers treat time and money similarly or differently? How do they perceive and navigate fundamental tradeoffs and constraints in these two resources?

The first two papers compare perceptions and preferences concerning access to time and money resources, for self versus other. First, Olivola and Han examine the 'X-effect'—the tendency for people to assume others are willing to pay more for goods than they are—and show that it extends to time: they find that people also believe others are willing to wait longer (in line) to obtain free products. They further show that the X-effect is not due to self-other discrepancies in time/money opportunity cost considerations. Next, Berman and Gurdamar show that consumers tend to believe similar others have more money and time resources than they do. Yet, consumers also believe (paradoxically) that similar others *spend* more money and time than they do. However, these self-other differences disappear when consumers are asked to compare themselves to a specific, known other (as opposed to a generic, unknown other).

The next two papers examine people's preferences for trading-off money and time, and how access to time and money affect preferences. First, Litovsky and Olivola show that subtly focusing consum-

ers on time versus money leads to preference reversals for identical tradeoffs between these two important resources. In particular, focusing on time (versus money) decreases willingness to spend time in order to save money (e.g., waiting in line to receive a discount on a purchase). Similarly, focusing on time (versus money) increases willingness to spend money in order to save time (e.g., paying extra to obtain an express train ticket). Next, Pew uses a large dataset of real investors to examine how access to money and access to time influence risk preferences. He finds that consumers become less risk averse the greater their access to money (relative wealth) or time (age and years-to-retirement).

Attendees will leave this session with greater understanding of the way consumers perceive and respond to tradeoffs involving time and money.

Consumers Overestimate Others' Willingness to Pay AND Wait for Goods: New Findings and Insights Concerning the "X-Effect" Bias

EXTENDED ABSTRACT

Frederick (2012) documented a puzzling, but highly robust, bias: people systematically overestimate others' willingness to pay (WTP) for a broad array of goods. This bias, which Frederick coined the "X-effect", reveals a fundamental error in consumer judgment that has important marketing implications. For example, it could lead producers and retailers to overestimate the profit-maximizing prices of new products and these products' likelihoods of successfully selling at a given price. The net result would be overpricing and/or excessive market entry for many new products, followed by disappointing sales (relative to expectations).

Interestingly, Frederick found that the X-effect did not extend to several other types of valuation measures: there were no significant self-other discrepancies in selling prices, judgments of liking, or "working prices" (the maximum number of pencils someone would be willing to sharpen to obtain the good). These latter results suggested the X-effect might be limited to WTP judgments, and thus seemed to rule out several possible accounts of the X-effect.

Here, we show that the X-effect is not limited to monetary payments: the same pattern emerges for willingness to wait (WTW) judgments (the maximum amount of time a person is willing to wait in line to obtain the good). In doing so, we reveal parallel biases in self-other valuation discrepancies along the money *and* time dimensions. Our studies also examine a possible account of the X-effect: that people are less likely to consider others' opportunity costs of spending money (or time) on goods than they are to consider their own opportunity costs. Such a tendency to underappreciate the fact that others also have "better things to do" with their money (or time), could plausibly explain why consumers typically overestimate others' WTP (or WTW). Although consumers already tend to neglect their own opportunity costs (e.g., Frederick et al., 2009; Read, Olivola, & Hardisty, 2016; Shafir & Thaler 2006; Spiller, 2011), there are good theoretical reasons to expect that they might do so to an even larger extent for others (e.g., Pronin, Olivola, & Kennedy, 2008).

Studies 1A and 1B were designed to test whether the X-effect could be explained by a self-other discrepancy in opportunity cost consideration.

In Study 1A, participants ($N = 233$) were randomly assigned to either report their own WTP for 10 different goods (drawn from Matthews, Gheorghiu, & Callan, 2016), or to predict another person's WTP for those same 10 goods (specifically, the WTPs of the next participant to complete the same study). In addition, half of the participants were asked to consider other ways that they (or the other person) could spend that money, before providing their WTP judgments. This manipulation was used to increase consideration of opportunity costs. First, we replicated the X-effect: participants predicted that others would be willing to pay more for each good than they would themselves (ANOVA with the 10 product-WTPs as repeated-measures: $F(1, 2290) = 69.89, p < .0001$). We also found a separate main effect of highlighting opportunity costs: WTP judgments were significantly lower (for both self and other) when participants were explicitly asked to first consider opportunity costs ($F(1, 2290) = 7.30, p < .007$). However, highlighting opportunity costs did *not* mitigate the X-effect; if anything, it strengthened the effect (the interaction was only significant for log-transformed WTP: $F(1, 2290) = 6.10, p = .014$).

In Study 1B ($N = 394$), we varied the same factors, but the self-other manipulation was within-subject (i.e., every participant reported their own WTP *and* predicted the other's WTP for each good, in counterbalanced order). The results of Study 1B replicated those of 1A: WTP was higher for other than for self ($F(1, 7839) = 196.70, p < .0001$), and lower when opportunity costs were highlighted ($F(1, 7839) = 42.98, p < .0001$). Once again, the X-effect was directionally stronger when participants were explicitly asked to consider opportunity costs (the interaction was only significant for log-transformed WTP: $F(1, 7839) = 9.66, p < .002$).

Studies 2A and 2B examined whether the X-effect extends to the time dimension (i.e., willingness-to-wait / WTW). These studies employed the same designs as 1A and 1B (respectively), with the only difference being that participants were asked to report the maximum amount of time (in minutes) that they would be willing to wait for a good that was being offered for free at a store with long lines. In addition, the opportunity cost consideration manipulation asked participants to think of other ways they (or the other person) could spend that time (instead of waiting in line).

The results of Study 2A ($N = 401$) paralleled those of Study 1A: We replicated the X-effect in the time dimension: participants predicted that others would be willing to wait longer for each good than they would themselves ($F(1, 3970) = 150.23, p < .0001$). We also found a separate main effect of highlighting opportunity costs: WTW judgments were significantly lower (for both self and other) when participants were explicitly asked to first consider opportunity costs ($F(1, 3970) = 18.29, p < .0001$). As with WTP, highlighting opportunity costs of spending time did *not* mitigate the X-effect for WTW, but instead strengthened it (interaction: $F(1, 3970) = 6.93, p < .009$).

The results of Study 2B ($N = 410$) replicated those of 2A in a within-subject design: WTW was higher for other than for self ($F(1, 8194) = 327.94, p < .0001$), and lower when opportunity costs were highlighted ($F(1, 8194) = 22.29, p < .0001$). Moreover, this X-effect for time was again directionally stronger (but not significantly so) when participants were explicitly asked to consider opportunity costs.

Taken together, the results of our four studies reveal novel findings and insights regarding the X-effect. First, by showing that the X-effect is not mitigated (and in fact seems to grow stronger) when opportunity costs are highlighted, we rule out a self-other discrep-

ancy in opportunity cost consideration as an account of the X-effect. Second, by showing that the X-effect also occurs for WTW judgments, we extend the scope of this bias to the time dimension.

Subjective Resource Deprivation: Consumers Feel More Constrained For Spare Resources Than Similar Others

EXTENDED ABSTRACT

Decision-making would be much easier if consumers were not faced with resource constraints. Most consumers would like to spend more, save more, and do more with their time, but are confronted with the reality that they cannot have it all. Moreover, feeling that one's resources are scarce greatly affects consumer decision-making and welfare, often for the negative (Roux et al., 2015; Shah et al., 2012; Zaubermaier & Lynch, 2005). Yet, we know little about what causes individuals to feel relative flush or constrained for available resources (but see Etkin et al., 2015).

The present research examines how individuals assess subjective feelings of resource availability by investigating how consumers compare themselves to others. Across 7 studies we find that consumers feel relatively deprived of spare resources, reporting that, on average, they spend less, save less, and have less spare time than similar others. The results we present are consistent with an availability bias in self-other judgments (cf. Davidai & Gilovich, 2016; Frederick, 2012) whereby individuals are highly aware of the constraints on their resources, but are less aware of the constraints on others. As a result, individuals feel particularly limited by their budgets, and do not recognize that others experience the same limits as they do.

Study 1 evaluated how consumers compare their savings to others by examining data from the 2014 Federal Reserve SHED survey. Respondents ($N = 2,587$) were asked "How do you think that the percent of your income that you saved in the past 12 months compared to the average percent saved by other people your age with similar incomes?" (-2 = "much less" to +2 = "much more"). On average, respondents felt that they saved less than others (Mean = -0.20; SE = 0.03, $p < .001$). Responses were positively correlated with income ($r = .25$), and a follow up floodlight analysis (Spiller et al., 2013) revealed that, on average, those who earn less than \$100,000 believed that they saved less than others, while those who earn more than \$120,000 believe that they saved more than others. In all subsequent studies, relative judgments were uncorrelated with income.

These initial results show that, on average, people believe that they save less than others. One possibility is that results are due to differential information about individuals' savings, whereby people have good information that they save little, but do not have good information about the savings of others (Moore & Small, 2007). If so, then when individuals assess their spending levels, we should expect to find the reverse effect, whereby presumably individuals believe that they save less than others because they spend more. However, if individuals feel particularly limited by their own constraints, then we should find that they feel that they both feel limited by their ability to save and spend, and report doing so less than others. Study 2a-2d tests these contrasts.

In Study 2a ($N = 301$), participants made indirect comparisons of saving and spending estimates to others (Moore, 2007). Specifically, participants made four evaluations, reporting how much they spent and saved in the previous year as well as how much they estimate the average person their age and income level spent and saved in the previous year (1 = "very little" to 7 = "an extreme amount"). Results show that participants felt that they both saved less than others (Mean_{SelfMinusOthers} = -.26, SE = .09, $p = .003$) and spent less than others (Mean_{SelfMinusOthers} = -.18, SE = .09, $p = .04$).

Study 2b ($N = 401$) tests robustness by asking participants to make evaluations in dollar amounts instead of a subjective scale. We replicate our previous results, finding that participants felt that they both saved less (Median Difference_{Saving} = $-\$25$, $p < .001$) and spent less than others (Median Difference_{Spending} = $-\$82$, $p < .001$) in the past month.

Study 2c ($N = 402$) asked participants to estimate how much they and an average person their age and income level spent in the past month on nine different expenditures (rent/mortgage; utilities; groceries; entertainment; transportation; medical; clothing; savings; and all other expenses. When summed, the total expenditures for the self were less than others (Median_{TotalSelf} = $\$1,900$ vs. Median_{TotalOthers} = $\$2,450$; $p < .001$), replicated our previous results.

Study 2d ($N = 303$) asked participants to place themselves in a distribution, and asked them to evaluate how they compare to 100 people chosen at random with the same income as them. On average, participants evaluated themselves to be below the 50th percentile in both saving (Mean_{Percentile} = 45.7, $p = .005$) and spending (Mean_{Percentile} = 47.0, $p = .02$) levels.

We argue that consumers are highly attuned to the constraints they face, but less attuned to the constraints of others. If so, then manipulating how constrained individuals feel should impact their estimation of the budgets of others. In Study 4 ($N = 200$), participants were given a fixed budget ($\$225$) to allocate towards five different expenditure goals. We manipulated whether the line items were more or less costly (e.g., a fancy dinner vs. a casual lunch; saving for a new car vs. a new couch). Participants were insensitive towards the constraints of others: when the line items were costly, participants assumed others could afford these expenditures, over estimating the total expenditures of others (Median = $\$269$) significantly more than when the line items were less costly (Median = $\$232$, $p < .001$).

Study 4 ($N = 257$) tests whether the same effect holds for spare time. Students were asked to evaluate their own spare time and the estimated spare time of the average student in their city. Students felt that they have less spare time ($M = 3.55$, $SD = 1.40$) than others ($M = 3.91$, $SD = 1.08$, $p < .001$), suggesting that these results hold for time as well as money.

In sum, this research shows that people feel particularly constrained for spare resources, believing that they spend less, save less, and have less spare time than similar others.

The Resource Focus Effect Nudging Consumer Preferences in Time-Money Tradeoffs

EXTENDED ABSTRACT

Consumers regularly face tradeoffs between saving time and saving money—two of the most valuable resources we have. For example, they can spend time to save money (e.g., waiting in line to obtain a discount on purchases or traveling to a distant store that offers the same product at a lower price) or they can spend money to save time (e.g., buying a more expensive express train ticket). Therefore, it is important that we understand how consumers choose among these time-money ‘tradeoff-bundles’ and whether their choices are affected by normatively irrelevant factors.

While there is a rich literature on our valuation of money (e.g., Kahneman & Tversky, 1979; Tversky & Kahneman, 1992) and a sparser literature on our valuation of time (e.g., Odaka & Hoch, 2004; Monga & Saini, 2009), very few studies have examined decisions concerning time-money bundles (e.g., Olivola & Wang, 2016), and fewer still have done so in the context of real-world consumer decisions. Here, we compare consumer preferences for *identical* time-money bundles under two normatively equivalent elicitation

procedures. Specifically, before presenting them with the key decision, we have consumers either focus on the amount of time that is equivalent to a given amount of money (time-focus condition) or the amount of money that is equivalent to a given amount of time (money-focus condition). In theory, a rational consumer should exhibit consistent preferences for time-money bundles and display similar levels of patience, regardless of how the decision problem is framed. We show, however, that consumers’ preferences for time-money bundles—and, by extension, their implied levels of patience—depend on which resource is brought into focus. Focusing on time decreases their likelihood of spending time to save money and increases their likelihood of spending money to save time—essentially, encouraging less patience. Conversely, focusing on money increases willingness to spend time to save money and decreases willingness to spend money to save time, thereby encouraging more patience. Across 4 studies, we document this *resource focus effect*, and rule-out alternative explanations for the observed preference reversal among time-money bundles.

Study 1 ($N = 707$) presented participants with one of two hypothetical time-money tradeoff scenarios, in which they imagined choosing between purchasing a $\$100$ coat at full price versus spending time (traveling or waiting in line) to purchase the same coat at a discount. Within each scenario, participants were randomly assigned to either a time- or money-focus condition. In the time-focus condition, the discount on the coat was fixed at $\$30$, and participants were asked to consider the amount of time they would be willing to wait/travel for this discount, using a choice-ladder method; specifically, they indicated whether they would be willing to wait/travel 10, 20, 30, 40 and 50 minutes for the $\$30$ discount. In the money-focus condition, the time expenditure was fixed at 30 minutes and participants were asked to consider the amount of money they would need to save to wait/travel this length of time, using a choice-ladder method; specifically, they indicated whether they would be willing to incur this 30-minute time cost for a $\$10$, $\$20$, $\$30$, $\$40$ and $\$50$ discount. In both conditions, the five binary-choice tradeoffs were presented on a single page, in either ascending or descending order. Critically, participants in both conditions were presented with one identical time-money tradeoff-bundle: spending 30 minutes to save $\$30$. We compared their likelihood of opting for this bundle (vs. paying full price) across the two conditions, and found that participants in the money-focus condition were more likely to spend 30 minutes to save $\$30$ (willingness-to-wait scenario: $M_{\text{money-focus}} = 92\%$ vs. $M_{\text{time-focus}} = 80\%$, $Wald = 5.23$, $p = .022$; willingness-to-travel scenario: $M_{\text{money-focus}} = 85\%$ vs. $M_{\text{time-focus}} = 70\%$, $Wald = 5.07$, $p = .024$).

Study 2 ($N = 554$) replicated the previous design but reversed the order in which time and money were mentioned in the binary-choice tradeoff statements. For example, “I would wait 10 minutes to receive the $\$30$ discount on the coat” was replaced with: “To receive the $\$30$ discount on the coat, I would wait 10 minutes.” Despite the altered word order, Study 2 replicated the *resource focus effect* ($M_{\text{money-focus}} = 91\%$ vs. $M_{\text{time-focus}} = 76\%$, $Wald = 10.14$, $p = .001$), thereby ruling-out word order as a potential confound.

In the two previous studies, the scenarios involved spending time to save money. In Study 3 ($N = 560$), we instead used a scenario that involved *spending money* in order to *save time* (buying an express train ticket to shorten travel time). Here, a focus on money again significantly increased the level of patience, but this time it was manifested by a *lower* willingness to spend $\$30$ in order to save 30 minutes, indicating that the *resource focus effect* occurs regardless of whether time (or money) is being saved or spent ($M_{\text{money-focus}} = 14\%$ vs. $M_{\text{time-focus}} = 21\%$, $Wald = 6.24$, $p = .013$).

Finally, in Study 4, we combined the main design elements from Studies 1-3, but we presented the five binary-choice tradeoffs one-at-a-time and in random order. Study 4 replicated the results of Studies 1-3 (willingness-to-travel scenario: $M_{\text{money-focus}} = 87\%$ vs. $M_{\text{time-focus}} = 81\%$, $Wald = 4.85$, $p = .028$; express-train scenario: $M_{\text{money-focus}} = 21\%$ vs. $M_{\text{time-focus}} = 41\%$, $Wald = 25.75$, $p < .001$), indicating that the effect does not require simultaneous or monotonic presentation of the binary-choice tradeoffs.

In sum, we identify a novel preference reversal phenomena for time-money tradeoff-bundles: focusing consumers on expenditures or savings of money increases their willingness to spend (and decreases their willingness to save) time, whereas focusing them on expenditures or savings of time has the opposite effect. Moreover, we show that this *resource focus effect* is robust to various features of the elicitation procedure (such as wording, ordering, etc.) and that it occurs regardless of whether consumers are considering spending time to save money or spending money to save time.

How Do Wealth and Time Horizon Affect Investors' Risk Tolerance? Evidence from the Field

EXTENDED ABSTRACT

In selecting an asset allocation, investors must choose an appropriate mix of lower-variance instruments (such as bonds) that offer relatively certain, but lower returns and higher-variance instruments (such as stocks) that provide the potential for both greater gain and greater loss. Fundamentally, this establishes a continuum ranging from a 100% bond allocation (0% stocks) to a 100% stock allocation (0% bonds), with the appropriate mix being determined by the investor's preference and tolerance for trading-off risk and return. However, little is known about how risk tolerance is affected by time (e.g. investment time horizon, age) and money (e.g. absolute and relative wealth). For example, should wealthy investors be more risk-averse or relatively risk-seeking? On the one hand, a concave utility function might suggest that risk aversion increases as wealth increases. Alternatively, investors might be risk-seeking at higher levels of wealth, as additional assets afford the opportunity to take risks. Furthermore, these questions are complicated by behavioral biases such as risk aversion and loss aversion (Kahneman & Tversky, 1979; Tversky & Kahneman, 1992), as well as questions concerning the generalizability of small stakes lab findings to field settings (Charness, Gneezy, & Imas, 2013; Dean & Ortoleva, 2015). Yet, it is undeniable that wealth and time horizon are critical elements in investment decision-making. To shed light on how temporal and monetary factors affect risk preference, cross-sectional analyses of a large-scale, field data set were conducted.

Data from a dynamic, risk tolerance titration questionnaire along with corresponding investor and advisor profile information were obtained from a FinTech firm. In total, data are available for 15,241 unique respondents. These individuals answered a series of risk tolerance questions at the request of their professional investment advisor knowing their advisor would, in turn, use the "risk score" generated from their responses to determine an appropriate asset allocation mix. The survey begins with preliminary items about specific investment goals and at what age the individual expects to retire (or did retire). The respondent then goes on to complete a dynamic titration questionnaire by making selections between a certain outcome (which could be a gain or a loss) and a risky outcome (50/50 chance of a specified gain/loss). Based on each selection, the subsequent question reflects an increase or decrease in risk and corresponding return. The process continues iteratively until the software identifies an indifference point for the respondent. Because

advisors are deploying the questionnaire to their clients, each client's investable portfolio size is known with precision (based on the accounts managed and tracked by the investment advisor). And, substantively, the titration questions are calibrated to the respondent's wealth. For example, an investor with \$300,000 in investable assets would respond to questions for which the certain and risky outcomes are based on an initial wealth state of \$300,000.

Separate regression analyses were conducted for the risk aversion and loss aversion measures. Both measures were calculated from responses to the titration questions.

Descriptively, risk aversion follows an S-shaped curve as a function of time (both in age and years-to-retirement metrics). Risk aversion is largely stable for younger individuals (age 25-49) who are far from retirement. As retirement approaches, risk aversion increases sharply through retirement and then stabilizes. In contrast, loss aversion declines slowly as a function of age and then drops precipitously in the ten years preceding retirement.

Regression results appear in the table below and reveal interesting differences between risk aversion and loss aversion. Loss aversion is predicted only by relative wealth ($p < .001$). That is, within each age bracket, individuals who are comparatively wealthy (top half of the wealth distribution relative to age) are slightly less loss averse compared to those who are relatively less wealthy (at that same age). Risk aversion, on the other hand, is influenced by relative wealth and temporal factors including age, years-to-retirement, (with quadratic and cubic effects representing the S-shaped curve described above) and their interaction. Overall, this complex set of results simplifies to just two effects. Individuals who are relatively more wealthy are more risk-averse compared to those who are less wealthy at the same age. However, when re-plotted as years-to-retirement (rather than age), the relative wealth differences disappear. That is, individuals who are less wealthy at a given age expect to retire later than those who are more wealthy. This result is supported by the interaction between age and years-to-retirement ($p < .05$). Notably, no effects are observed for absolute wealth. This is not particularly surprising since wealth and age move together. However, it underscores the importance of examining relative wealth and the temporal dimension findings. That is, nudges to increase retirement savings may benefit from factoring in whether an investor is ahead or behind in retirement savings. The presentation will discuss implications for developing investment advice and advocate for a more sophisticated understanding that incorporates time horizon effects into analyses of financial decision-making research.

REFERENCES

- Charness, Gary, Uri Gneezy, and Alex Imas (2013), "Experimental Methods: Eliciting Risk Preferences," *Journal of Economic Behavior & Organization*, 87, 43-51.
- Davidai, Shai, and Thomas Gilovich (2016), "The Headwinds/tailwinds Asymmetry: An Availability Bias in Assessments of Barriers and Blessings," *Journal of Personality and Social Psychology*, 111 (6), 835.
- Dean, Mark, and Pietro Ortoleva (2015), "Is it all Connected? A Testing Ground for Unified Theories of Behavioral Economics Phenomena," SSRN: <https://ssrn.com/abstract=2643355>
- Etkin, Jordan, Ioannis Evangelidis, and Jennifer Aaker (2015), "Pressed for Time? Goal Conflict Shapes How Time is Perceived, Spent, and Valued," *Journal of Marketing Research*, 52 (3), 394-406.
- Kahneman, Daniel, and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica: Journal of the Econometric Society*, 263-291.

- Frederick, Shane (2012), "Overestimating Others' Willingness to Pay," *Journal of Consumer Research*, 39 (1), 1-21.
- Frederick, Shane, Nathan Novemsky, Jing Wang, Ravi Dhar, and Stephen Nowlis (2009), "Opportunity Cost Neglect," *Journal of Consumer Research*, 36 (4), 553-561.
- Matthews, William J., Ana I. Gheorghiu, and Mitchell J. Callan (2016), "Why Do We Overestimate Others' Willingness to Pay?" *Judgment and Decision Making*, 11 (1), 21-39.
- Monga, Ashwani, and Ritesh Saini (2009), "Currency of Search: How Spending Time on Search is Not the Same as Spending Money," *Journal of Retailing*, 85 (3), 245-257.
- Moore, Don A. (2007), "Not So Above Average After All: When People Believe they are Worse than Average and its Implications for Theories of Bias in Social Comparison," *Organizational Behavior and Human Decision Processes*, 102 (1), 42-58.
- Moore, Don A., and Deborah A. Small (2007), "Error and Bias in Comparative Judgment: On Being both Better and Worse than we Think we are," *Journal of Personality and Social Psychology*, 92 (6), 972.
- Olivola, Christopher Y. and Stephanie W. Wang (2016), "Patience Auctions: The Impact of Time vs. Money Bidding on Elicited Discount Rates," *Experimental Economics*, 19, 864-885.
- Okada, Erica M. and Stephen J. Hoch (2004), "Spending Time versus Spending Money," *Journal of Consumer Research*, 31, 313-323.
- Pronin, Emily, Christopher Y. Olivola, and Kathleen A. Kennedy (2008), "Doing Unto Future Selves As You Would Do Unto Others: Psychological Distance And Decision Making," *Personality and Social Psychology Bulletin*, 34 (2), 224-236.
- Read, Daniel, Christopher Y. Olivola, and David J. Hardisty (2016), "The Value Of Nothing: Asymmetric Attention To Opportunity Costs Drives Intertemporal Decision Making," *Management Science*.
- Roux, Caroline, Kelly Goldsmith, and Andrea Bonezzi (2015), "On the Psychology of Scarcity: When Reminders of Resource Scarcity Promote Selfish (and Generous) Behavior," *Journal of Consumer Research*, 42 (4), 615-631.
- Shafir, Eldar, and Richard H. Thaler (2006), "Invest Now, Drink Later, Spend Never: On The Mental Accounting Of Delayed Consumption," *Journal of Economic Psychology*, 27 (5), 694-712.
- Shah, Anuj K., Sendhil Mullainathan, and Eldar Shafir (2012), "Some Consequences of Having Too Little," *Science*, 338 (6107), 682-685.
- Spiller, Stephen A. (2011), "Opportunity Cost Consideration," *Journal of Consumer Research*, 38 (4), 595-610.
- Spiller, Stephen A., Gavan J. Fitzsimons, John G. Lynch Jr., and Gary H. McClelland (2013), "Spotlights, Floodlights, and the Magic Number Zero: Simple Effects Tests in Moderated Regression," *Journal of Marketing Research*, 50 (2), 277-288.
- Tversky, Amos, and Daniel Kahneman (1992), "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty*, 5 (4), 297-323.
- Zauberman, Gal, B. Kyu Kim, Selin A. Malkoc, and James R. Bettman (2009), "Discounting Time and Time Discounting: Subjective Time Perception and Intertemporal Preferences," *Journal of Marketing Research*, 46 (4), 543-556.
- Zauberman, Gal, and John G. Lynch Jr. (2005), "Resource Slack and Propensity to Discount Delayed Investments of Time versus Money," *Journal of Experimental Psychology: General*, 134 (1), 23.

Nonconscious Attention and Imagery: Impact on Perception and Preference

Chairs: Zachary Estes, Bocconi University, Italy
Aradhna Krishna, University of Michigan, USA

Paper #1: Rapid Evidence Accumulation during Brand Choice: An Eye-tracking Analysis

Rik Pieters, Tilburg University, The Netherlands
Tulin Erdem, New York University, USA
Ana Martinovici, Tilburg University, The Netherlands

Paper #2: Eye Buy: Attentional Scope Affects Product Choice via Visual Exploration

Mathias Streicher, University of Innsbruck, Austria
Oliver Büttner, University of Duisburg-Essen, Germany
Zachary Estes, Bocconi University, Italy

Paper #3: Communicating a Promise of Change: Visual Steps Enhance Process Imagery

Luca Cian, University of Virginia, USA
Aradhna Krishna, University of Michigan, USA
Chiara Longoni, Boston University, USA

Paper #4: The Effect of Visual Cues on the Sense of Completeness

Miaolei (Liam) Jia, National University of Singapore, Singapore
Aradhna Krishna, University of Michigan, USA
Xiuping Li, National University of Singapore, Singapore

SESSION OVERVIEW

Much work has revealed how visual images affect consumers' conscious attitudes. But how do visual images affect consumers nonconsciously, and do their visual patterns affect their choices? This session brings together four papers that address these under-researched questions in different, but synergistic ways. The first two papers explore eye movements and choice, whereas the second two examine nonconscious visual imagery.

Pieters, Erdem and Martinovici report a large-scale eye-tracking experiment with 342 U.S. consumers. They test what kinds of eye movements best predict choice and the extent to which they mediate brand ownership effects on choice. The model accommodates eye-fixations (overall attention) and brand-, attribute-, and other-saccades (jumps between attributes, brands, and brand-attribute combinations) as choice predictors. They find that brand-saccades, which reflect processing by brand, are best at predicting choice. Moreover, brand preferences build up remarkably rapidly, so that eye movements predict brand choice well before it is implemented. Thus, eye movements reflect fundamental, fast preference formation processes.

Streicher, Büttner and Estes focus on the magnitude of the field of attention. They theorize that activating broad (vs. narrow) attention increases visual exploration of product assortments. In one lab study and two field experiments they manipulate broad (vs. narrow) attention by asking participants to name objects that randomly appear in the center or the periphery of a computer screen. Mouse-clicks and eye movements show that inducing broad attention increases visual exploration of product displays, increasing choice of peripherally-located products and ultimately increasing unplanned purchasing. This effect of attentional focus on unplanned purchasing is accentuated among impulsive buyers.

Cian, Krishna, and Longoni investigate ads that visualize a desired transformation either via before/after visuals (i.e., the starting and ending points of a weight loss program) or through progression visuals (i.e., also including intermediate steps). Across five studies, they show that the less frequently used format, the progression ad,

is actually more credible and improves attitudes towards the ad and product. They theorize that, to be effective, ads promising transformation should facilitate mental imagery of the trajectory of the change. Indeed, progression ads demystify the promised transformation, making it more credible and leading to more positive attitudes.

Jia, Krishna and Li examine how shapes affect perceptions. Many marketing problems relate to whether a given set of products or procedures is a "complete set," so that missing one element might create a psychological void. For example, social marketing campaigns promoting healthy eating should ensure that every element of information reaches the audience. They study the effect of shape on the sense of completeness. In three studies, they show that circular shapes increase the sense of completeness amongst constituent elements, and consequently increase the perceived importance of each component. Distinctive visual cues (e.g., colors) of components attenuate this effect.

Audience members should gain a more nuanced understanding of how eye movements can predict brand choices, and how manipulating those eye movements can affect actual purchases. Additionally, audience members should gain insight into how visual imagery can nonconsciously influence perceptions such as credibility and importance.

Rapid Evidence Accumulation during Brand Choice: An Eye-tracking Analysis

EXTENDED ABSTRACT

Consumers frequently make rapid choices between complex products on websites that display detailed information on multiple brands and attributes side-by-side. Remarkably little is known about the processes driving such choices, which occur in less than a few minutes only. We develop and test an evidence accumulation model that is calibrated on eye-movements to address the issue. The model is rooted in recent developments in cognitive science and economics (Krajbich and Rangel 2011; Reutskaja et al. 2011), and relies on the idea that over and above their role in information search, eye-movements reflect fundamental preference formation processes. This builds on seminal research about the implications of task complexity for information processing (Jacoby, Speller, and Kohn 1974; Payne 1976; Russo and Rosen 1975) and the visual perception and information processing literature (Wedel and Pieters 2008). The model is calibrated on data collected in a large scale field experiment (N = 342) among regular consumers. The findings have implications for search and choice theories, and for the brand management and information design.

Under normal conditions, visual attention, information processing and comprehension processes are strongly connected to the eye-movements that people make during task performance (Just and Carpenter 1980; Wedel and Pieters 2008). Prior research on attention and choice (Krajbich, Armel, and Rangel 2010; Pieters and Warlop 1999; Shi, Wedel, and Pieters 2013; Yang, Toubia, and de Jong 2015) has often focused on one type of eye-movements: eye-fixations, which are brief moments (200-400 milliseconds) when the point of regard is relatively still and which indicate attention intensity. The very fast jumps (20-40 milliseconds for typical stimuli) between successive fixations are defined as eye-saccades.

While eye-fixations, eye-saccades provide information about the specific attentional processes that people are engaged in (Rayner 1978). Specifically, for consumers making a choice from an attributes-by-brands matrix, eye-saccades reflect specific processing styles that are central to brand choice. We hypothesize that consumers engage in rapid brand comparison and information integration processes, which are reflected in, respectively, attribute-saccades and brand-saccades (jumps between brands within an attribute and jumps between attributes within a brand, respectively), and that in particular brand-saccades predict choice, over and above the effect of mere eye-fixations. In addition, we hypothesize that prior ownership predicts choice and this is mediated by attention. Task complexity is expected to influence attention measures as consumers need to adapt their processing style to the amount of product information available on the display.

We develop a multivariate latent growth and choice model, estimated using MCMC techniques, to examine the extent to which attention predicts brand choice, the effect of ownership on choice, and the extent to which attention mediates it. The model is calibrated on data collected from consumers who had expressed to be in the market for a smartphone, randomly drawn from large, locally representative participant pools, from three locations in the continental US: Washington DC, Cincinnati, and San Diego. Stratification led to representation of three user segments: owners of one of the smartphone brands on display ($N = 246$), owners of a different brand ($N = 25$), and current non-smartphone owners ($N = 71$). User segment information combined with choice data, allows testing differences between loyal consumers, brand switchers, and consumers new to the market.

The results not only show that attention predicts choice, but more importantly that it does so from the very start of the choice task (39% correct brand choice predictions after only one quarter of the decision time, $p < .01$ when compared to random choice). We find support for a positive feedback loop over time between attention and choice meaning that (1) consumers focus more on the brand they eventually choose, and (2) this brand focus also increases the probability of choice. The influence of brand ownership on choice is mediated by specific attention types: brand-saccades and overall attention. Task complexity influences the total time spent in the task, but not how the specific attention types evolve during the choice task, which counters common ideas in the decision-making literature. Both brand-loyal and brand-switching consumers are found to focus on the owned brand and to compare its attributes to the other brands during the first half of the decision. In the second half these groups differ in attention towards the owned brand, but have similar attention patterns towards the chosen brand.

Our research provides strong evidence that over and above the mere intensity of attention (eye-fixations), the type of attentional processes (brand-saccades) predicts choice. It reveals that preference formation during brand choices proceeds very early and our research is the first to document this “early saccade preference effect”. It also is the first to show the attentional processes that account for ownership effects on choice.

Eye Buy: Attentional Scope Affects Product Choice via Visual Exploration

EXTENDED ABSTRACT

Marketing studies suggest that with increasing exploration of shopping environments unplanned purchasing also increases (e.g., Hui et al. 2013; Inman, Winer, and Ferraro 2009; Stille, Inman, and Wakefield 2010). Recent eye-tracking studies, in turn, show that

chronic impulse buying, a trait which links to unplanned purchasing, correlates with increased exploration of non-focal products in shoppers' visual periphery (Büttner et al. 2014). The present research therefore tests, for the first time, whether the scope of attention influences unplanned purchasing by visual exploration of shopping environments. Measuring mouse-clicks, eye movements, and actual purchases, we show that activating broad (vs. narrow) attention increases visual exploration of product displays, ultimately increasing unplanned purchasing.

Prior marketing studies have described visual exploration of product assortments as relatively stable and unmalleable gaze patterns with a bias towards the horizontal center of shelves (Atalay, Bodur, and Rasolofarison 2012). In contrast, we theorize that activating broad (vs. narrow) attention increases visual exploration of the periphery of product assortments, because attentional scope may affect spatial dispersion of gaze patterns in subsequent situations (Friedman et al. 2003). We further predict that this increased attention to the visual periphery should increase choice of peripheral products, because viewing those peripheral products may remind shoppers of forgotten needs (Inman and Winer 1998), increase product preferences (Orquin and Mueller Loose 2013) or trigger an impulsive desire to possess that product (Hoch and Loewenstein 1991). Hence, broad attentional scope should increase purchasing products from the periphery by increasing visual exploration (i.e., mediation). And given that more choice options fall into the visual consideration set as visual exploration of the shopping environment increases, a broad (vs. narrow) scope of attention should ultimately increase unplanned purchasing.

The results of Büttner et al. (2014) also suggest that chronic buying impulsiveness may moderate the effect because non-impulsive shoppers are effective in shielding and filtering irrelevant stimuli from the visual periphery. And conversely, highly impulsive individuals are more susceptible to irrelevant stimuli and more affected by their direct surroundings (Kasof 1997). Hence, impulsive shoppers should be more susceptible to the influence of attentional scope on unplanned purchasing.

Using a visual manipulation of attention, Study 1 establishes that broad (vs. narrow) attention increases hypothetical choice (mouse-clicks) of peripheral products presented onscreen. Study 2 shows via eye-tracking in a field setting that both choice quantity (i.e., total number of chosen products) and choice variety (i.e., number of different brands chosen) increase as a function of broad (vs. narrow) attention by increasing visual exploration of products on shelves. Using real shoppers in a supermarket, Study 3 finally shows that activating broad (vs. narrow) attention increases unplanned purchasing, and that high buying impulsiveness accentuates this effect.

In all studies, attentional scope was manipulated by showing participants 20 object pairs on a computer display, one pair at a time (2 sec). Critically, each pair included one object in the center and one in a random corner (periphery) of the display. Participants in the *narrow attention* group were instructed to name the object appearing in the center of each display, whereas participants in the *broad attention* group named all objects appearing in the periphery. All participants saw and named the same objects. In study 1, participants ($N = 129$) then viewed a horizontal arrangement of nine refrigerators containing frozen food and they were instructed to click on any products they would be interested in purchasing. We calculated the horizontal distance of each click from the center of the display, and then we averaged those distances per participant. Participants in the broad attention group chose products further from the center of the display ($M = 10.55$ cm) than those in the narrow attention group ($M = 8.39$ cm), $t(127) = 2.97, p < .01$.

Study 2 was conducted in a small retail shop (400 m²) with shoppers ($N = 79$) who wore eye-tracking glasses. After the attentional manipulation, participants were asked to make hypothetical purchases from a specific shelf area containing candy and snack food. The broad attention group hypothetically spent more money ($M = €6.57$), chose more products ($M = 3.16$), and chose more brands ($M = 3.16$) than the narrow attention group (spending $M = €5.01$, $t(77) = 2.20$, $p < .05$; chosen products $M = 2.48$, $t(77) = 1.97$, $p = .05$; chosen brands $M = 2.40$, $t(77) = 2.20$, $p < .05$). Participants in the broad attention group visually examined 62% of all shelf compartments, whereas the narrow attention group examined only 50% of the shelf compartments, $t(71) = 2.72$, $p < .01$. This visual exploration also mediated all three variables of hypothetical purchasing (Hayes 2013, model 4; all CIs excluding zero; all direct effects $p > .05$).

Study 3 was conducted in a large supermarket (3000 m²). First, shoppers ($N = 99$) indicated their planned purchases and then were released for shopping after the attentional manipulation. After their shopping, the experimenters recorded their unplanned purchases and chronic buying impulsiveness (Rook and Fisher 1995). The broad attention group purchased more product categories unplanned ($M = 2.00$) than the narrow attention group ($M = .96$), $t(97) = 3.18$, $p < .01$, and also spent more money unplanned ($M_{broad} = €5.59$ vs. $M_{narrow} = €3.22$, $t(97) = 2.01$, $p < .05$). As predicted, this effect interacted (Hayes 2013, Model 1) with chronic buying impulsiveness ($B = .55$, $t(95) = 2.06$, $p < .05$), with 63% of shoppers showing a significant effect of the attentional manipulation on unplanned category purchases as a function of increasing buying impulsiveness.

Thus, attentional scope seems to be an important mechanism that explains how many different products shoppers attend to and discover during shopping, ultimately affecting unplanned purchasing. Practically, in-store communications (e.g., screens) could be optimized by displaying product offers in the periphery, thus inducing broad attention.

Communicating a Promise of Change: Visual Steps Enhance Process Imagery

EXTENDED ABSTRACT

Humans often desire change: we want to be thinner, look younger, have more hair. Marketers respond to such desires by offering products promising to deliver the corresponding changes: weight-loss programs, wrinkle removers, hair regrowth solutions. The visuals in the advertisements (ads) for these products typically focus on the desired final outcome by featuring a before and an after visual (e.g., a person at the beginning and at the end of a weight loss program; *before-after ads*). Very few *change-ads* include visuals of the intermediate steps between the before and the highly desirable after (e.g., a person gradually slimming down throughout the weight loss program; *progression ads*).

Although neglected in the marketplace and by future marketers, across seven studies we show that progression ads are superior to before-after ads across multiple consumer domains. We theorize that, to be effective, ads promising transformation should facilitate mental imagery of the trajectory of the change, i.e., the consumer should be able to imagine herself going through the transformation from “before” to “after.” Progression ads (but not before-after ads) evoke this kind of spontaneous *process imagery* -- thoughts and images about the means and ways leading to a change. In turn, spontaneous process imagery increases the credibility of the ad and leads to more favorable attitudes toward the product (serial mediation).

Through a content analysis of 250 ads of the top five weight-loss programs in the US (source: Consumer Affairs) we show that

before-after ads are more common than progression ads: 36% were “before-after” whereas only 0.8% were “progression.” Another pilot study asked participants ($N=122$) to draw the ad for a weight loss program. While 22.95% of participants drew before-after ads, only 1.64% drew progression ads ($z = 5.07$, $p < .001$; remaining ads coded as “others”). Overall, these pilot studies show that progression ads are neglected by both current and future marketers.

In studies 1a ($N=116$) and 1b ($N=139$), we show that adding intermediate steps to a before-after ad increases the credibility of the ad. In both studies and using different stimuli (stylized figures and actual photographs), the progression ad was more credible than the before-after ad. One pretest ensured that the stimuli used did not differ on visual appearance, informativeness, complexity, familiarity, and novelty (all p 's $> .1$).

In study 2 ($N=134$), we test the downstream consequences of credibility on attitudes toward the product. Participants rated credibility and reported their attitudes toward one of two versions of an ad for a fictitious hair growth product. The before-after ad featured a drawing of a person before using a hair growth treatment and a drawing of the same person at the end of the treatment. The progression ad contained an identical drawing with the addition of drawings of four intermediate outcomes. As predicted, the progression ad was associated with higher credibility ($M_{before-after} = 2.91$, $M_{progression} = 3.79$; $F(1, 132) = 5.99$, $p < .05$) and more positive attitudes ($M_{before-after} = 3.71$, $M_{progression} = 4.73$; $F(1, 132) = 7.35$, $p < .05$) than the before-after ad. In a mediation model, credibility fully accounted for the effect of ad type on attitudes (95% CI: .16, 1.43).

Studies 3a ($N=143$) and 3b ($N=80$) we use open-ended and close-ended responses to show that progression ads evoke greater process imagery than before-after ads, even though both ads only have visuals of outcomes. In study 3a we coded the content of the spontaneous thoughts and images that either a before-after or a progression ad evoked in participants. Indeed, the progression ad generated more spontaneous process imagery than the before-after ad ($z=5.11$, $p < .01$). The two ads did not differ on outcome imagery ($p > .5$) or amount of imagery (i.e., response length, $p > .5$). In study 3b participants rated the extent to which a before-after ad or a progression ad evoked process and outcome imagery (through six randomly presented statements, three reflecting process imagery ($\alpha = .89$) and three reflecting outcome imagery ($\alpha = .70$) adapted from Taylor et al. 1998; Escalas and Luce 2004; Zhao et al. 2007; 2011). Again, the progression ad led to higher process imagery than the before-after ad ($M_{before-after} = 4.11$, $M_{progression} = 6.92$; $F(1, 78) = 41.53$, $p < .01$) and to the same outcome imagery ($p > .5$).

Study 4 ($N=142$) tests the links between the constructs investigated in the previous studies. Results show how the progression ad leads to greater process imagery than the before-after ad, which then results in higher credibility and consequently more positive attitudes toward the product (full serial mediation, 95% CI: .18 and .89).

Study 5 tests a boundary condition and shows that ambiguity (operationalized through size of change) moderates the effect of ad type on attitudes. We expected to replicate study 4 in the large change condition (high ambiguity because the transformation is large), with a full serial mediation whereby the progression ad leads to greater process imagery, credibility, and ultimately better attitudes than the before-after ad. However, when the change is small (low ambiguity because the transformation is trivial), the progression ad should no longer be more persuasive than the before-after ad. Indeed, within the large change condition, there was a full serial mediation (95% CI: .45 and 1.86). However, and as predicted, within the small change condition, the serial mediation was not significant (95% CI: -1.00 and .20). Importantly, the full mediations in studies 2, 4, and

5 via process imagery indicated that the process mechanism driving the observed effect is not the amount of information contained in the ad (or these mediations would be partial).

Theoretically, and differently from prior research on mental simulation, we bring attention to an understudied yet important typology of mental imagery: spontaneous mental simulation of process (*process imagery*), and highlight its critical role in the persuasiveness of advertised change. Second, we add to the literature on process versus outcome focus by showing how process imagery can be spontaneously generated through outcome visuals. Substantively, we show that before-after ads, currently prevalent in the market place, may be an ineffective way to credibly promise positive change.

The Effect of Visual Cues on the Sense of Completeness

EXTENDED ABSTRACT

When brand managers introduce a new product category to their existing portfolio (e.g., when Colgate introduced mouthwash), they are frequently concerned with how to leverage on the popularity of their existing products (e.g., Colgate toothpaste). When a city tourism board wants to promote some lesser-known attractions, a solution might be to link these attractions to better-known ones. Similarly, when social marketing campaigns aim to promote disease prevention or healthy eating, an important issue is to ensure that every element of information gets across to the audience. The marketing problems discussed above can all relate to “a sense of completeness” – whether consumers perceive a given set of products or procedures as being a complete set, so that missing one element might create a psychological void.

In this research, we study the effect of visual cues on the sense of completeness. Specifically, we examine the role of circular shapes. Prior research has documented that circular shapes activate a “softness” association (Jiang et al. 2016), are related to harmony and friendliness (Zhang, Feick, and Price 2006), and are related to groups and belonging (Zhu and Argo 2013). We contribute to this literature and demonstrate that circular shapes increase the sense of completeness amongst constituent elements.

We first conducted a pilot study to test whether the association strength between circles and completeness is indeed greater than that for the other shapes. Participants (n=118) were shown six shapes (i.e., triangle, square, rhombus, circle, rectangle, and trapezium), and were asked to indicate which shape gave them the greatest feeling of completeness. We found that 67.8% of the participants indicated that out of the six shapes, circle gave them the greatest feeling of completeness (16.1% chose square, the next popular shape; $t(117) = 7.43, p < .0001$).

Because circular shapes are associated with a high sense of completeness, grouping a set of components in a circular (vs. square, based on our pilot) shape should increase the perceived completeness of the set. Study 1 confirmed this. Participants (n=125) were asked to view a flyer on the prevention measures for the Zika virus. When study 1 was run, the Zika virus was widespread in the city where the study was conducted. Four prevention measures were listed in the flyer (e.g., “use insect repellents regularly,” “wear long-sleeved shirts and long pants”), and each was illustrated with a figure and verbal descriptions. Participants were randomly assigned to one of the two conditions. In the *circle [square]* condition, the four measures were grouped in a circular [square] shape. After participants viewed the flyer, they were asked to indicate the extent to which the four measures formed a complete prevention process for the Zika virus (1 = not at all, 7 = very much). An ANOVA revealed that participants perceived the set of prevention measures to be more complete

when the four measures were grouped in a circular versus square shape ($M_{\text{circle}} = 4.75, M_{\text{square}} = 4.26; F(1, 123) = 5.52, p = .02$).

Study 2 was conducted to test whether circular shapes would increase the perceived importance of the components. Participants (n=123) were asked to view an ad for an oral care product collection. The collection included three products of a brand: toothpaste, mouthwash, and dental floss. Participants were randomly assigned to one of the two conditions. In the *circle [square]* condition, the product collection was grouped in a circular [square] shape. Two dependent variables were measured: (1) the completeness perception of the set; and (2) product importance rating. We asked participants to rate the importance of mouthwash – which was not in the oral care routine for most of the participants (as determined by a pre-test).

ANOVA analyses revealed that a circular (vs. square) shape made participants perceive the product collection to be more complete ($M_{\text{circle}} = 4.67, M_{\text{square}} = 4.30; F(1, 121) = 3.99, p < .05$), and made participants perceive the mouthwash to be more important ($M_{\text{circle}} = 4.48, M_{\text{square}} = 3.97; F(1, 121) = 3.86, p = .05$). A mediation analysis further revealed that the completeness perception fully mediated the effect of the circular (vs. square) shape on the importance rating.

Study 3 (n=293) was conducted to test the moderating role of distinctive visual cues. We predict that distinctive visual cues (e.g., colors) will reduce the sense of completeness, and thereby attenuate the effect of circular shapes. We employed a 2 (shape: circle vs. square) 2 (component color: same color vs. different color) between-subjects design. In the *same color* condition, we used the same design as we did in study 2. In the *different color* condition, we used different background colors for the three component products. After participants viewed the ad, they responded to the same importance measure as we used in study 2. A two-way ANOVA revealed a significant interaction effect between shape and component color ($F(1, 289) = 4.13, p = .04$). A contrast analysis revealed that when the background of the components had the same color, a circular (vs. square) shape made participants perceive the mouthwash to be more important ($M_{\text{circular}} = 4.48, M_{\text{angular}} = 3.91; F(1, 289) = 5.94, p = .02$); when the components had different background colors, a circular versus square shape did not affect the perception of mouthwash importance ($M_{\text{circular}} = 3.96, M_{\text{angular}} = 4.07; F(1, 289) = .23, p = .63$). The main effects of shape and component color were non-significant ($ps > .10$).

Our research demonstrates that a circular (vs. square) shape increases the perceived completeness of a set of products or items, which has rich implications for the design of product campaigns and marketing materials.

REFERENCES

- Atalay, A. S., Bodur, H. O., & Rasolofoarison, D. (2012). Shining in the center: Central gaze cascade effect on product choice. *Journal of Consumer Research, 39*(4), 848-866.
- Büttner, O. B., Florack, A., Leder, H., Paul, M. A., Serfas, B. G., & Schulz, A. M. (2014). Hard to ignore: Impulsive buyers show an attentional bias in shopping situations. *Social Psychological and Personality Science, 5*(3), 343-351.
- Elder, R., and Krishna, A. (2012). The “visual depiction effect” in advertising: Facilitation embodied mental simulation through product orientation. *Journal of Consumer Research, 38*, 988-1003.
- Escalas, J. E., and Luce, M. F. (2004). Understanding the effects of process-focused versus outcome-focused thought in response to advertising. *Journal of Consumer Research, 31*, 274-285.

- Friedman, R. S., Fishbach, A., Förster, J., & Werth, L. (2003). Attentional priming effects on creativity. *Creativity Research Journal*, 15(2-3), 277-286.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hoch, S. J., & Loewenstein, G. F. (1991). Time-inconsistent preferences and consumer self-control. *Journal of Consumer Research*, 17(4), 492-507.
- Hui, S. K., Inman, J. J., Huang, Y., & Suher, J. (2013). The effect of in-store travel distance on unplanned spending: Applications to mobile promotion strategies. *Journal of Marketing*, 77(2), 1-16.
- Inman, J. J., Winer, R. S., & Ferraro, R. (2009). The interplay among category characteristics, customer characteristics, and customer activities on in-store decision making. *Journal of Marketing*, 73(5), 19-29.
- Jacoby, Jacob, Donald E Speller, and Carol A Kohn (1974), "Brand Choice Behavior as a Function of Information Load," *Journal of Marketing Research*, 63-69.
- Jiang, Yuwei, Gerald J. Gorn, Maria Galli, and Amitava Chattopadhyay (2016), "Does Your Company Have the Right Logo? How and Why Circular- and Angular-Logo Shapes Influence Brand Attribute Judgments," *Journal of Consumer Research*, 42 (5), 709-26.
- Just, Marcel A and Patricia A Carpenter (1980), "A Theory of Reading: From Eye Fixations to Comprehension," *Psychological review*, 87 (4), 329.
- Kasof, J. (1997). Creativity and breadth of attention. *Creativity Research Journal*, 10(4), 303-315.
- Krajbich, Ian, Carrie Armel, and Antonio Rangel (2010), "Visual Fixations and the Computation and Comparison of Value in Simple Choice," *Nature neuroscience*, 13 (10), 1292-98.
- Krajbich, Ian and Antonio Rangel (2011), "Multialternative Drift-Diffusion Model Predicts the Relationship between Visual Fixations and Choice in Value-Based Decisions," *Proceedings of the National Academy of Sciences*, 108 (33), 13852-57.
- Orquin, J. L., & Loose, S. M. (2013). Attention and choice: A review on eye movements in decision making. *Acta Psychologica*, 144(1), 190-206.
- Payne, John W (1976), "Task Complexity and Contingent Processing in Decision Making: An Information Search and Protocol Analysis," *Organizational behavior and human performance*, 16 (2), 366-87.
- Pieters, Rik and Luk Warlop (1999), "Visual Attention During Brand Choice: The Impact of Time Pressure and Task Motivation," *International Journal of Research in Marketing*, 16 (1), 1-16.
- Rayner, Keith (1978), "Eye Movements in Reading and Information Processing," *Psychological bulletin*, 85 (3), 618.
- Reutskaja, Elena, Rosemarie Nagel, Colin F Camerer, and Antonio Rangel (2011), "Search Dynamics in Consumer Choice under Time Pressure: An Eye-Tracking Study," *The American Economic Review*, 101 (2), 900-26.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305-313.
- Russo, J Edward and Larry D Rosen (1975), "An Eye Fixation Analysis of Multialternative Choice," *Memory & Cognition*, 3 (3), 267-76.
- Shi, Savannah Wei, Michel Wedel, and FGM Pieters (2013), "Information Acquisition During Online Decision Making: A Model-Based Exploration Using Eye-Tracking Data," *Management Science*, 59 (5), 1009-26.
- Stilley, K. M., Inman, J. J., & Wakefield, K. L. (2010). Planning to make unplanned purchases? The role of in-store slack in budget deviation. *Journal of Consumer Research*, 37(2), 264-278.
- Wedel, Michel and Rik Pieters (2008), *Eye Tracking for Visual Marketing: Now Publishers Inc.*
- Yang, Liu, Olivier Toubia, and Martijn G de Jong (2015), "A Bounded Rationality Model of Information Search and Choice in Preference Measurement," *Journal of Marketing Research*, 52 (2), 166-83.
- Zhang, Yinlong, Lawrence Feick, and Lydia J. Price (2006), "The Impact of Self-Construal on Angular versus Rounded Shape Preference," *Personality and Social Psychology Bulletin*, 6 (June), 794-805.
- Zhao, M., Hoeffler, S. and Zauberma, G. (2011). Mental simulation and product evaluation: The affective and cognitive dimensions of process versus outcome simulation. *Journal of Marketing Research*, 48, 827-839.
- Zhu, Rui (Juliet) and Jennifer J. Argo (2013), "Exploring the Impact of Various Shaped Seating Arrangements on Persuasion," *Journal of Consumer Research*, 40 (2), 336-49.

Me, Myself, and My Variety: Exploring the Relationship Between Variety and the Self

Chairs: Kelley Gullo, Duke University, USA

Jacqueline Rifkin, Duke University, USA

Paper #1: How Variety in Self-Expression Undermines Self-Continuity

Jacqueline Rifkin, Duke University, USA

Jordan Etkin, Duke University, USA

Paper #2: Variety Counts: How Variety is Perceived in the Presence of Self-Regulatory Goals

Hoori Rafieian, Drexel University, USA

Yanliu Huang, Drexel University, USA

Barbara E. Kahn, University of Pennsylvania, USA

Paper #3: Get on My Level: Power and Differential Patterns of Attribute-Level Variety Seeking

Jillian Hmurovic, University of Pittsburgh, USA

J. Jeffrey Inman, University of Pittsburgh, USA

Paper #4: Does Variety-Seeking Vary by Time of Day?

Kelley Gullo, Duke University, USA

Jonah Berger, University of Pennsylvania, USA

Jordan Etkin, Duke University, USA

Bryan Bollinger, Duke University, USA

SESSION OVERVIEW

A great deal of work in consumer behavior has explored why consumers seek variety (e.g., Ariely and Levav 2000; Etkin and Migliner 2016; Kahn and Isen 1993; Kahn 1995; Ratner, Kahn, and Kahneman 1999). For example, variety-seeking can be driven by people's needs to buffer against future preference uncertainty (Simonson 1990), accommodate multiple needs or users (McAlister and Pessemier 1982), have stimulation (Etkin 2016; Menon and Kahn 1995), or signal information to others (Ratner and Kahn 2002; Sela, Morgan, and Maimaran 2016).

By comparison, relatively less is known about the relationship between variety-seeking and the self. How does variety affect properties of people's selves; and how might properties of people's selves, in turn, influence variety preferences? This session addresses these questions by shedding light on the bi-directional relationship between variety-seeking and diverse properties of the self—including thoughts about the self, biological traits, and emotions—using mixed methodologies (e.g., panel data; experiments; field data) across multiple domains.

The first two papers explore how variety influences properties of people's selves, such as self-continuity and emotions during goal pursuit. Paper 1 (Rifkin and Etkin) examines how the perceived variety in consumers' self-expressive choices undermines self-continuity. Four experiments demonstrate that perceiving greater variety in an assortment chosen to express the self elicits inferences of unstable preferences, which undermines self-continuity. Paper 2 (Rafieian, Huang, and Kahn) examines how the variety among goal-inconsistent (consistent) behaviors affects anticipated guilt (reward). Five experiments demonstrate that when a self-regulation goal is primed, greater variety among goal-inconsistent (consistent) behaviors generates more anticipated guilt (reward); accordingly, people choose less variety among goal-inconsistent behaviors to minimize guilt (and more variety for goal-consistent behaviors to maximize reward).

The second two papers examine how variety-seeking behavior is, in turn, influenced by properties of people's selves. Paper 3 (Hmurovic and Inman) investigates how feelings of power affect variety-

seeking patterns. Using experimental and panel data, two studies demonstrate that low- and high-power consumers differ on whether they seek variety in high- (e.g., brand) vs. low-level (e.g., flavor) product attributes. Finally, drawing from research in chronobiology, paper 4 (Gullo, Berger, Etkin, and Bollinger) examines how people's fluctuating circadian rhythms affect preferences for variety throughout the day. Using experimental, panel, and field data, four studies demonstrate that consumers' preferences for variety are lowest in the morning and increase throughout the day.

Taken together, these four papers explore how variety can influence, and be influenced by, properties of people's selves. The papers approach this topic by examining the psychological and biological underpinnings of variety preferences, as well as how the perception of variety influences self-perception and emotion. This session also provides perspectives on some open questions in the literature: how might chosen or perceived variety affect the way consumers see themselves and their emotions, and how might aspects of people's selves—such as their chronobiology or feelings of power—influence variety-seeking patterns? This session will have broad appeal to scholars interested in variety, self-related processes, such as chronobiology and judgments of self-continuity, self-regulation, and mixed-method research.

How Variety in Self-Expression Undermines Self-Continuity

EXTENDED ABSTRACT

From dating profiles to social media accounts to streaming services, consumers are often asked to communicate their preferences by constructing assortments. For example, LivingSocial's "Pick Five" campaign encouraged social networkers to list their "five favorite" movies and songs on their profiles (Sullivan 2009). Yet while consumers often construct such assortments to communicate information about who they are, might these assortments impact how consumers see themselves? What aspect(s) of the assortment might play a role?

The present research proposes that the perceived variety in a self-expressive assortment can impact how consumers see themselves. Recent research demonstrates that variety-seeking can accommodate for unstable and changing preferences (Sela and Maimaran 2016; Simonson 1990). Integrating this work with Self-Perception Theory (Bem 1972), which argues that people learn about their preferences by observing their own actions, we theorize that perceiving greater variety within a self-expressive assortment should elicit inferences that one's preferences in the choice domain are less stable (e.g., greater perceived variety in one's music choices signals that one's music preferences are unstable). Because instability implies change over time, we reason that this inference of preference instability should affect judgments of similarity with past and future selves (self-continuity; Bartels and Urminsky 2011). We thus propose that by leading consumers to infer that their domain-specific preferences are less stable, perceiving greater variety in a self-expressive assortment will undermine self-continuity.

Four studies support our predictions. In study 1, participants ($N = 80$) created a personal profile of their five favorite types of tea for a fictitious tea delivery service. To manipulate perceived variety, we provided participants with (false) feedback about the composition of

their choices (high vs. low variety), then measured self-continuity using a measure from the literature (future-self connectedness; Bartels and Urminsky 2011). As predicted, perceiving greater variety in their self-expressive assortments undermined participants' self-continuity ($M_{\text{high-variety}} = -.08$ vs. $M_{\text{low-variety}} = .32$, $F = 5.40$, $p = .023$). We also replicated this effect using a different manipulation of perceived variety (i.e., visually categorizing participants' choices into more vs. fewer categories).

Study 2 explores the proposed underlying process by measuring the proposed mediator (domain-specific preference stability) and by separately measuring two components of self-continuity (future-self similarity vs. future-self liking; Molouki, Bartels, and Hershfield 2016). First, participants ($N = 122$) created an online personal profile and chose an "ideal collection" of book genres or public radio programs (depending on which activity they indicated doing more often) that represented their personal tastes. After receiving (false) feedback about the variety in their assortments (high vs. low), we measured future-self similarity, future-self liking, and the underlying mechanism, domain-specific preference stability. As predicted, perceiving greater variety in their assortments decreased future-self similarity ($M_{\text{high-variety}} = 5.40$ vs. $M_{\text{low-variety}} = 5.87$, $F = 6.30$, $p = .013$) due to reductions in preference stability ($M_{\text{high-variety}} = 5.25$ vs. $M_{\text{low-variety}} = 5.74$, $F = 4.64$, $p = .033$; Mediation 95% CI [-0.35, -0.04]). Importantly, however, perceived variety had no effect on future-self liking ($F < 1$, $p > .6$), suggesting that greater perceived variety negatively affects self-continuity by diminishing a sense of similarity with—and not liking for—one's future self.

Prior work suggests that beyond feeling connected to future selves, we can also feel connected to past selves (Milligan 2003; Sedikides et al. 2008). If our self-continuity effect is driven by inferences of preference instability, as we suggest, then the effect may extend to past-self continuity. To test this, study 3 participants ($N = 183$) chose their "ideal collection" of book genres for an online profile and received false feedback about the variety in their choices (high vs. low). Then, we measured future-self and past-self continuity. Supporting our predictions, perceiving greater variety reduced not only future-self connectedness ($M_{\text{high-variety}} = -.18$ vs. $M_{\text{low-variety}} = .20$; $F = 7.61$, $p = .006$) and similarity ($M_{\text{high-variety}} = 5.51$ vs. $M_{\text{low-variety}} = 5.91$; $F = 6.99$, $p = .009$), but also past-self similarity ($M_{\text{high-variety}} = 5.19$ vs. $M_{\text{low-variety}} = 5.59$; $F = 4.08$, $p = .045$). Further, all three effects were driven by a reduction in preference stability ($M_{\text{high-variety}} = 4.81$ vs. $M_{\text{low-variety}} = 5.55$, $F = 11.79$, $p = .001$; all 3 mediation CIs exclude 0), providing support for our proposed mediating process.

Critical to our theory is that a chosen assortment says something about who one is (i.e., it is self-expressive; Belk 1988). If a chosen assortment were not self-expressive, by contrast, we would not expect to observe our effect. To test this, participants in study 4 ($N = 222$) first indicated a domain that is least (vs. most) self-expressive from several options (books, radio, music, public radio). Then, while choosing "five favorite" items for a social media profile (as in prior studies), we manipulated whether participants chose from the domain previously selected as their most or least self-expressive. We manipulated the perceived variety of the assortment and measured self-continuity and participants' belief that they would outgrow the social media platform. A 2 (perceived variety) \times 2 (self-expressiveness) ANOVA revealed the predicted interaction ($F = 3.75$; $p = .054$): When choosing from one's most self-expressive domain, perceiving greater variety among one's assortment reduced future-self connectedness ($M_{\text{high-variety}} = -.32$ vs. $M_{\text{low-variety}} = .11$; $F = 6.21$, $p = .013$); but when choosing from one's least self-expressive domain, however, the effect disappeared ($M_{\text{high-variety}} = .11$ vs. $M_{\text{low-variety}} = .09$; $F < 1$, $p > .8$). Thus, only when a chosen assortment is self-

expressive does greater perceived variety undermine self-continuity. In addition, greater perceived variety enhanced participants' belief that they would "outgrow" the social media platform, particularly when choosing from their most (vs. least) self-expressive domain (high self-expressiveness: $M_{\text{high-variety}} = 5.31$ vs. $M_{\text{low-variety}} = 4.60$; $F = 5.35$, $p = .022$; low self-expressiveness: $M_{\text{high-variety}} = 5.26$ vs. $M_{\text{low-variety}} = 4.86$; $F = 2.08$, $p = .151$).

Together, these findings demonstrate that greater perceived variety in a self-expressive assortment has implications both for consumers' self-continuity and for marketers who care about long-term customer relationships. This research contributes to the literatures on symbolic consumption, self-continuity, and variety-seeking.

Variety Counts: How Variety is Perceived in the Presence of Self-Regulatory Goals

EXTENDED ABSTRACT

Consumers set various goals in their daily lives. Achieving these goals requires consumers to avoid the allure of goal-inconsistent behaviors (Loewenstein 1996). The act of trying to avoid goal-inconsistent behaviors results in relief and contentment when successful and guilt and anxiety when unsuccessful (Carver and Scheier 1982).

In this research, we propose that when consumers pursue a self-regulatory goal, they tend to think about the future evaluation of their current choices. So, if they are anticipating violating a self-regulatory goal by consuming indulgent options, they think about ways to minimize anticipated guilt. If they are behaving consistently with a self-regulatory goal by consuming virtuous options, however, they think about ways to maximize anticipated reward. We suggest that when consumers are choosing items to consume that are either consistent or inconsistent with a self-regulatory goal (holding the number of options consumed constant), they consider the variety of the chosen options, and not just their preference for those options.

Specifically, we hypothesize that when people are primed with a self-regulatory goal, less (more) variety in goal-inconsistent (goal-consistent) acts results in less anticipated guilt (more anticipated fulfillment and perceptions of progress). People who are not primed with a goal, however, try to maximize the enjoyment of their current consumption and thus, focus on their preferences and not future evaluations of their current choice. These two different perspectives result in different behaviors depending upon the preference structure of the options in the choice set: When consumers are making choices between equally preferred indulgent options, they opt for more (less) variety in the absence (presence) of a self-regulatory goal. In the absence of a goal, variety is perceived as positive in hedonic current consumption (Ratner, Kahn, and Kahneman 1999), but negative when considering anticipated guilt. By contrast, when virtuous items are not equally preferred, consumers choose to consume their more preferred item repeatedly when no goal is primed, but choose more variety—even at the expense of consuming a less preferred item—if a goal is primed. Formally, we hypothesize:

Hypothesis 1a: Variety in goal-inconsistent choices leads to higher levels of anticipated guilt for people with a goal than for those without a goal.

Hypothesis 1b: Variety in goal-consistent choices leads to higher levels of anticipated satisfaction for people with a goal than for those without a goal.

Hypothesis 2a: People with a goal seek less variety in goal-inconsistent activities than those without a goal, adjusting for the preferences of the options consumed.

Hypothesis 2b: People with a goal seek more variety in goal-consistent activities than those without a goal, adjusting for the preferences of the options consumed.

We argue that when a health goal is activated, consumers are motivated to count the number of their goal-relevant choices, as a means of monitoring their goal progress. We further contend that, in these situations, the variety of options chosen will be perceived as a way to count how many goal-consistent, or inconsistent, options have been consumed. For instance, for the delicious (but unhealthy options) a higher variety of items, holding actual quantity constant, will be perceived as more goal inconsistent activities. On the other hand, when consuming vegetables (healthy snacks) or exercise activities, more variety will be perceived as more goal-consistent, again holding quantity of consumption or activity constant.

We test our predictions across five studies. The self-regulatory goal that is primed for consumers is a health goal. The first three studies test the hypotheses in a vice category (eating unhealthy snacks). The stimuli used in these studies were pretested to ensure that participants have statistically even preferences for them. The last two studies test the claims in a virtue category (exercising and eating vegetables), with the preference structure manipulated individually for each participant.

In the first study, we show that thinking about having variety in vice options leads to higher anticipated guilt, and that this happens because by choosing more (than less) variety in vice categories, consumers with a health goal think they have consumed more of those goal-inconsistent options.

In studies 2 and 3, we show that priming participants with a health goal leads them to incorporate less variety in their choice of vice options. In study 2, half of participants were primed with a health goal. All participants were then asked to choose two pieces from two available snack types. A smaller percentage of participants in the goal group (than in the control group) chose two different snacks. In study 3, we replicated these findings this time with real snacks (participants were asked to choose three pieces from four available snack types in the lab).

In studies 4 and 5, we tested our predictions in virtue categories. In study 4, participants were asked to rank five exercise activities. Participants then thought about a routine with different levels of variety in exercise activities. While the non-varied routine involved only the highest-ranked (most liked activity), the varied routine involved the highest-ranked, the mid-ranked, and the lowest-ranked activities. This ensured that seeking variety would have to come with the cost of incorporating an activity that participants had ranked the lowest. Participants in the variety condition felt they had made more progress and that their routine had involved more activity than did participants in the no-variety condition. In study 5, participants ranked seven different vegetables, then got an individualized choice set including their high-ranked and low-ranked vegetables. Participants with a health goal chose more variety although it meant consuming a vegetable they did not like.

Get on My Level: Power and Differential Patterns of Attribute-Level Variety Seeking

EXTENDED ABSTRACT

Power is defined as the “asymmetric control over valued resources in social relations” (Magee and Galinsky 2008, p. 361), and exists both as a chronic and situationally-evoked psychological state (Rucker et al. 2012). There is growing recognition that power can have profound effects on consumer behavior and cognition (e.g., Dubois et al. 2012; Inesi et al. 2011; Rucker and Galinsky 2008), with recent work finding that increased action tendency triggered by high-power states increases consumer switching behavior (Jiang et al. 2014). Although prior power research suggests that action orientation may lead overall levels of variety-seeking to differ between low and high-power consumers, this research is silent regarding how the *pattern* of variety-seeking may differ. If low-power consumers make less varied purchases, is the variety they do select equivalent to that of high-power consumers? That is, do low and high-power consumers seek variety on the same types of product attributes, just to a different degree? In the current paper, rather than focusing on differences in the intensity of variety-seeking for low and high-power consumers, we investigate differences in the patterns of variety-seeking they pursue. Specifically, we propose that both low and high-power consumers seek variety, but do so more intensely on different product attribute levels.

Product attributes can be categorized as higher-level or lower-level, depending on their degree of abstractness (e.g., Liberman et al. 2002). Just as prior work has shown consumers can seek variety more intensely on some product attributes more than others (e.g., sensory vs. nonsensory attributes; Inman 2001), we posit that low and high-power consumers differ in the relative intensity to which they seek variety on different product attribute levels (higher vs. lower). Given research evidencing that high-power consumers process information at higher, more abstract levels (Smith and Trope 2006), we argue that variety-seeking occurs more intensely at the level at which consumers’ attention is directed—higher-level product attributes for high-power consumers and lower-level product attributes for low power consumers.

Study 1 tested this prediction using historical purchase data from the Nielsen Homescan Consumer Panel in three product categories (i.e., chips, pasta sauce, and carbonated beverages) over a twelve-year period (2004-2015). We restricted our analyses to single-person households to more reliably capture individual-level variety-seeking behavior (Kahn et al. 1986). Nielsen-specified UPC attribute and category classifications were used to code low- and high-level attributes. Flavor served as a low-level attribute for all product categories. Higher-level attributes varied in availability between product categories and included brand, type (e.g., kettle-cooked), form (e.g., waffle), module (e.g., tortilla), and style (e.g., extra thick). Consistent with prior research, we calculated the degree of consumer variety-seeking using the Herfindahl-Hirschman Index (i.e., HHI; the sum of squares of choice shares), which was subtracted from 1 so that larger scores indicate greater variety-seeking (Nowlis et al. 2010). Subtracting the higher-level index from the lower-level index generates an indicator of relative variety-seeking, with positive values signaling greater lower-level (vs. higher-level) product attribute variety-seeking.

Because income reflects a literal control over economic resources and is tightly linked to experiences of power (e.g., Dubois et al. 2015), income was used as an indicator of individuals’ chronic sense of low (<\$12,000; n=2,462) and high (≥\$100,000; n=1,034) power. To minimize the possibility that variety-seeking could be attributed

to recent income changes, only panelists who remained at the same income level for at least two consecutive years were included in the sample, and only purchase data from the longest spell of consecutive years at the same income level were retained for analysis.

Separate regression analyses were performed for each index of relative variety seeking within each product category, including power as the primary predictor (1 = high, 0 = low) and controlling for both income stability (i.e., total number of years at same income level) and total spent (i.e., total amount spent on all trips in which target product was purchased). In the chip category, although there was no difference in relative variety-seeking on flavor versus brand ($b = -.003, p = .706$), low-power consumers engaged in significantly more variety-seeking on the lower-level attribute of flavor than the higher-level attributes of form ($b = -.080, p < .001$), type ($b = -.164, p < .001$), and module ($b = -.024, p = .020$), as compared to high-power consumers. Similar results emerged in the other product categories, with low-power consumers demonstrating greater variety-seeking on flavor than all other higher level attributes except for brand (sauce style: $b = -.024, p = .035$; beverage type: $b = -.070, p < .001$). This suggests that high-power consumers engage in more intense variety-seeking on higher-level (vs. lower-level) product attributes to a greater degree than low-power consumers.

Study 2 sought to replicate the results of Study 1 using a direct (but subtle) power-state manipulation. MTurk participants ($n = 177$) imagined receiving a promotional punchcard for six free bagels (one per week). After viewing the bagel shop's 16 options listed below a chalkboard sign reading "We all feel powerful [powerless] in the morning...have a bagel!" (i.e., phrasing adapted from Dubois et al.'s 2012 successful manipulation), participants sequentially chose which bagel they wanted for each of the following six weeks. Flavor categorization constituted different product attribute levels, with each specific flavor (e.g., everything) representing the lower-level attribute the broader flavor categorization (i.e., sweet, savory) as the higher-level attribute. Replicating Study 1, an index of relative variety seeking on product attribute levels was computed. ANCOVA results, controlling for income (to examine unique effects of situationally-induced power), reveal that low-power participants, relative to high-power participants, seek more variety on low-level flavor attributes than the higher-level flavor categorization, as predicted ($F(1,174) = 3.79, p = .053$). Thus, Study 2 supports our thesis that variety-seeking occurs relatively more intensely at higher-level product attributes for high (vs. low) power consumers.

In sum, converging evidence from both actual and hypothetical product choices using both chronic and situationally-induced power states suggests that the relative intensity with which high and low-power consumers seek variety differs by product attribute level. As such, this research not only differentiates between relative and absolute variety-seeking intensity, but also identifies a novel dimension on which to examine consumer variety-seeking—product attribute level.

Does Variety-Seeking Vary by Time of Day?

EXTENDED ABSTRACT

Variety is the proverbial spice of life. From mundane choices, like what to eat, to important decision, like how to spend one's time, people often seek variation (Kahn 1995; McAlister and Pessemier 1982). But might this preference vary by time of day? Might grocery-shoppers pick less varied options, for example, if they go shopping in the morning rather than the evening?

We suggest this possibility based on research regarding chronobiology. Various internal biological processes naturally oscillate

over an approximately 24-hour period. The rhythms are endogenous (Aschoff et al. 1971), but are often adjusted, or synchronized, by external cues (e.g., light). Most relevant to the current research are diurnal variations in arousal. People tend to feel lower arousal or less alert in the morning (Kleitman 1987; Thayer 1978, 1989), and given that variety is stimulating (Berlyne 1960; Raju 1980), people may seek less variety in the morning.

Four studies support this hypothesis. Compared to other times of day, variety-seeking is lower in the morning: people pick items that are more similar to what they chose previously, and choose less-varied portfolios of options to consume at a later date. Further, the effects are moderated by factors that impact circadian rhythms (i.e., sunlight and individual differences in circadian preferences). On mornings when people feel more alert (i.e., earlier sunrise), they show greater variety-seeking, and people who feel more alert in the morning (i.e., morning types), prefer more variety than as well.

In Study 1, we analyzed the supermarket shopping behavior of over 1 million households across a 25-month period. We use scanner panel data from a single California location of a major grocery chain. Each purchase includes time of day and a unique household identifier for consumers using a loyalty card. This allows us to track the same household over time and isolate the time-of-day effect using within-household-category variation. We analyze the variety purchased within each category for a given shopping trip, i.e., the ratio of unique products purchased within that category to the number of total products purchased within the category. For example, someone buying two yogurts might purchase two of the same flavor (i.e., less variety) or two different flavors (i.e., more variety).

Results indicate that people choose less variety in the morning than the rest of the day ($p < .0001$). Extensive control variables rule out potential alternative explanations, such as shopping basket composition or variation across households.

We also test the underlying process by examining whether the effect of time of day is moderated by sunlight. Light itself can be stimulating and boost arousal (Cajochen 2007) light is intuitively linked with an alert or wakeful state. Compared to the effects of light on human circadian rhythms, little attention has been paid to its acute alerting action. Here I summarize studies from the past two decades, which have defined and quantified the dose (illuminance levels, so if stimulation plays a role in these effects, as we suggest, then variety-seeking should vary with seasonal changes in day length. We collected sunrise time for the 761 days in the dataset, and estimate an alternative regression where we interact within-day time trends with sunrise times. Diurnal variation in variety-seeking is moderated by sunlight ($p < .05$). Morning variety-seeking is higher on days when the sun comes up earlier.

Study 2 looked at meal consumption. We measured what a panel of participants ($N = 135$) ate every day for breakfast, lunch, and dinner over a multiday period. Then, for each meal, independent coders ($\alpha = .87$) rated how much variety existed among that meal across days. Considering dinners, for example, someone who ate the same thing every meal across days (e.g., all pasta and vegetables) would receive a lower variety score than someone who ate completely different things each dinner.

As predicted, people ate less variety for breakfast ($M_{\text{breakfast}} = 2.54$) than lunch ($M_{\text{lunch}} = 3.40, p < .0001$) and than dinner ($M_{\text{dinner}} = 3.79, p < .0001$). Ancillary analyses cast doubt on a host of alternative explanations. While one could argue that people eat more variety for lunch and dinner because they eat out (rather than at home), eat with others (rather than alone) or eat food others make (rather than prepare themselves), results hold controlling when for all these factors, casting doubt on these alternatives.

To test diurnal variation in variety-seeking more broadly, Study 3 examines a non-food context. Participants ($N = 783$) were shown a list of activities (e.g., watch a movie) and asked to pick a total of six they would like to do over the coming week (adapted from Etkin 2016). They could pick six different activities, or the same activities multiple times so long as they selected six total activities. Variety preference was measured as the number of unique activities they selected. To examine whether variety preferences varied over the course of the day, we surveyed 80 people each hour from 5am to 11pm.

As predicted, variety preferences were positively correlated with time of day ($r = .07$, $p < .05$); people chose less variety in the morning than they did later in the day.

Study 4 examined the moderating role of individual differences in circadian preferences. People vary in sleep/wake and alertness patterns. Morning types go to bed and wake up earlier, and feel more alert and energized in the morning (Natale and Cicogna 1996; Wilson 1990). If less variety-seeking in the morning is driven by stimulation, as we suggest, morning types might seek greater variety in the morning compared to other individuals. Participants completed the morningness scale (Smith, Reilly, and Midkiff 1989) and filled out the variety measure from Study 2, either in the morning, mid-day, or evening.

Consistent with the hypothesized underlying role of circadian rhythms, individual differences in circadian preference moderated the results. In the morning, variety-seeking was correlated with morningness ($b = .016$, $p < .05$), but not in the mid-day or evening (all p 's $> .2$).

Taken together, these four studies use diverse methodologies and contexts to support the notion that variety-seeking varies throughout the day. These results provide insight into drivers of variety-seeking and the biological basis of decision making more broadly.

REFERENCES

- Ariely, Dan and Jonathan Levav (2000), "Sequential Choice in Group Settings: Taking the Road Less Traveled and Less Enjoyed," *Journal of Consumer Research*, 27(3), 279–90.
- Aschoff, J., M. Fatranska, H. Giedke, P. Doerr, D. Stamm, and H. Wisser (1971), "Human Circadian Rhythms in Continuous Darkness: Entrainment by Social Cues," *Science*, 171(3967), 213–15.
- Bartels, Daniel M. and Oleg Urminsky (2011), "On Intertemporal Selfishness: How the Perceived Instability of Identity Underlies Impatient Consumption," *Journal of Consumer Research*, 38 (1), 182–98.
- Belk, Russell W. (1988), "Possessions and The Extended Self," *Journal of Consumer Research*, 15(2), 139–68.
- Bem, Daryl (1972), "Self-Perception Theory," in *Advances in Experimental Social Psychology*, Vol. 6, ed. Leon Berkowitz, New York: Academic Press.
- Berlyne, Daniel E. (1960), *Conflict, Arousal, and Curiosity*, New York: McGraw-Hill.
- Cajochen, Christian (2007), "Alerting Effects of Light," *Sleep Medicine Reviews*, 11(6), 453–64.
- Carver, Charles S. and Michael F. Scheier (1982), "Control Theory: A Useful Conceptual Framework for Personality–Social, Clinical, and Health Psychology," *Psychological Bulletin*, 92(1), 111–35.
- Dubois, David, Derek D. Rucker, and Adam D. Galinsky (2012), "Super Size Me: Product Size as a Signal of Status," *Journal of Consumer Research*, 38(6), 1047–62.
- _____ (2015), "Social Class, Power, and Selfishness: When and Why Upper and Lower Class Individuals Behave Unethically," *Journal of Personality and Social Psychology*, 108(3), 436–49.
- Etkin, Jordan (2016), "Choosing Variety for Joint Consumption," *Journal of Marketing Research*, 53(6), 1019–33.
- Etkin, Jordan and Cassie Mogilner (2016), "When Variety Among Activities Increases Happiness," *Journal of Consumer Research*, 8(August), forthcoming.
- Inesi, Ena, Simona Botti, David Dubois, Derek D. Rucker, and Adam D. Galinsky (2011), "Power and Choice: Their Dynamic Interplay in Quenching the Thirst for Personal Control," *Psychological Science*, 22(8), 1042–8.
- Inman, J. Jeffrey (2001), "The Role of Sensory-Specific Satiety in Attribute-Level Variety Seeking," *Journal of Consumer Research*, 28(1), 105–20.
- Jiang, Yuwei, Lingjing Zhan, and Derek D. Rucker (2014), "Power and Action Orientation: Power as a Catalyst for Consumer Switching Behavior," *Journal of Consumer Research*, 41(1), 183–96.
- Kahn, Barbara E. (1995), "Consumer Variety-Seeking among Goods and Services," *Journal of Retailing and Consumer Services*, 2(3), 139–48.
- Kahn, Barbara E. and Alice M. Isen (1993), "The Influence of Positive Affect on Variety Seeking Among Safe, Enjoyable Products," *Journal of Consumer Research*, 20(2), 257–70.
- Kahn, Barbara E., Donald G. Morrison, and Gordon P. Wright (1986), "Aggregating Individual Purchases to the Household Level," *Marketing Science*, 5, 260–8.
- Kahn, Barbara E. and Brian Wansink (2004), "The Influence of Assortment Structure on Perceived Variety and Consumption Quantities," *Journal of Consumer Research*, 30(4), 519–33.
- Kleitman, Nathaniel (1987), *Sleep and Wakefulness*, University of Chicago Press.
- Liberman, Nira, Michael D. Sagristano, and Yaacov Trope (2002), "The Effect of Temporal Distance on Level of Mental Construal," *Journal of Experimental Social Psychology*, 38 (6), 523–34.
- Loewenstein, George (1996), "Out of Control: Visceral Influences on Behavior," *Organizational Behavior and Human Decision Processes*, 65(3), 272–92.
- Magee, Joe C. and Adam D. Galinsky (2008), "Social Hierarchy: The Self-Reinforcing Nature of Power and Status," *Academy of Management Annals*, 2(1), 351–98.
- McAlister, Leigh and Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9(3), 311–22.
- Menon, Satya and Barbara E. Kahn (1995), "The Impact of Context on Variety Seeking in Product Choices," *Journal of Consumer Research*, 22(3), 285–95.
- Milligan, Melinda J. (2003), "Displacement and Identity Discontinuity: The Role of Nostalgia in Establishing New Identity Categories," *Symbolic Interaction*, 26(3), 381–403.
- Molouki, Sarah, Daniel M. Bartels, and Hal E. Hershfield (2016), "Who Will I Be Tomorrow? How the Valence of Expected Personal Change Affects Future-Oriented Feelings and Choices," paper presented at Society for Consumer Research conference, St. Pete's Beach, FL.
- Natale, Vincenzo and Piercarla Cicogna (1996), "Circadian Regulation of Subjective Alertness in Morning and Evening Types," *Personality and Individual Differences*, 20(4), 491–97.

- Nowlis, Stephen M., Ravi Dhar, and Itamar Simonson (2010), "The Effect of Decision Order on Purchase Quantity Decisions," *Journal of Marketing Research*, 40 (4), 725–37.
- Raju, P. S. (1980), "Optimum Stimulation Level: Its Relationship to Personality, Demographics, and Exploratory Behavior," *Journal of Consumer Research*, 7(3), 272–82.
- Ratner, Rebecca K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences For the Sake of Variety," *Journal of Consumer Research*, 26(1), 1–15.
- Ratner, Rebecca K. and Barbara E. Kahn (2002), "The Impact of Private versus Public Consumption on Variety-Seeking Behavior," *Journal of Consumer Research*, 29(2), 246–57.
- Rucker, Derek D. and Adam D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35(2), 257–67.
- Rucker, Derek D., Adam D. Galinsky, and David Dubois (2012), "Power and Consumer Behavior: How Power Shapes Who and What Consumers Value," *Journal of Consumer Psychology*, 22(3), 352–68.
- Sedikides, Constantine, Tim Wildschut, Lowell Gaertner, Clay Routledge, and Jamie Arndt (2008), "Nostalgia as Enabler of Self-Continuity," in *Self-Continuity: Individual And Collective Perspectives*, ed. Fabio Sani, Psychology Press, 227-39.
- Sela, Aner, Siân Morgan, and Michal Maimaran (2016), "Variety as an Expertise Signal," working paper.
- Sela, Aner and Michal Maimaran (2016), "Variety as a Preference Strength Signal," working paper.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27(2), 150–62.
- Smith, Carlla S., Christopher Reilly, and Karen Midkiff (1989), "Evaluation of Three Circadian Rhythm Questionnaires with Suggestions for an Improved Measure of Morningness," *The Journal of Applied Asychology*, 74(5), 728–38.
- Smith, Pamela K. and Yaacov Trope (2006), "You Focus on the Forest When You're in Charge of the Trees: Power Priming and Abstract Information Processing," *Journal of Personality and Social Psychology*, 90(4), 578–96.
- Sullivan, Mark (2009), "Facebook 'Pick Five' Lists: The Hottest and the Wildest", <http://www.pcworld.com/article/166303/pickfive.html>.
- Thayer, Robert E. (1978), "Toward a Psychological Theory of Multidimension Activation (Arousal)," *Motivation and Emotion*, 2(1), 1-34.
- Thayer, Robert E. (1989), *The Biopsychology of Mood and Arousal*, NY: Oxford University Press.
- Van Trijp, Hans M. C., Wayne D. Hoyer, and J. Jeffrey Inman (1996), "Why Switch? Product Category-Level Explanations for True Variety-Seeking Behavior," *Journal of Marketing Research*, 33(3), 281-92.
- Wilson, Glenn D. (1990), "Personality, Time of Day and Arousal," *Personality and Individual Differences*, 11(2), 153–68.

Saliency and Consumer Decision-Making

Chairs: Milica Mormann, Southern Methodist University, USA
Evan Weingarten, University of Pennsylvania, USA

Paper #1: The Influence of Number Format on Consumer Attention

Marisabel Romero, Colorado State University, USA
Adam W. Craig, University of Kentucky, USA
Anand Kumar, University of South Florida, USA
Milica Mormann, Southern Methodist University, USA

Paper #2: Perceptual and Cognitive Saliency and their Effects on Product Valuations

Evan Weingarten, University of Pennsylvania, USA
J. Wesley Hutchinson, University of Pennsylvania, USA

Paper #3: Promotion Emotion: The Saliency of Restrictions vs. Rewards in Framing a Deal

Priya Raghuram, New York University, USA
Jeff Inman, University of Pittsburgh, USA
Kirk Wakefield, Baylor University, USA

Paper #4: How Tradeoff Framing Impacts Attribute Focus and Shifts Choices

Minzhe Xu, University of Florida, USA
Oleg Urminsky, University of Chicago, USA

SESSION OVERVIEW

Daily life is filled with tons of information, only some of which can be processed at a given time (Kahneman 1973). Given limited consumer attention and sensitivity to context, how this attention is directed is critical. Retailers, advertisers, and other marketers can make various benefits or costs of products salient and sway consumer opinion.

But, why and how does making some information salient affect how consumers evaluate products? There are many different possible pieces of information to make more or less salient, whether it's the restrictions to a deal, product attributes, or numbers on a product page or advertisement. With recent advances demonstrating how saliency may influence consumer product evaluations (Milosavljevic et al. 2012; Towal, Mormann, and Koch 2013), there are still many open questions about the nature of this relationship and whether it applies to a multitude of contexts. For example, does the numeric information formatting affect saliency and product valuation? Does the saliency of time versus money influence intertemporal tradeoffs? Can saliency effects occur even when consumers are not overwhelmed with information? Does the effect of saliency persist over several weeks, or is it short-lived? Can emphasizing certain elements of a deal affect consumer perceptions of that deal and purchase?

This session deals with these and other questions across laboratory, eye-tracking, and field experiments to develop the understanding of how saliency shapes consumer behavior. **Romero, Craig, Kumar, and Mormann** study how number format (symbolic versus verbal) affects product evaluations. Using eye-tracking they demonstrate how negative temporal attributes representation affects attention and evaluation: people fixate quicker on symbolic numbers, which depress product valuations. **Weingarten and Hutchinson** examine how saliency biases occur even when all information is accessible and relevant. They find product valuations can be biased by both cognitive saliency (i.e., greater elaboration on some attributes) and perceptual saliency (e.g., position effects), but that cognitive saliency effects may decline as people make more decisions. **Raghuram, Inman, and Wakefield** investigate, in lab and field studies, how making "reward" versus "restriction" (i.e., strings attached) aspects

of a deal salient for promotions affects deal evaluations and purchase behavior. They find that framing a deal as a restriction and then a reward bolsters deal positivity. Finally, **Xu and Urminsky** demonstrate how consumer patience changes based on whether calling attention to time or money in eliciting intertemporal preferences. They find more impatience when consumers pick how long to wait for a large reward than when determining the money they would forego for a sooner payout.

Taken together, we will discuss how saliency shapes consumer behavior in different choice contexts including time-money and price-quality tradeoffs, product valuations, and product choice. Overall, we examine how saliency affects product valuations and choice through several different instantiations of saliency, which have direct applications even to advertising and retailing.

Given the importance of these effects to the theory and practice of consumer behavior, this session should appeal to multiple audiences with attention and perception, retailing, intertemporal choice, differences in money and time, advertising, and heuristics and biases.

The Influence of Number Format on Consumer Attention

EXTENDED ABSTRACT

As a consumer, would you evaluate the cost of purchasing a gym membership any differently if its price was expressed as "50 dollars a month" rather than "Fifty dollars a month"? This research proposes that consumers process symbolic representations of numbers (e.g., 5) differently than word representations (e.g., five), which ultimately leads to changes in quantity estimations and product evaluations. While previous work on numerical cognition has looked at changes in unit presentation (e.g., 3 weeks vs. 21 days) or precision (e.g., 115 vs. 120), the present research uniquely studies whether the visual notation of quantitative information can influence consumer judgment even when keeping magnitude and unit constant.

Arabic symbols have long been associated with precision and accuracy (Windschitl and Wells 1996). Moreover, due to their ideographic notation (Besner and Coltheart 1979), Arabic numbers (when compared to verbal numbers) possess shape features that make them more visually salient (Treisman and Gormican 1988; Wolfe and Horowitz 2004). Centered on these cognitive and perceptual characteristics, we propose that symbolic numbers (vs. verbal numbers) increase attention to quantitative information presented.

Attention eliminates distractions from the stimulus, allowing consumers to process information more efficiently (Posner and Rothbart 2005). Attention has also been known to bias magnitude perception upward. For example, a package that attracts more attention is associated to higher volume (Folkes and Matta 2004). Because number magnitude is a judgment of relative "size" (Dehaene 1992; Coulter and Coulter 2005) and given that Arabic numbers should increase attention to quantitative information, we expect that they should also lead to higher magnitude perceptions. Furthermore, we propose that the direction in which Arabic numbers will affect product evaluation depends on whether higher magnitudes of the advertised attribute is a positive addition to the product.

Our initial objective is to demonstrate that number notation can influence attention to quantitative information. Thus, in our first study, we manipulated number notation as well as the amount of product information presented in each product package. Based on

the principles of attention, we expect that when the amount of product information presented is large, there will be more competition for attention among product elements. Hence, symbolic numbers should lead to greater attention to quantitative information when the display is visually complex. However, when the amount of information presented is small, consumers will be able to attend equally to quantitative information regardless of the number format, and hence, our effects will be attenuated.

We created seventeen different stimuli for consumer products that highlighted a quantitative benefit. For nine out of seventeen products, we included a large amount of information in the package design. A pretest confirmed that consumers correctly identified the amount of information manipulation.

Our main study used eye-tracking technology to provide evidence for an attention-based mechanism. Sixteen students (43.8% female, average age = 23.25) from a large US University participated in a mixed factor design. Number format (symbolic vs. verbal) was manipulated between-subjects and amount of information was measured within-subjects. Participants evaluated three products as a part of a practice trial. Subsequently, they evaluated 17 different products (e.g., a cheese cracker, a light bulb, a car, etc.). Across conditions, the products only differed on the numerical notation (e.g., the cracker cheese content as “4 cheese” versus “Four cheese”). Once participants viewed the image, they pressed the spacebar to continue. In the session, we continuously recorded the participant’s eye movements using Tobii eye-tracking apparatus.

We separated the results by amount of information presented in the package (small vs. large). We ran a repeated-measure Analysis of Variance (ANOVA) with number format (symbolic vs. verbal) as a between-subjects factor. The time to first fixation for each product category created (small vs. large information) was the within-subjects factor. The results confirmed a significant main effect of amount of information ($F(1,14) = 68.10, p < .001$) and a marginally significant number format \times amount of information interaction ($F(1,14) = 3.37, p = .09$). In line with our attention-based hypothesis, it took less time for consumers to fixate on the symbolic (vs. verbal) number when the products presented a large amount of information ($M_{\text{symbol}} = 5.04, M_{\text{verbal}} = 7.06; F(1,14) = 4.38, p = .05$), however, this effect was attenuated when the products contained small amount of information ($M_{\text{symbol}} = 1.86, M_{\text{verbal}} = 2.10; F(1,14) = .31, p = .58$).

In Study 2, we explored the influence of number notation on product evaluations. Seventy-three MTurk panelists (39.7% female, average age = 32.7) participated in a single-factor between-subjects design (number notation: symbol vs. verbal). We created an advertisement for a new refrigeration product, VTex, that can chill any food item in 45 (vs. forty-five) seconds. Because the main purpose of this product is to chill food items quickly, higher magnitudes should be associated with lower product evaluations. Participants looked over the ad. Subsequently, they provided their attitudes toward brand VTex ($\alpha = .94$) and indicated how likely they would be to purchase the product if available locally ($\alpha = .96$). As expected participants evaluated VTex more negatively when the temporal attribute was presented in symbolic rather than verbal format ($M_{\text{symbol}} = 5.13, M_{\text{verbal}} = 5.83; F(1, 71) = 6.12, p < .05; \eta^2_{\text{partial}} = .08$). Similarly, participants were less willing to purchase the product when the temporal attribute was presented in symbols rather than words ($M_{\text{symbol}} = 4.38, M_{\text{verbal}} = 5.22; F(1, 71) = 4.23, p < .05; \eta^2_{\text{partial}} = .05$). The results of this study suggest that number notation influences downstream evaluations depending on the valence of the information.

Can the mere notation of a number shape magnitude judgments and product perceptions? We propose that due to cognitive (i.e., precision) and perceptual (i.e., salience) differences between symbolic

and verbal numbers, consumers direct more attention to quantitative information, which in turn, affects downstream evaluations. Given the essential role numbers play in forming consumer judgments, the findings of this research have important managerial implications. This research proposes and provides evidence that managers should use these different representations selectively depending upon the message they would like to emphasize.

Perceptual and Cognitive Salience and their Effects on Product Valuations

EXTENDED ABSTRACT

How do consumers evaluate products? Myriad papers and models have suggested how consumers tend to integrate information about products they view (e.g., Anderson 1971; Bettman et al. 1998). Yet, there are common instantiations of consumers employing more salient but irrelevant information while neglecting less salient but relevant information (e.g., Carpenter, Glazer, and Nakamoto; Klayman and Ha 1987). In some such cases, salience may even affect the valuation of given information (Hutchinson and Alba 1991; Towal, Mormann, and Koch 2013).

We propose a model of interactions among salience and valuation in consumer decision-making. This model expands upon the accessibility-diagnostics framework from Feldman and Lynch (1988). In their memory-based model, accessibility is the readiness (based on recency or frequency) to apply informational inputs (Higgins 1989). Inputs that are accessible are then judged for their diagnosticity (here, valuation), and inputs that are inaccessible do not enter the decision process. Accessibility, which is a memory-based analog of salience, is thus treated categorically: either information is accessible or it is not. In this paper we show salience is not merely categorical and exists a graded effect when all information is accessible and relevant.

The present model also contributes to the literature by distinguishing between two unique sources of salience: perceptual salience (based on location or noticeability in the immediate environment) and cognitive salience (based on elaboration in working memory). Further, we examine the temporal dynamics of salience biases over repeated judgments. If the bias declines over time, then the explanation of the bias may be one of familiarity, whereas if the bias increases over time, the bias may be explained through polarization.

We use a rating-based conjoint paradigm in three studies and multiple product categories to demonstrate the influence and temporal dynamics of the salience bias. We present participants with one of three product categories (cars, cell phone plans, Disney vacation packages), each of which had four attribute identities with two levels each. For example, for cars these attributes were MPG (28, 33), sound system (Basic, Advanced), warranty (1 year, 4 years), and safety level (3.5 Stars, 4.5 Stars). Participants were asked to make willingness-to-pay (WTP) judgments for sixteen combinations of these attributes in two phases: a learning phase in which they made two judgments per page, and a test phase in which they made one judgment per page. All participants saw the same products in the learning phase and test phase, but we manipulated the order of products in the learning phase between-subjects. We used the WTP judgments in each phase to calculate each attribute’s part-worth valuation in each phase separately (Green et al. 2001).

In this setup, we manipulate perceptual salience (salience determined by immediate environmental position) based on the position of an attribute in a list: attributes in more extreme positions should be more salient than those in the middle (Dayan and Bar-Hillel 2011; Mantonakis et al. 2009). We control for attribute identity by position

by using four orders of attribute presentation from a 4x4 Latin square such that all attribute identities, across participants, appear in each position (Rosenthal and Rosnow 2008).

We manipulate cognitive salience (likelihood of elaborating on information) by changing the order of presentation of product versions in the learning phase: in the Biased condition, subjects only saw one attribute vary on a page for four pages in the learning phase: this was the fourth (bottom) attribute. In the Control condition, three attributes differed on each page of the learning phase. We predict attributes made more cognitively salient (by being the only attribute to vary on each page) in the learning phase in the Biased condition, here the bottom attribute (attribute four), will receive higher valuations than in the Control condition in the test phase that was common to all participants.

In Study 1, participants used a slider scale to indicate WTP, and were randomly assigned to see one of three goods (cars, cell phone plans, Disney vacation packages). Consistent with perceptual salience, we found attributes in extreme positions (one and four) to have higher valuations than those in middle positions (two and three); $F(1, 750) = 59.95, p < .001$. Consistent with cognitive salience, we found the attribute to be made more salient in the learning phase (attribute four) was valued higher than other attributes in the Biased condition versus the Control condition ($F(1, 750) = 24.48, p < .001$).

Study 2 replicates Study 1 but with three changes. First, participants made sixteen additional judgments in two test phases that followed the first test phase, and they consisted of one judgment per page for 16 pages. These additional two test phases were meant to examine whether the salience bias observed in Study 1's test phase would persist for additional, repeated judgments. Second, we also created another learning phase with different product versions for some participants to ensure the result generalized past the learning phase design from Study 1. Finally, participants indicated their WTP on slider scales.

Study 2 again found evidence of perceptual salience and cognitive salience ($F(1, 807) = 18.44, p < .001$), but these effects declined by test phase III (interaction of cognitive salience and phase: $F(3, 807) = 12.99, p < .001$). Therefore, although salience may bias valuation, its impact may be self-correcting.

Study 3 replicated Study 2, but this time it manipulated the cognitive salience of the third attribute for robustness. Study 3 also added another Control condition with another design matrix in the learning phase to ensure robustness. Again we found evidence of perceptual salience and cognitive salience ($F(2, 606) = 7.45, p < .01$), but an interaction of phase and salience such that the impact of salience declined by the end of test phase III ($F(6, 606) = 5.17, p < .001$).

We make three contributions over three studies for how salience influences valuation: we demonstrate salience may exert a graded (non-categorical) bias on valuation, salience biases may be perceptual or cognitive in nature, and that over repeated decisions, this bias may decline.

Promotion Emotion: The Salience of Restrictions vs. Rewards in Framing a Deal

EXTENDED ABSTRACT

Sales promotions affect sales through economic, informational, and affective components (e.g., Raghurir, Inman, and Grande 2004). While offering incentives to purchase, sales promotions often require a cost to the customer in the form of a restriction, such as time expirations, off-peak times, limited quantities, or purchase preconditions (Inman, Peter, and Raghurir 1997). How do consumers weigh the benefits

against the costs associated with such restrictions? Can a reward offer be made to appear even more rewarding? Can an offer restriction be made to appear less restrictive?

Chandon, Wansink, and Laurent (2000) suggest sales promotions have a hedonic benefit (e.g., entertainment) over and above utilitarian benefit (e.g., savings, quality). Some derive satisfaction from being the "smart shopper" who takes advantage of "good" deals to signal positive traits to self and others (Schindler 1992). Being the "smart shopper" also affects the manner in which deals are evaluated (Shimp and Kavas 1984). Promotions often include explicit purchase limits (e.g., two per customer) or precondition restrictions (e.g., minimum purchase). Wansink, Kent, and Hoch (1998) report the value of a purchase limit on a sales promotion increased the average purchase quantity – suggesting people use the limit amount as an anchor to decide how much to purchase. Preconditions requiring complementary purchases or imposing time limits may serve to accentuate deal value and act as "promoters" of promotions (Inman et al. 1997) by heuristically signalling value to a customer. In their review of sales promotion research, Grewal et al. (2011) recognize the importance of framing or design of deals, suggesting future research should examine the relative effectiveness of multiple ways of communicating restrictions, such as buy-one-get-one-free and other deal limitations.

Across two field studies and a series of experiments, we examine the effect of varying the salience of a "reward" versus a "restriction" in framing a deal. We propose and show the counterintuitive effect that presenting the restriction first, followed by the reward (rather than leading with the reward, followed by the restriction) makes the restriction salient and leads to viewing the entire offer as more of a reward than a restriction and a more positive response. We examine these effects across restrictions for specific times/seats in a sports mobile marketing context (Study 1a, 1b, 2a, 3), offer available to the first few customers (Study 2b, Study 3), purchase preconditions (Studies 4 and 5), and limited time discount offers (Study 6). We find promotions that are ex ante perceived to be more restrictive than rewards (e.g., specific seats/ times) can be made to appear less restrictive and those perceived to be more of a reward than a restriction (e.g., available for the first few fans) can be made to appear as more of a reward.

Our field studies demonstrate the behavioral response to restriction-first promotions, while our experiments test the process. For example, Study 1b reports the results of a field study conducted in cooperation with Major League Baseball. An email offer was delivered prior to the last series of home games in the season to a sample of 21,883 individuals who previously purchased single game tickets from the team. The standard ticket discount offers contain restrictions regarding the seats ("Get a discounted price on seats in these select areas") and dates. In this case, the seats were restricted to selected areas in the stadium and available for only two selected games (Thursday and Sunday) in a four-game span. We adapted the standard offer to provide a reward message frame, but otherwise presented an identical deal. The regular message copy employed the email subject line of, "A special ticket offer for valued TEAM fans" while the email subject line for the reward frame message was, "A special reward for valued TEAM fans." The regular frame offer had a slightly higher open rate compared to the reward frame (38.8% compared to 36.2%). However, among those opening the regular frame email ($n = 4,234$), only 16.6% clicked-through to the ticket purchase page to consider the offer. In comparison, 23.6% of those who opened the reward frame email continued on to the ticket purchase page. Thus, the reward frame was significantly ($p < .001$) more likely to motivate click-through to purchase. This led to an increase in revenue from the reward frame compared to the regular frame (\$2,744 vs. \$1,646).

Study 5 is an experiment in which 161 business school undergraduates participated in a 2 (frame: reward vs. restriction) \times 3 (25% off, 50% off, or one free) between-subjects design. Subjects were asked to assume they needed to replenish household coffee supplies and needed at least three boxes (12 cups; Keurig) or three bags (beans or ground coffee). They were told that while searching online, an ad directed them to the Distant Lands Coffee website, where they were asked to read a company description. Directed to a website with assorted coffees, participants were instructed to select three they would like. On average, subjects spent two minutes and five seconds reviewing the webpage. Participants in a reward-first condition were exposed to an offer such as "Get 50% off one Distant Lands Coffee Blend when you buy two at the regular price," while the order was reversed for participants in the restriction-first condition. Our analysis reveals that deal evaluation was higher for the restriction-first frame (4.87) than the reward-first frame (4.56, $p < .05$, one-tailed) and that the effect is mediated by deal enjoyment. The results suggest a restriction-first frame leads to more favorable deal evaluations than a reward-first frame and is judged to be a more enjoyable promotion.

In sum, our research examines the role of varying the salience of rewards versus restrictions on deal perceptions and deal response. Given that deals often offer a reward with some strings attached (restrictions), we examine the effect of explicitly making the reward or restriction differentially salient in the offer as well as implicitly manipulating salience in the offer through manipulating the presentation order of the discount and the restriction. Implications for research and practice will be discussed.

How Tradeoff Framing Impacts Attribute Focus and Shifts Choices

EXTENDED ABSTRACT

People's choices in tradeoffs depend on which attribute is salient as compensating for the other. In measuring tradeoffs, researchers often present a series of choices between a fixed option and an option varying in only one attribute, to identify the indifference point where the consumers' preference switches. For example, the indifference point in a size-price tradeoff could be elicited by fixing volume and varying price or by fixing price and varying volume (e.g. asking consumers to choose between a \$14, 20-oz bottle and a 25-oz bottle with a price of \$15, \$18, \$21 etc., or between a \$14, 20-oz bottle and an \$18 bottle with a volume of 21-oz, 25-oz, 29-oz, etc.) Normatively, the framing implied by the elicitation method should not influence how consumers trade one attribute for another. However, we predict that consumers focus more attention on the attribute that varies across the choices. In the example above, the amount they are willing to pay for the larger bottle is more salient in the first version and the amount of extra volume they would need to justify the higher price is more salient in the second version. As a result, we propose that this difference in framing will shift consumers' indifference point, and more generally affect their valuation and choices.

In studies 1 – 3, we tested this proposition in the context of intertemporal choice, which is most often measured using discount rates from a monetary titration task (Urminsky & Zauberman 2016). We propose that this approach may make the monetary (vs. temporal) aspect of the tradeoff more salient, potentially highlighting the attractiveness of the LL. In contrast, we predict that fixing the monetary amounts and varying the time delays across pairs of options in a titration task (i.e., time titration) may shift consumers' attention to the temporal aspect.

Study 1 (N = 459) tested whether the discount factor measured would be different in a money-titration versus in a time-titration task

and used a 2 (SS: immediate vs. delayed) \times 2 (elicitation type: money titration vs. time titration) between-subjects design. Participants were asked to finish one titration task. Results showed a significant effect of elicitation type on both discount factor ($F(1, 455) = 33.09, p < .01$) and self-reported relative attribute weight ($F(1, 455) = 13.48, p < .01$). The discount factor was lower (e.g., greater impatience was observed) in the time-titration cells than in the money-titration cells (.9918 vs. .9943), and participants in the time-titration (vs. money-titration) cells thought the time delay (vs. money amounts) mattered more (3.65 vs. 3.01). Importantly, attribute weight partially mediated the effect of elicitation type on discount factor.

Study 2 (N = 418) tested the effect of attribute salience on discount factor by having participants directly indicate their indifference point. Participants in one condition indicated the amount of money (X) in 8 weeks that would make them indifferent between that and receiving \$50 now, and after a filler task, indicated the number of weeks of delay that would make them indifferent between receiving \$50 now and receiving \$X after that delay. Participants in the other condition, first estimated a delay, and then an amount of money based on that delay. The effect of task type and order on discount factor were significant ($F(1, 414) = 19.49, p < .01$; $F(1, 414) = 46.56, p < .01$, respectively). Discount factors were lower (people were more patient) when participants indicated time (vs. money) (.8796 vs. .8953), and when participants indicated time first and money later (vs. the reverse) (.8554 vs. .9229).

Study 3 (N = 186) tested the spillover effect of making time or money more salient via the elicitation method on a subsequent intertemporal choice, using a 2 (elicitation type: indicating money vs. indicating time) \times 2 (role: creditor vs. debtor) between-subjects design. Participants first indicated their indifference point and then made a choice between two fixed options. For example, in the indicating-time-creditor condition, participants indicated N so that receiving \$65 today and receiving \$N in 6 weeks were indifferent, and then made a fixed choice between receiving \$65 today and receiving \$90 in 6 weeks. The effect of elicitation type on discount factor was significant ($F(1, 182) = 51.54, p < .01$). Pairwise comparison results showed a lower discount factor (greater impatience) when indicating time (vs. money), for both creditors (.8673 vs. .9473) and for debtors (.9329 vs. .9789). Meanwhile, consistent with our proposition, a higher proportion of creditors chose to wait to receive \$90 in 6 weeks after indicating money than indicating time (73.3% vs. 31.8%), while a higher proportion of debtors chose to pay \$65 today after indicating money than indicating time (92.0% vs. 80.9%).

Study 4 (N = 114) extended the attribute salience effect in time-money tradeoffs to a price-quality tradeoff in a travel package choice. We used a 2-condition (elicitation type: indicating cost vs. indicating rating) between-subjects design. For example, participants in the indicating-cost condition reported the cost that would make them indifferent between an 84%-quality-rating package for 3,780 yuan and a 93%-quality-rating package for the specified cost, and then made a choice between an 84%-rating/3,780-yuan-cost package and a 93%-rating/5,130-yuan-cost package. We found a significant effect of elicitation type on the price-quality indifference ratio ($F(1, 112) = 69.86, p < .01$). Moreover, a higher proportion of participants in the indicating-cost (vs. indicating-rating) condition chose the low-cost-low-rating package (87.7% vs. 59.6%). We also did another study to test this effect in a desirability-feasibility tradeoff and found similar results.

In summary, this research shows that different decision modes can influence discount factors and intertemporal choice, and provides initial evidence that decision mode may influence how consumers trade one product attribute for another.

REFERENCES

- Anderson, Norman H. (1971), "Integration Theory and Attitude Change," *Psychological Review*, 78 (3), 171-206.
- Besner, Derek and Max Coltheart (1979), "Ideographic and alphabetic processing in skilled reading of English," *Neuropsychologica*, 17 (5), 467-72.
- Bettman, James R., Mary Frances Luce, and John W. Payne (1998), "Constructive Consumer Choice Processes," *Journal of Consumer Research*, 25 (3), 187-217.
- Carpenter, Gregory S., Rashi Glazer, and Kent Nakamoto (1994), "Meaningful Brands from Meaningless Differentiation," *Journal of Marketing Research*, 31 (August), 339-50.
- Chandon, Pierre, Brian Wansink, and Gilles Laurent (2000), "A benefit congruency framework of sales promotion effectiveness," *Journal of Marketing* 64(4), 65-81.
- Coulter, Keith S. and Robin A. Coulter (2005), "Size Does Matter: The Effects of Magnitude Representation Congruency on Price Perceptions and Purchase Likelihood," *Journal of Consumer Psychology*, 15 (1), 64-76.
- Dayan, Eran and Maya Bar-Hillel (2011), "Nudge to nobesity II: Menu positions influence food orders," *Judgment and Decision Making*, 6 (4), 333-42.
- Dehaene, Stanislas (1992), "Varieties of numerical abilities," *Cognition*, 44, 1-42.
- Feldman, Jack M., and John G. Lynch (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior," *Journal of Applied Psychology*, 73 (3), 421-435.
- Folkes, Valerie and Shashi Matta (2004), "The Effect of Package Shape on Consumers' Judgments of Product Volume: Attention as a Mental Contaminant," *Journal of Consumer Research*, 31 (2), 390-401.
- Green, Paul E., Abba M. Krieger, and Yoram (Jerry) Wind (2001), "Thirty Years of Conjoint Analysis: Reflections and Prospects," *Interfaces*, 31 (3), S56-S73.
- Grewal, Dhruv, Kusum L. Ailawadi, Dinesh Gauri, Kevin Hall, Praveen Kopalle, and Jane R. Robertson (2011), "Innovations in retail pricing and promotions," *Journal of Retailing* 87, S43-S52.
- Higgins, E. T. (1989), "Knowledge accessibility and activation: Subjectivity and suffering from unconscious sources," In J. S. Uleman and John A. Bargh (Eds.), *Unintended Thought*.
- Hutchinson, J. Wesley and Joseph W. Alba (1991), "Ignoring Irrelevant Information: Situational Determinants of Consumer Learning," *Journal of Consumer Research*, 18, 325-345.
- Inman, J. Jeffrey, Anil C. Peter, and Priya Raghubir (1997), "Framing the deal: The role of restrictions in accentuating deal value," *Journal of Consumer Research* 24(1), 68-79.
- Klayman, Joshua and Young-Won Ha (1987), "Confirmation, Disconfirmation, and Information in Hypothesis Testing," *Psychological Review*, 94 (2), 211-228.
- Mantonakis, Antonia, Pauline Rodero, Isabelle Lesschaeve, and Reid Hastie (2009), "Order in Choice: Effects of Serial Position on Preferences," *Psychological Science*, 20 (11), 1309-12.
- Milosavljevic, Milica, Vidhya Navalpakkam, Christof Koch, and Antonio Rangel (2012), "Relative Visual Saliency Differences Induce Sizable Bias in Consumer Choice," *Journal of Consumer Psychology*, 22, 67-74.
- Raghubir, Priya, J. Jeffrey Inman, and Hans Grande (2004), "The three faces of consumer promotions," *California Management Review* 46 (4), 23-42.
- Rosenthal, Robert and Ralph L. Rosnow (2008), *Essentials of Behavioral Research: Methods and Data Analysis, 3rd Edition*
- Schindler, Robert M (1992), "A coupon is more than a low price: evidence from a shopping-simulation study," *Psychology & Marketing* 9(6), 431-451.
- Shimp, Terence A., and Alican Kavas (1984), "The theory of reasoned action applied to coupon usage," *Journal of Consumer Research* 11(3), 795-809.
- Towal, R. Blythe, Milica Mormann, and Christof Koch (2013), "Simultaneous modeling of visual saliency and value computation improves predictions of economic choice," *PNAS*, 110 (40), E3858-67.
- Treisman, Anne and Stephen Gormican (1988), "Feature Analysis in Early Vision: Evidence from Search Asymmetries," *Psychological Review*, 95 (1), 15-48.
- Urmitsky, Oleg and Gal Zauberaman (2016), "The Psychology of Intertemporal Preferences," *Blackwell Handbook of Judgment and Decision Making*, George Wu and Gideon Keren (eds), Wiley-Blackwell, 141-181.
- Wansink, Brian, Robert J. Kent, and Stephen J. Hoch (1998), "An anchoring and adjustment model of purchase quantity decisions," *Journal of Marketing Research* 35 (1), 71-81.
- Windschitl, Paul D. and Gary L. Wells (1996), "Measuring psychological uncertainty: Verbal versus numeric methods," *Journal of Experimental Psychology: Applied*, 2, 343-64.
- Wolfe, Jeremy M. and Todd S. Horowitz (2004), "What attributes guide the deployment of visual attention and how do they do it," *Nature Reviews Neuroscience*, 5, 495-501.

Understanding the Use of Online Reviews and Recommendations in Consumer Judgment and Decision-Making

Chair: Elizabeth C. Webb, Columbia University, USA

Paper #1: The Drivers and Downstream Consequences of the J-Shaped Distribution of Consumer Online Reviews

Verena Schoenmueller, Columbia University, USA
Oded Netzer, Columbia University, USA
Florian Stahl, University of Mannheim, Germany

Paper #2: Using Reviews to Determine Preferences: How Variance in Customer-Generated Reviews Affects Choice

Elizabeth C. Webb, Columbia University, USA
Itamar Simonson, Stanford University, USA

Paper #3: “Don’t Tell Me What to Do!” Shoppers Rely Less on Consumer Reviews for Experiential than Material Purchases

Hengchen Dai, Washington University in St. Louis, USA
Cindy Chan, University of Toronto, Canada
Cassie Mogilner, UCLA, USA

Paper #4: Consumers and Managers Reject (Superior) Algorithms Because They Fail to Compare Them to the (Inferior) Alternative

Berkeley J. Dietvorst, University of Chicago, USA

SESSION OVERVIEW

Product reviews and recommendations have become a ubiquitous facet of the consumer landscape. For this reason, it is important to understand how and when consumers use online reviews and recommendations. Specifically, the research in this session strives to understand the general features of online reviews (Paper 1), how the characteristics of online reviews, such as their variance, can affect consumer preferences (Paper 2), how consumers differentially use online reviews for experiential and material goods (Paper 3), and how consumers choose between user-generated recommendations and algorithmic recommendation systems (Paper 4).

In Paper 1, Schoenmueller et al. investigate the underlying causes of the positive skew (J-shaped distribution) found in many online reviews. The authors analyze over 130 million reviews to show that the most prevalent distribution of reviews is indeed J-shaped (heavily skewed towards the high end of the review scale). While there is some platform dependency in the shape of the review distributions, the authors show that the main driver is one of self-selection. Specifically, consumers are more likely to post reviews for products that they have evaluated extremely. This self-selection may lead to loss of information and bias in consumers’ reliance on average review ratings as a source of information.

While Paper 1 evaluates the underlying causes of review distributions, Paper 2 investigates how a key feature of review distributions—variance—affects consumer choice. Specifically, Webb and Simonson show that the variance in user-generated reviews, holding average rating constant, moderates various context effects. The authors find that when consumers evaluate products with high variance (versus low variance) in the reviews, they choose less variety, they show a reduced susceptibility to the compromise effect, and they are less likely to defer choice. The authors find that these effects occur because consumers find low variance reviews less useful, leading them to rely on relative value considerations or risk-reduction strategies instead.

In comparison to Paper 2, which focuses on a feature of reviews that moderates reliance on reviews (variance), Paper 3 identifies an-

other moderator—product type. Dai et al. find that consumers rely on reviews less when they are for experiential (vs. material) goods. The authors find this occurs because consumers believe their preferences are more unique for such product types and are thus not well-represented by the reviews of other customers. This underlying process—perceived preference uniqueness—acts as a moderator for the use of consumer reviews in decision-making.

Finally, in Paper 4, Dietvorst investigates why consumers and managers often prefer human generated recommendations and judgments over those generated by algorithms. Dietvorst finds that consumers and managers fail to use algorithms that outperform human judgment because they hold algorithms to a higher standard. Instead of choosing algorithms that beat the best alternative (human judgment), many people only choose algorithms that also meet their lofty goals for forecasting performance.

Together, the research in this session helps consumer researchers and marketers better understand the psychological processes underlying the use of online reviews and recommendations in consumer decision-making and judgment.

The Drivers and Downstream Consequences of the J-Shaped Distribution of Consumer Online Reviews

EXTENDED ABSTRACT

Consumer online reviews have become an integral part of consumers’ decision-making process. Based on a recent study, 90 percent of consumers read online reviews before visiting a store (Invespro 2015) and 88 percent of consumers trust online reviews as much as a personal recommendation (DeMers 2015). Consumer reviews have also been shown to have an economic impact (e.g., Chevalier and Mayzlin 2006; Liu 2006; Moe and Trusov 2012). Recently, several meta-analyses summarize the impact of the number (volume) as well as the average rating (valence) of reviews on products sales (Babić et al. 2016; Floyd et al. 2014; You, Gautham, and Joshi 2015).

One common finding in the study of online reviews has been that reviews are heavily skewed to the positive end of the rating scale, with a few reviews in the mid-range and some reviews at the negative end of the scale (Hu et al. 2009). This has been often referred to as the J-shaped distribution of online ratings (e.g., Dalvi, Kumar, and Pang 2015; Feng et al. 2012; Gao et al. 2015; Hu et al., 2009). This finding is surprising given that online reviews represent crowdsourcing of experiences of a large body of heterogeneous consumers, which based on the law of large numbers and previous findings should converge towards a normal distribution. The extreme positive skewness of reviews has fueled the debate on how informative consumer reviews actually are (Fritz 2016; Hickey 2015), and whether these consumer reviews mirror “true” product quality (De Langhe, Fernbach, and Lichtenstein 2015).

While several studies have demonstrated the existence of the skewness of rating distributions, the prevalence, the reasons behind, and the implications of the J-shaped distribution of online reviews has been given considerably less attention compared to the impact of overall rating statistics such as the volume and valence on product sales. Accordingly, the objective of this study is threefold. First, we test how prevalent and robust the J-shaped distribution of reviews is by collecting a large-scale data set across various online review and e-commerce platforms that span across a large number of products

and services. Second, we investigate what could be the main reasons for the J-shaped distribution of reviews and to what extent it reflects a bias or self-selection of consumers' preferences and opinions. We employ a multi-pronged approach, including: secondary data analysis, experiments, and surveys. Third, we investigate the information loss and the bias introduced by the J-shaped distribution in capturing consumer preferences and behavior.

Using a large-scale dataset of over 130 million online reviews from 18 different platforms such as Amazon, Yelp, and Expedia, involving more than 10 million products, reflecting different types of platforms (e.g., e-commerce sites, reviews sites, comparison sites) various product categories (e.g., books, beers, hotels, restaurants and services) and various formats of review scales, our analysis reveals that, while indeed the most dominant distribution of reviews across platforms and product categories is a J-shaped distribution, several platforms have consumer reviews and ratings that are not J-shaped distributed and the distribution of the ratings of the same product or service can differ across platforms.

Our results show that while some product selection by the platforms exists, the main driver behind the J-shaped distribution is a reviewer level self-selection mechanism. Using secondary datasets, survey data as well as data collected in several lab experiments, we find that consistent with consumers' tendency to report and spread WOM for extreme experiences (Anderson 1998), consumers are more likely to review products or services for which the experience or evaluation was extremely positive or extremely negative. We name this *polarity self-selection*. Specifically, we find that reviewers who are less selective in the products they chose to review exhibit less polarity in their reviews. Furthermore, consumers who were asked to review the last book they read or restaurant they visited, gave less extreme ratings than consumers who selected the product they wish to review. Furthermore, we disentangle the effect of polarity self-selection from purchasing self-selection.

Building on empirical evidence from our large-scale dataset of reviews that suggests that shorter scales may lead to scale truncation as a potential driver of the J-shaped distribution, we use several experiments to test the impact of rating scales on review distributions. Our experiments rule out that the J-shaped distribution is driven by factors related to the usage of different rating scales or wording across online platforms. We further find evidence that cognitive dissonance increases the positive skewness of consumer ratings. Finally, we demonstrate that review fraud possibly explains ratings at the negative extreme of the rating scale but not at the positive extreme of the J-shaped distribution.

We find that the J-shaped distribution of reviews, while somewhat decreasing over time, is fairly robust over the product and the reviewer lifecycle. In summary, our results show that the common J-shaped distribution of online reviews mainly emerges from two selection mechanisms and that reviewers' self-selection has an impact over and beyond platforms' product selection.

Finally, we find that polarity self-selection, causing the J-shape distribution, leads to an information loss. We show that for review distributions with a high intensity of self-selection, the average ratings metric commonly used in online review platforms and academic research is less related to the actual sales than the number of reviews. Additionally, we find that inconclusive results in previous research regarding the relationship between the average ratings and sales can be explained by polarity self-selection and the predominance of the J-shaped distribution.

Using Reviews to Determine Preferences: How Variance in Customer-Generated Reviews Affects Choice

EXTENDED ABSTRACT

User-generated product reviews have become an important input in consumer decision-making (Floyd et al. 2014; de Langhe, Fernbach, and Lichtenstein 2016; Simonson 2016). Consumers are now able to use product reviews to learn about products and gather information about their options. While past research has found preferences can be manipulated by context (e.g., the compromise effect, variety-seeking, and choice deferral) (Simonson 1989; 1990; Simonson and Tversky 1992; Kahn 1995; Dhar 1997) the question of how product review information affects these choice effects remains. Beyond the sheer content of reviews, their observed variance and the implied consensus (or lack thereof) among reviewers provides additional, potentially useful information about the drivers of product preferences and the expected consumer experience.

Thus, in this research we examine the impact of user-generated review variance or dispersion, and especially, the implications for consumer susceptibility to context effects. We show that product reviews with greater variance/dispersion attenuate variety-seeking, reduce choice shares for a compromise option, and decrease choice deferral rates relative to products associated with reviews with less variance/dispersion. Greater review variance indicates that evaluations are a matter of taste (Spiller and Belogolova 2016), thereby allowing the consumer to deviate from the safe norms (e.g., compromising or hedging). Paradoxically, this means that dispersed reviews are more useful and informative and encourage consumers to follow their own tastes based on the options' absolute values.

In Study 1 ($N = 279$), we tested the effect of review variance on variety seeking. Participants were assigned to one of two between-subjects conditions (High vs. Low review variance). Participants in both conditions were told to imagine they were grocery shopping through an online grocer and were asked to choose options across several product categories (yogurt, ice cream, soup, and snacks) for three weeks of consumption. Participants viewed six options in each category. They were informed that each product had reviews from customers who had purchased the product in the particular store. Participants in the High condition viewed options that had high variance/widely distributed product reviews (reviews that were dispersed across the entire rating scale); participants in the Low condition viewed options that had low variance/narrowly distributed product reviews (reviews that were clustered at the high-end of the rating scale). All products in both conditions and across categories had the same average rating (4/5 stars), and only the variance differed across options. We found that for all product categories, participants who chose among options with high variance reviews chose significantly less variety than participants who chose from options with low variance reviews ($p < 0.04$). We also found that across conditions, participants believed they would feel significantly happier ($p = 0.03$) and marginally significantly more personal responsibility ($p < 0.10$) for a positive outcome with a product associated with higher variance reviews. This finding is consistent with the notion that higher review variability allows consumers to feel that they "own" the choice based on their personal tastes.

In Study 2 ($N = 393$), we investigated whether review variance moderates the compromise effect. In this study, we used a standard compromise effect (two set) test with participants assigned to either a 2-option or 3-option choice set; we compared the relative shares for the middle option between the two sets. Participants made choices in two product categories: TVs and restaurants. The design was a 2 (Variance: High, Low) x 2 (2-option, 3-option), such that partici-

pants saw high variance reviews for one product and low variance reviews for the other (and 2-options for one and 3-options for the other). Again, the reviews all had the same average rating (4/5 stars), but the variance differed across products and was either high or low (depending on condition assignment). We found that choice shares for the compromise (middle) option were significantly higher when participants chose from products with low variance reviews ($p < 0.001$ for TVs; $p = 0.03$ for restaurants). Thus, consumers are less likely to choose a compromise option when they are choosing among products with high variance reviews relative to products with low variance reviews.

In Study 3 ($N = 425$), we evaluated how ratings variance affected choice deferral. Participants were assigned to one of two between-subjects conditions: High variance or Low variance. Using a standard choice deferral set-up, participants were shown two product options from a randomly assigned product category (Microwave or Coffee Maker). Participants in the High (Low) condition, chose between two options with high (low) variance customer reviews. Participants also had the option not to choose (defer). We found that deferral rates were marginally significantly lower across both product types when participants were in the High condition relative to the Low condition ($p = 0.08$). This suggests that consumers are less likely to defer choice when they are choosing across products with high variance customer reviews than when they are choosing across products with low variance customer reviews.

In Study 3 we further assessed the mechanism underlying the effect of review variance on choice. Specifically, we found that participants choosing from products with high variance reviews found the reviews significantly more useful, trustworthy, and relied on them to a greater extent than participants choosing from products with low variance reviews ($p = 0.01$). These results suggest that consumers find reviews with lower variance less informative and helpful, and thus employ relative valuation strategies (e.g., compromise effect) that minimize risk (e.g., by choosing greater variety and deferring choice).

Overall, our empirical results suggest that customer review variance can act as an important moderator of various choice effects. Further, review variance also moderates how much consumers use and rely on product reviews (with higher variance reviews being rated as more useful and trustworthy). Additional studies are currently being designed to gain further insights regarding the process underlying the impact of reviews' dispersion. This research thus contributes to our understanding of the psychological processes underlying the use of online reviews and suggests that attributes of the reviews themselves (e.g., variance) can affect how and to what extent reviews are used in consumer judgment and decision-making.

**“Don’t Tell Me What to Do!”
Shoppers Rely Less on Consumer Reviews for
Experiential than Material Purchases**

EXTENDED ABSTRACT

Consumer reviews are a pervasive form of word-of-mouth communication. We examine whether and why the type of purchase—experiential or material—affects shoppers' reliance on consumer reviews. An archival field study and six experiments reveal that shoppers rely on reviews less when making experiential (vs. material) purchases because they believe their own evaluations (preferences, tastes, and quality judgments) are more unique from other consumers' evaluations for experiential purchases.

Study 1 analyzed 6,508,574 Amazon.com consumer reviews written over 5 years and found that shoppers are less likely to as-

sign a “helpful vote” to reviews for experiential purchases than for material purchases ($p < .001$). In Studies 2A-2B, participants contemplating a future experiential (vs. material) purchase (Study 2A; $N = 168$) or focusing on the experiential (vs. material) aspects of the same purchase (Study 2B; $N = 203$) reported they would rely less on consumer reviews (both p 's $\leq .02$).

Study 3 tested the influence of positive and negative consumer reviews among participants ($N = 215$) deciding between either two cooking classes (experiential) or two coffee makers (material) for a prize in a real lottery. Participants were less likely to choose the positively-reviewed option in the experiential (vs. material) condition ($p = .02$), suggesting participants relied less on reviews when deciding on the experience.

In Study 4, participants relied less on consumer reviews for a Broadway ticket (experiential) than for speakers (material; $p < .05$), but there was no difference for company-provided information ($p = .16$), indicating the effect is specific to consumer-generated information.

In Study 5, participants ($N = 404$) asked to choose between reading consumer reviews or company-provided information were less likely to choose consumer reviews for a concert (experiential) than for a digital camera (material; $p < .001$). This was mediated by shoppers' beliefs that their evaluations would be more unique from other consumers' evaluations for the experiential purchase.

In Study 6, participants ($N = 469$) were presented with chips (experiential) or a flashlight (material), and they either tried or saw a picture of the product. All participants then rated the actual or perceived similarity of a randomly-selected review. Reliance on reviews was again lower for experiential (vs. material) purchases and mediated by perceived preference uniqueness; further, people overestimated how unique their evaluations were for experiential purchases.

Furthermore, in Studies 1, 5, and 6, our additional analyses suggest that people's lesser reliance on consumer reviews for experiential purchases cannot be simply explained by the belief that evaluations of experiences are more diverse across all consumers.

In sum, shoppers are skeptical about the similarity of others' evaluations of experiential purchases to their own, and thus rely less on consumer reviews for experiential (vs. material) purchases. This highlights that these purchases differ not only in their post-consumption enjoyment, but also in their pre-decision processes. Our findings also inform the field's understanding of the types of purchases influenced by word-of-mouth and contribute to an emerging literature that examines the psychological processes underlying the perceived usefulness of consumer reviews. We identify the role of perceived preference uniqueness—a novel mechanism that captures the extent to which people view their own purchase evaluations as unique from others'. Extending prior research showing that consumers are more receptive to the opinions of seemingly similar others based on shared demographic characteristics, our investigation suggests that people are apt to hone in on the similarity between theirs and other consumers' preferences, and that there are particular purchase domains in which consumers are motivated to perceive their preferences as unique, thus relying less on other consumers' reviews.

**Consumers and Managers Reject (Superior) Algorithms
Because They Fail to Compare Them to the (Inferior)
Alternative**

EXTENDED ABSTRACT

Now more than ever, consumers and managers have the opportunity to use algorithms to make important predictions and decisions under uncertainty. For example, consumers can use recommendation

systems to decide which products to buy, use matchmaking algorithms to decide whom to date, and use algorithms to forecast the future prices of airline tickets. Professionals can use algorithms to forecast demand for products, decide which job applicants to hire, and choose which investments to make. Algorithms already outperform humans in the majority of the forecasting domains that have been tested (see Ægisdóttir et al., 2006; Camerer, 1981; Dawes, Faust, & Meehl, 1989; Grove et al., 2000; Kaufmann, Reips, & Wittmann, 2013; Kaufmann & Wittmann, 2016; Kuncel, Klieger, Connelly, & Ones, 2013; Meehl, 1954), and algorithms will become more accurate and abundant as we collect more data and develop new methods of leveraging those data. However, these algorithms cannot help consumers and managers make better predictions if they are unwilling to use them.

People are often hesitant to use forecasts from algorithms, even when they are the best alternative available. Professionals often underuse algorithms when making predictions (e.g. Fildes & Goodwin, 2007; Sanders & Manrodt, 2003; Vrieze & Grove, 2009). Similarly, laypeople often prefer using forecasts from humans to forecasts from algorithms (Arkes et al., 2010; Diab, Pui, Yankelovich, & Highhouse, 2011; Eastwood, Snook, & Luther, 2012; Önkál et al., 2009; Promberger & Baron, 2006). However, it is still unclear what decision process leads people to use (inferior) human forecasts instead of (superior) algorithmic forecasts.

I propose that people choose between forecasting methods by (1) using their status quo forecasting method by default and (2) deciding whether or not to use the alternative forecasting method by comparing its expected performance to their performance goal. This process leads people to reject a superior algorithm when (1) the algorithm serves as their alternative forecasting method and (2) the algorithm performs better than their default forecasting method but fails to meet their performance goal. In other words, people often use human judgment by default and when deciding whether or not to switch to an algorithm they ask, “will the algorithm meet my performance goal?” instead of asking “will the algorithm outperform my default forecasting method?”. Given that algorithms only perform 10% - 13% better than human judgment on average in many forecasting domains (see Ægisdóttir et al., 2006; Grove et al., 2000) and that people often have unrealistically high expectations about forecasting performance (see Dietvorst, Simmons, and Massey, 2015), it is frequently the case that algorithms outperform human judgement but fail to reach people’s lofty performance goals.

I report the results of five studies that are consistent with the notion that people decide whether or not to use an algorithm by comparing its performance to their performance goal. In each study, participants decided whether to use their own judgment or an algorithm to complete an incentivized forecasting task. I manipulated participants’ performance goals by incentivizing them to reach different levels of performance between conditions and tested whether or not this manipulation affected participants’ choice of forecasting method.

In Study 1, participants in the “higher performance goals condition” could earn \$0.40, \$0.30, \$0.20, or \$0.10 for estimates that were off by 5, 15, 25, or 35 percentiles respectively, and participants in the “lower performance goals condition” could earn \$0.20 or \$0.10 for estimates that were off by 25 or 35 percentiles respectively. I found that participants in the lower performance goals condition were significantly more likely to choose to use the algorithm (69%) than those in the higher performance goals condition (52%), $\chi^2(1, N = 544) = 15.87, p < .001$. This finding is consistent with the notion that the majority of participants used human judgment by default and compared the algorithm’s expected performance to their perfor-

mance goal when deciding whether or not to use it. In study 2, I replicated this finding, $\chi^2(1, N = 553) = 5.14, p = .023$, and ruled out the alternative explanation that participants in the lower performance goals condition believed that the algorithm performed significantly better than themselves.

In Study 3, participants received a summary of their own forecasting performance after making a set of 10 practice forecasts. Next, participants were assigned to one of five conditions in which they would need to achieve an absolute error of 12, 14, 16, 18, or 20 to earn a \$0.25 bonus. Finally, participants chose between using the algorithm’s forecast and their own by indicating how good the algorithm’s past performance would have to be in order for them to use its forecast instead of their own. I found that participants required the algorithm’s past performance to be significantly better when they were assigned to harder incentives, $t(506) = 2.21, p = .027$, even though participants in each condition believed that the algorithm was the better performing alternative, $t_s(>=98) \leq -3.61, p_s < .001$, and participants’ estimates of the algorithm’s performance advantage was not related to their assigned condition, $t(505) = -0.60, p = .552$. In Study 4, I replicated the main finding from Study 3, $z(N = 508) = 4.01, p < .001$, found that 66% of participants reported using their assigned incentives to decide on their requirement for the algorithm’s performance, and that the same 66% participants did not use their own past forecasting performance (i.e., the performance of the alternative) when deciding on their requirement for the algorithm’s performance.

In Study 5, I changed the participants’ default – participants used the algorithm’s forecast by default and reported how well they would need to perform in a set of 10 practice forecasts in order for them to use their own forecast instead of the algorithm’s. Under these conditions participants’ behavior reversed. Participants required *their own* past forecasts to be significantly better when they were assigned to harder incentives, $z(N = 508) = 4.44, p < .001$, and the majority of participants (64%) reported using their assigned incentives to decide on their requirement for *their own* performance.

REFERENCES

- Ægisdóttir, S., White, M. J., Spengler, P. M., Maugherman, A. S., Anderson, L. A., Cook, R. S., & Rush, J. D. (2006). The meta-analysis of clinical judgment project: Fifty-six years of accumulated research on clinical versus statistical prediction. *The Counseling Psychologist*, 34(3), 341-382.
- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*, 1(1), 5-17.
- Arkes, H. R., González-Vallejo, C., Bonham, A. J., Kung, Y. H., & Bailey, N. (2010). Assessing the merits and faults of holistic and disaggregated judgments. *Journal of Behavioral Decision Making*, 23(3), 250-270.
- Babić Rosario, A., Sotgiu, F., De Valck, K., and T. H. Bijmolt (2016), “The effect of electronic word of mouth on sales: A meta-analytic review of platform, product, and metric factors,” *Journal of Marketing Research*, 53(3), 297-318.
- Camerer, C. (1981). General conditions for the success of bootstrapping models. *Organizational Behavior and Human Performance*, 27(3), 411-422.
- Chevalier, J.A., and D. Mayzlin (2006), “The effect of word of mouth on sales: Online book reviews,” *Journal of Marketing Research*, 43(3), 345-354.
- Dalvi, N., Kumar, R., and B. Pang (2015), “Para ‘normal’ activity: On the Distribution of Average Ratings,” *Association for the Advancement of Artificial Intelligence*.

- Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical versus actuarial judgment. *Science*, 243(4899), 1668-1674.
- De Langhe, B., Fernbach, P.M. and D.R. Lichtenstein (2015), "Navigating by the stars: investigating the actual and perceived validity of online user ratings," *Journal of Consumer Research*.
- Dellarocas, Chrysanthos, and Ritu Narayan (2006), "A statistical measure of a population's propensity to engage in post-purchase online word-of-mouth," *Statistical Science* 21 (2), 277-285.
- DeMers (2015), *Forbes*, <http://www.forbes.com/sites/jaysondemers/2015>.
- Dhar, Ravi (1997), "Consumer Preference for a No-Choice Option," *Journal of Consumer Research*, 24(1), 215-31.
- Diab, D. L., Pui, S. Y., Yankelevich, M., & Highhouse, S. (2011). Lay Perceptions of Selection Decision Aids in US and Non-US Samples. *International Journal of Selection and Assessment*, 19(2), 209-216.
- Dietvorst, B. J., Simmons, J. P., & Massey, C. (2015). Algorithm aversion: People erroneously avoid algorithms after seeing them err. *Journal of Experimental Psychology: General*, 144(1), 114-126.
- Eastwood, J., Snook, B., & Luther, K. (2012). What People Want From Their Professionals: Attitudes Toward Decision-making Strategies. *Journal of Behavioral Decision Making*, 25(5), 458-468.
- Fildes, R., & Goodwin, P. (2007). Against your better judgment? How organizations can improve their use of management judgment in forecasting. *Interfaces*, 37(6), 570-576.
- Floyd, K., Freling, R., Alhoqail, S., Cho, H.Y., and T. Freling (2014), "How online product reviews affect retail sales: A meta-analysis," *Journal of Retailing*, 90(2), 217-232.
- Fritz, B. (20016), *Wall Street Journal*, <http://www.wsj.com/articles/hollywood-turns-spotlight-on-websites-that-aggregate-movie-reviews-1469038587>.
- Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment*, 12(1), 19-30.
- Hickey (2015), Be Suspicious Of Online Movie Ratings, Especially Fandango's, <http://fivethirtyeight.com/features/fandango-movies-ratings/>.
- Hu, N., Zhang, J., and P.A. Pavlou (2009), Overcoming the J-shaped distribution of product reviews," *Communications of the ACM* 52.10,144-147.
- Kahn, Barbara E. (1995), "Consumer Variety-Seeking Among Goods and Services," *Journal of Retailing and Consumer Services*, 2(3), 139-48.
- Kaufmann, E., Reips, U. D., & Wittmann, W. W. (2013). A critical meta-analysis of lens model studies in human judgment and decision-making. *PloS one*, 8(12), e83528.
- Kaufmann, E., & Wittmann, W. W. (2016). The success of linear bootstrapping models: Decision domain-, expertise-, and criterion-specific meta-analysis. *PloS one*, 11(6), e0157914.
- Kuncel, N. R., Klieger, D. M., Connelly, B. S., & Ones, D. S. (2013). Mechanical versus clinical data combination in selection and admissions decisions: A meta-analysis. *Journal of Applied Psychology*, 98(6), 1060.
- Liu, Y. (2006), "Word of mouth for movies: Its dynamics and impact on box office revenue," *Journal of Marketing*, 70(3), 74-89.
- Meehl, P. E. (1954). *Clinical versus statistical prediction: A theoretical analysis and review of the literature*. Minneapolis: University of Minnesota Press.
- Moe, W.W., and M. Trusov (2011), "The value of social dynamics in online product ratings forums," *Journal of Marketing Research*, 48(3), 444-456.
- Önköl, D., Goodwin, P., Thomson, M., Gönül, S., & Pollock, A. (2009). The relative influence of advice from human experts and statistical methods on forecast adjustments. *Journal of Behavioral Decision Making*, 22(4), 390-409.
- Promberger, M., & Baron, J. (2006). Do patients trust computers? *Journal of Behavioral Decision Making*, 19(5), 455-468.
- Sanders, N. R., & Manrodt, K. B. (2003). *The efficacy of using judgmental versus quantitative forecasting methods in practice*. *Omega*, 31(6), 511-522.
- Simonson, Itamar (1989), "Choice Based on Reasons: the Case of Attraction and Compromise Effects," *The Journal of Consumer Research*, 16(2), 158-74.
- Simonson, Itamar (2016), "Imperfect Progress: an Objective Quality Assessment of the Role of User Reviews in Consumer Decision Making, a Commentary on De Langhe, Fernbach, and Lichtenstein," *Journal of Consumer Research*, 42(6), 840-45.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27(2), 150-62.
- Simonson, Itamar, and Amos Tversky (1992), "Choice in Context: Tradeoff Contrast and Extremeness Aversion," *Journal of Marketing Research*, 29(3), 281-95.
- Spiller, Stephen A and Lena Belogolova (2016), "On Consumer Beliefs About Quality and Taste," *Journal of Consumer Research*, ucw065-22.
- Vrieze, S. I., & Grove, W. M. (2009). Survey on the use of clinical and mechanical prediction methods in clinical psychology. *Professional Psychology: Research and Practice*, 40(5), 525.
- You, Y., G.G. Vadakkepatt, and A.M. Joshi (2015), "A Meta-Analysis of Electronic Word-of-Mouth Elasticity," *Journal of Marketing* 79(2), 19-39.

When Modern Consumers Face Moral Violations

Chair: Stephanie Lin, Singapore Management University, Singapore

Paper #1: Explaining Moralized Opposition to Genetically Modified Food in the U.S. and Europe

Sydney Scott, Washington University in St. Louis, USA
Yoel Inbar, University of Toronto, Canada
Paul Rozin, University of Pennsylvania, USA

Paper #2: The First-Mover Authentic Advantage: How Order of Entry Signals the Purity of Motives

Brooke Kelly, University of Pennsylvania, USA
Deborah Small, University of Pennsylvania, USA

Paper #3: When Feeling Good Feels “Wrong”: Avoiding Hedonic Consumption When It Reflects Immoral Character

Stephanie Lin, Singapore Management University, Singapore
Taly Reich, Yale University, USA
Tamar A. Kreps, University of Utah, USA

Paper #4: Witnessing Moral Violations Increases Conformity in Consumption

Ping Dong, Northwestern University, USA
Chen-Bo Zhong, University of Toronto, Canada

SYMPOSIUM OVERVIEW

What constitutes a moral violation in the modern consumer’s mind, and what are the consequences of those moral judgments? Although morality is becoming an increasingly popular topic across fields, our understanding of the determinants and consequences of negative moral judgments in consumer contexts is underdeveloped. This is especially relevant in the modern world, with the increasing use of morally relevant technology (e.g., genetic modification), attempts for firms to be viewed as moral (e.g., corporate social responsibility), and exposure of consumers to moral violations through news and social media outlets. Our four papers draw on and contribute to the moral values and judgment literature (Barasch et al. 2014; Baron and Spranca 1999; Graham et al. 2013; Haidt 2001; Rozin 1999) by exploring how consumers’ moral values lead them to view certain products (**Scott, Inbar, and Rozin**), firms’ behavior (**Kelly and Small**), and their own behavior (**Lin, Reich, and Kreps**) as moral violations, and examining consumption consequences of being exposed to those violations (**Lin, Reich, and Kreps; Dong and Zhong**).

Scott, Inbar and Rozin find that genetic modification (GM), which is increasingly prevalent across the world, is widely met with moral opposition. They examine different roots of this opposition across cultures (US and Europe), and further find that opposition is only somewhat mitigated when consumers read about potential moral benefits of GM (e.g., saving lives). Thus, technological advancements that can serve moral ends can ironically be viewed as immoral. **Kelly and Small** also examine when consumers view actions that achieve objectively “good” outcomes as immoral. They investigate this question in the increasingly common context of corporate social responsibility and find that second-mover companies (i.e., following another company’s CSR behavior) are viewed as less authentically motivated, and are thus seen as less virtuous than first-movers.

Moving away from firms and products, **Lin, Reich, and Kreps** examine when people’s own consumption is judged as immoral, touching on both antecedents and consequences of moral violations. They show that after exposure to moral violations, consumers desire to feel negative emotions, and thus view hedonic consumption as a moral violation and avoid it (e.g., getting ice cream after the Holo-

caust Museum). Consumers also feel uncomfortable when negative moral content is followed by hedonic frivolous content in popular social media contexts (i.e., Twitter). **Dong and Zhong** further examine consumption consequences of moral violations. They find that, after exposure to moral violations, consumers choose products that conform to majority preferences (e.g., products with higher market share). Furthermore, they provide evidence that they choose such products to restore the social order disrupted by those violations.

Our papers use diverse methodologies and theoretical perspectives to examine the role of moral judgment in consumer behavior. Furthermore, while clearly focused around moral violation, our papers cover a wide range of topics (GM, CSR, hedonic consumption, conformity), and each contributes uniquely to the moral judgment literature while offering practical implications for marketers and consumers. Thus our session should appeal to a broad audience at ACR.

Explaining Moralized Opposition to Genetically Modified Food in the U.S. and Europe

EXTENDED ABSTRACT

Genetically modified (GM) food has become prevalent. Eighty-three percent of soybean plants and 29% of corn grown worldwide is GM (ISAA 2015). Yet, consumers are very opposed to GM food. Protesters from the Philippines to Australia to the United States continue to destroy genetically modified crops (Harmon 2013). A wealth of research has focused on the rational and quasi-rational factors underlying opposition to GM, such as beliefs about risks and benefits (Gaskell et al. 2004; Siegrist 2000). In the present research, we expand the scope of explanations about opposition to GM food. We find GM food opposition is moralized and based on sacred values (Baron and Spranca 1997; Rozin 1999). Consumers view the very process of genetic modification as morally repugnant, regardless of its risks and benefits. We use this moralization framework to investigate two puzzles about GM food: 1) consumers’ (in)sensitivity to risk-benefit arguments and 2) why Americans and Europeans have different attitudes to GM food, despite the cultural similarity between the U.S. and Europe.

First, we examine whether attitudes to GM food are moralized in a representative U.S. sample ($N = 540$). We asked participants a number of agree/disagree questions regarding “genetically engineering plants and animals for human consumption”, including 1) “I oppose this”; 2) “This should be prohibited no matter how great the benefits and minor the risks from allowing it”. Following Baron and Spranca (1997) and Scott, Inbar, and Rozin (2016), we defined GM moralization using questions 1 and 2. The majority (64.9%) of consumers in the U.S. were opposed to GM (said “yes” to Q1). Moreover, the majority of this opposition was moralized opposition (said “yes” to Q2; 81.3% of opponents, which is 52.8% of the total sample). These moralized opponents indicated they are *evidence-insensitive*, and they would oppose GM food no matter the cost-benefit analysis.

In order to directly assess evidence-insensitivity of moralized opponents, we randomly assigned moralized opponents to view one of two opposition challenges: a moral benefit challenge and open-ended challenge (adapted from Baron and Spranca, 1997). In the moral benefit challenge, consumers considered and rated the acceptability of golden rice, a crop produced by non-profit companies to reduce death and blindness from Vitamin A deficiency. In the open-ended challenge, consumers wrote about any situation in which

GM would be acceptable, if they could think of such a situation. In both conditions, consumers were given the opportunity to change their moralization position and indicate that they would be willing to change their minds depending on the risks and benefits (i.e., re-answer Q1 & Q2, see above). Only 26.3% of moralized opponents shifted their position after viewing the moral benefit challenge; even fewer (13.7%, $p < .001$) shifted their position after viewing the open-ended challenge. Moralized consumers were evidence insensitive to both challenges.

Next, we examined the difference between attitudes in Europe (Germany & France) and the United States. Prior work suggests that Europeans find GM food more unacceptable than Americans (Gaskell et al., 1999), but it is unclear whether Europeans and Americans oppose GM food for the same or different reasons. We find that Europeans are more moralized towards GM than the United States, and that the bases of moralization differ across countries.

We administered the same survey described above to a representative sample of French ($N = 500$) and German ($N = 519$) participants. Europeans were more moralized than Americans. Moralized opposition was more prevalent in France and in Germany as compared to the U.S. (85.21% in France vs. 52.82% in USA, $t = 10.40$, $p < .001$; 72.69% in Germany vs. 52.82% in U.S., $t = 6.40$, $p < .001$). Even among only opponents (i.e., excluding supporters), moralization was more prevalent in Europe (93.15% in France vs. 81.33% in U.S., $t = 4.80$, $p < .001$; 87.48% in Germany vs. 81.33% in USA, $t = 2.27$, $p = .024$).

Consistent with these self-report measures of moralization, Europeans behaved more insensitive to evidence. Whereas 26.3% of U.S. moralized opponents shifted to non-moralized opposition after viewing the moral benefits challenge, only 15.8% of French and 9.8% of German moralized opponents shifted after this challenge (U.S. v. France, $p = .021$; U.S. v. Germany, $p < .001$). Similarly, whereas 13.7% of U.S. moralized opponents shifted after viewing the open-ended challenge, a mere 3.3% of French and 6.6% of German moralized opponents shifted their opinions (U.S. v. France, $p = .036$; U.S. v. Germany, $p = .002$).

Finally, we examined two potential bases of opposition. We measured connectedness to the natural world (Schultz, 2001) and religiosity. Connectedness to the natural world might capture the intuition that humans shouldn't "tamper with nature." Connectedness to the natural world predicted increased GM opposition in all countries, and France and Germany felt more connected to the natural world than the United States. On the other hand, religiosity might capture the intuition that GM is the equivalent of "playing God." Religiosity was higher in the United States, and religiosity predicted increased GM opposition in the United States better than in France or Germany. These results were robust across many operationalizations of GM opposition, connectedness to nature, and religiosity and were robust to demographic controls.

Taken together, across 1559 participants and representative samples from three different countries we find strong support for a moralization or sacred values framework of GM opposition. Consistent with this framework, most opposition is moralized opposition, and these opponents are unmoved by strong arguments about risks and benefits. Instead they seem to be opposed to the very process of GM itself, which, regardless of risks and benefits is considered intrinsically reprehensible. Furthermore, opposition may be stronger and more moralized in France and Germany (vs. the U.S.) in part due to stronger connectedness to the natural world, but religiosity plays a bigger role in the United States.

The First-Mover Authentic Advantage: How Order of Entry Signals the Purity of Motives

EXTENDED ABSTRACT

Companies engage in costly "corporate social responsibility" (CSR) because they can gain increased customer loyalty (Maignan, Ferrell, & Hult, 1999) and purchase intentions (Elfenbein & McManus, 2010; Sen & Bhattacharya, 2001), improved product quality perceptions (Blair & Chernev, 2014), and an enhanced reputation (Brammer & Pavelin, 2006). However, they run the risk of losing credit if their good deeds are seemingly motivated by self-interested motives (Newman & Cain, 2014; Vlachos et al., 2009). This aversion to impure motives, or inauthenticity more generally, extends beyond the prosocial behavior of firms. Consumers value authenticity in a number of domains (see Newman & Smith, 2016 for review). For example, Newman & Bloom (2012) find that consumers devalue intentional copies of paintings, which is consistent with plagiarism research demonstrating an aversion to stealing credit, a very self-serving act (see Mandel, Fast, & Olson, 2015 for review).

These results underscore the importance of appearing authentic as well as the skepticism and even distaste towards copying. We build on these insights to predict that companies who copy the original prosocial actions of another company will be judged as less benevolent and that this will be due to an inference about the impurity of their motives.

While the idea of first-movers being inherently authentic has been discussed in the first-mover literature (Kamins & Alpert, 2004), it has yet to be explicitly tested. Rather, the first-mover advantage literature began simply with descriptive evidence that market pioneers have larger market shares than later entrants (Robinson, 1988; Robinson and Fornell, 1985; Urban et al., 1986). First-movers are generally perceived more favorably than followers and have a greater advantage the more similar the follower is to them (Carpenter and Nakamoto, 1989). Explanations for this advantage include: increased exposure frequency, familiarity, recall, and representativeness, as well as pioneer image/self-image consistency and the application of consumer beliefs about first-mover traits such as quality and reliability (see Niedrich and Swain 2003 for review). The present research seeks to enrich this evidence by examining the role of judged motives. In doing so, it sheds light on when the first-mover advantage is likely to be particularly strong.

In the context of CSR and other prosocial activities, we expect that first-movers will be perceived as more benevolent than followers. If a company is first to do some type of CSR action, being first suggests that that act must be consistent with the company's character (i.e. "good"). In contrast, a company that copies the CSR action of another will appear less genuine. We further expect that the motive purity of a first-mover will translate into more positive overall attitudes. Because motive purity is so important for prosocial actions (Barasch et al., 2014; Berman et al., 2015), we further hypothesize that the first-mover advantage will be greater for prosocial innovations than for self-interested innovations.

In Study 1 ($N = 301$), participants evaluated first-mover and follower companies with domain-related CSR programs. Participants rated both the first-mover and the follower on social goodness ($\alpha = .962$) and motive purity ($\alpha = 0.949$). Across three industry scenarios, first-movers were judged as more benevolent ($M = 5.52$, $SD = 1.10$) and purely-motivated ($M = 4.59$, $SD = 1.34$) than followers ($M = 4.67$, $SD = 1.08$; $M = 3.82$, $SD = 1.26$, respectively; all $ps < .001$), with motive purity mediating the effect on benevolence judgments here and in subsequent studies.

In Study 2 ($N = 160$), we examined whether the first-mover authentic advantage is larger for CSR activities than for self-interested activities. Participants evaluated first-movers and followers and either judged companies whose innovations (and copied innovations) were self-interested (cost-cutting for the company) or prosocial (better for the environment). Our key dependent variable moving forward is overall attitude judgments ($\alpha = 0.976$), because it allows us to examine a more general evaluation that is reasonable for participants to evaluate across both types of innovations. We find that first-movers are judged more positively overall ($M = 5.22$, $SD = 1.06$) than followers ($M = 4.32$, $SD = .96$; $F(1, 156) = 186.15$, $p < .001$). We also find that companies with prosocial innovations are viewed more positively overall ($M = 5.18$, $SD = .82$) than companies that innovate in a self-serving way ($M = 4.37$, $SD = .82$; $F(1, 156) = 37.27$, $p < .001$). Importantly, there is a significant interaction between first-mover status and innovation type ($F(1, 156) = 12.73$, $p < .001$) such that the first-mover advantage is larger for CSR innovations than for self-interested innovations. These same patterns emerge for judgments of social goodness and motive purity.

In Study 3 ($N = 200$), we conceptually replicate Study 2 using scenarios that lack any company- or innovation-specific information. This controls for any inherent differences across the CSR and self-interested innovation scenarios of Study 2. Our results parallel those reported in Study 2 (all $ps < .001$).

In Study 4 ($N = 149$), we examine whether it is better to copy the CSR of a competitor or to persist pursuing self-interest. Participants judged a CSR first-mover as well as a company that responds to the CSR innovation by a) copying it, b) innovating in a non-CSR way, or c) doing nothing at all. We replicate the finding that first-movers are judged more positively than each type of following competitor (all $ps < .01$). Nonetheless, CSR copiers are evaluated more positively overall ($M = 5.11$, $SD = 1.32$) than companies that innovate in a self-interested manner ($M_i = 4.20$, $SD = 1.13$) and proceed with business as usual ($M = 3.73$, $SD = 1.00$; all $ps < .001$). In other words, CSR copiers are penalized for having impure motives, but they still receive more credit than companies that do no good at all.

We demonstrate that being first at doing something benevolent signals something positive above and beyond the action. Put another way, copying a good action raises doubt about the purity of the company's motives, which lowers the amount of credit that the company reaps. This underscores the importance of inferred motives for CSR activities.

When Feeling Good Feels “Wrong”: Avoiding Hedonic Consumption When It Reflects Immoral Character

EXTENDED ABSTRACT

People judge others' moral characters based on their emotional responses to moral situations (Barasch et al. 2014; Szcurek, Monin, and Gross 2012), perhaps because emotions play such a strong role in moral judgments (Graham et al. 2013; Haidt 2001). We propose that people turn the same judgment inward, and that this judgment affects their desire to consume hedonic experiences. In particular, in contrast to traditional accounts of hedonic emotion regulation (Gross and Thompson 2007), we posit that people desire to experience negative emotions in response to moral violations and negatively valenced moralized content, because experiencing positive emotions would reflect poorly on their moral character. As a consequence, we predict that consumers will avoid repairing emotions through hedonic consumption after viewing negative moralized content, and that they will feel uncomfortable when their ability to feel negatively is disrupted.

Study 1 tested whether consumers feel moral self-reproach (i.e., guilt) when they do not feel negatively enough about negative moralized content using a 3 (emotion feedback: lower, higher, no feedback) \times 2 (moralized content: moralized vs. nonmoral) design. An experimenter attached a physiological measurement device to the participant's palm and informed participants that they would view a sad video clip while he (ostensibly) monitored their emotional response in the next room. Participants viewed a sad moral (from a documentary about Bullying) or a sad nonmoral (from ET) film clip. The experimenter then interrupted the clip, claiming that he had to stop the study because the participant was feeling less sad or sadder than previous participants, or because he was having trouble with the equipment. Participants then reported how guilty they felt. Those who viewed the moralized clip felt guiltier when they thought they felt less sad ($M = 2.07$, $SD = 1.14$) than others than when they thought they felt sadder than others ($M = 1.40$, $SD = .66$; $p < .001$), or when they were given no feedback, ($M = 1.54$, $SD = .94$; $p = .001$). In contrast, the level of guilt for those who saw the nonmoralized clip was not affected by emotion feedback others ($M_{\text{lower}} = 1.41$, $SD = .75$; $M_{\text{higher}} = 1.30$, $SD = .65$; $M_{\text{no feedback}} = 1.33$, $SD = .51$; $ps > .40$). A moderated mediation analysis revealed that the moral content, and not emotional intensity, of the clip explained this effect [.013, .357]. Thus, participants felt they had violated a moral standard by not feeling adequately negative about a moralized clip, suggesting that people desire to negatively in response to negative moralized content.

Studies 2-4 tested whether consumers are reluctant to repair their moods by engaging in hedonic consumption after viewing negatively valenced moralized stimuli. In study 2, participants created a hypothetical itinerary for a trip to Washington, DC. They read that they would visit a museum with moralized content (the Holocaust Museum) or nonmoralized content (an art museum). Participants scheduled two other activities: going for ice cream (hedonic) or taking a walk on the Potomac River (neutral). They chose which should come before and which after the museum. Participants sequenced the ice cream trip after the Holocaust Museum less frequently (62.63%) than after the art museum (86.02%), $p < .001$. This was mediated by how it would reflect on their moral character to eat ice cream after visiting the museum they visited [.033, .146].

In study 3, participants viewed Beyoncé's “Formation” music video, and focused on the aesthetic or moral aspects (e.g., themes of racial discrimination) of the video, thus holding content constant. Afterwards, they chose between viewing a clip from America's Funniest Home Videos or engaging in a meditative breathing task for the next study. Participants were less likely to choose America's Funniest Home Videos after focusing on the moral aspects (58.06%) the music video than when they focused on aesthetic aspects (68.75%), $p = .05$.

Study 4 ruled experienced affect out as an alternative explanation. Participants viewed the same negative moral and nonmoral film clips from study 1 (Bully documentary clip vs. ET clip). They then chose between viewing a Bud Light ad or sitting in silence for 30 seconds. Participants were less likely to view the Bud Light ad after the moralized clip (37.69% vs. 56.86%; $p < .001$). This was mediated by how poorly it would reflect on their moral character to view the Bud Light ad after the video they viewed [-.12, -.04] and held true when controlling for how sad the video made participants feel.

In study 5, we explored the consequences of being exposed to moral content directly followed by hedonic, nonmoral content by using Twitter “tweets.” Participants viewed six negative tweets—three moral (e.g., about rape culture on college campus) and three nonmoral (e.g., about a bacterial outbreak among olive trees). Each tweet was randomly followed by one of six positive tweets—three

virtuous (e.g., about a paralyzed student being thrown a prom that he missed), and three frivolous (e.g., about eating Chipotle every day). Participants rated how comfortable the tweets made them feel (appropriate, comfortable, good). When the second tweet was frivolous, participants felt more uncomfortable when the first tweet was moral ($M=3.00$, $SD=1.12$) than when it was nonmoral, ($M=3.47$, $SD=1.21$; $p=.02$). However, this was not true when the second tweet was virtuous, ($M_{\text{moral}}=3.90$, $SD=1.23$; $M_{\text{nonmoral}}=3.90$, $SD=1.18$; $p=.44$; interaction $p=.004$). Individual ratings of tweets revealed that, when the second tweet as high in frivolous content, moral content of the first tweet predicted discomfort whereas when they were low in frivolous content, $p=.002$, moral content of the second tweet did not predict discomfort, $p=.81$, interaction $p=.006$. Thus, people feel more comfortable repairing their moods through moralized positive content, rather than through a cheap laugh.

Practically, our research suggests that marketers should develop different strategies following negative nonmoralized and moralized content, and that social media outlets should build algorithms to separate negative moral content (e.g., tragic news stories) from frivolous content (e.g., celebrity gossip). Theoretically, we contribute to a broader understanding of the role that emotion plays in moral contexts (Haidt 2001), and when people are motivated to experience negative emotion (Coleman and Williams 2013; Tamir, Mitchell, and Gross 2008). We also qualify judgment and decision making literature on the preferences for sequences of events that improve over time (Loewenstein and Prelec 1993).

Witnessing Moral Violations Increases Conformity in Consumption

EXTENDED ABSTRACT

News reports of unethical behaviors have become a regular feature on TV programs, newspapers, radio stations, and websites. Consumers are constantly exposed to moral violations, from infamously fraud by such companies as Enron, Lehman Brothers, and, more recently, Volkswagen to everyday transgressions such as tax evasion and adultery. Such unethical behaviors violate established moral codes and principles held by the majority of the society (Haidt 2012) and are usually recognized as breaches of social order. Despite the prevalence of moral violations, little is known about how witnessing them may affect consumer choice.

The current research highlights a novel influence of witnessing moral violations on consumers' preference for majority-endorsed (vs. minority-endorsed) options. We propose that moral violations pose a threat to social order and that mere exposure to them could heighten individuals' endorsement of conformist attitudes (Murray and Schaller 2012) by inducing a desire to correct wrongs (e.g., punishing the moral transgressors) and prevent future transgressions (e.g., adhering to social norms). In the domain of consumption, the heightened conformist attitudes could manifest symbolically through one's preference for majority-endorsed (vs. minority-endorsed) products or brands (cf. Berger and Heath 2007; Dong, Dai, and Wyer 2015; Huang, Dong, and Mukhopadhyay 2014).

We further propose that the effect should be attenuated or eliminated under two conditions. First, if the moral violator has already been punished by third parties, the need to restore social order should be fulfilled and hence the desire to conform to the majority should be lessened. Second, if the proposed moral violation effect is driven by heightened desire to restore social order, then the effect should not hold if conforming to the majority-endorsed option is viewed as being complicit with the moral violation, which might create further

imbalance in social order. We describe four experiments which investigated these possibilities.

Experiment 1 intends to test the proposed causal relationship between exposure to moral violations and conformity tendency. Participants were randomly assigned to 3(moral violation vs. innocent error vs. natural disaster) between-subjects conditions. To manipulate exposure to moral violation, participants were asked to read and comprehend news article describing an immoral behavior (i.e., the London Interbank Offered Rate [LIBOR] financial scandal). In the innocent error condition, participants were asked to read a similar news article but words were changed to describe the LIBOR incident as an innocent error. We also included the natural disaster condition to test whether the effect may generalize to any negative events. Afterwards, participants were asked to choose between a majority-endorsed (vs. minority-endorsed) office magnet as a small token of appreciation. The choice results yielded that witnessing moral violation increased consumers' tendency to choose a majority-endorsed (vs. minority-endorsed) magnet (55.1%), compared with those in the innocent error (33.3%; $p=.01$) or natural disaster conditions (37.7%; $p=.04$), suggesting that this effect is specific to moral violations and cannot be generalized to any negative events.

Experiment 2 extended the investigation in two ways: first, rather than manipulating moral violations using news article comprehension task, participants were exposed to real moral violation behavior (i.e., cheating). Second, we investigated whether the effect is comparable for observers and direct victims of moral violations. It followed a 2(exposure to cheating vs. not) \times 2(incentive structure: observers vs. direct victims) between subjects design. To manipulate exposure to cheating, we had a confederate cheating in a verbal ability task, and the behavior was observed by other participants in the same session. We varied the structure of the incentives that we offered to participants in the verbal ability task such that the confederate's cheating behavior would either hurt the participants' own payoff (i.e., direct victims condition) or not (observers condition). We find that exposure to cheating (vs. not) increased consumers' subsequent conformity tendency measured using the same magnet choice task as in Experiment 1, regardless of whether they are observers (54.0% vs. 31.7%; $p=.033$) or direct victims (58.5% vs. 35.4%; $p=.029$) of the cheating behavior.

Experiment 3 replicated the effect using a different operationalization of moral violation (i.e., reading a story about a corruptive CEO) and a different measure of conformity tendency (i.e., preference for brands with higher versus lower market share) and provided direct evidence for the underlying mechanism. Participants were randomly assigned to 3(unpunished corruptive CEO vs. punished corruptive CEO vs. control) between subjects conditions. As predicted, participants who read about a story describing an unpunished corrupt CEO ($M=14.21$) were more likely to prefer brands that have larger market share, compared with those who read about a punished corrupt CEO ($M=13.50$; $p=.025$) or those who were in the control condition ($M=13.46$; $p=.017$). In addition, a multi-stage mediation analysis revealed that the effect is shown to be driven by the heightened perceived threat to social order which subsequently enhanced participants' endorsement of conformist attitudes.

Experiment 4 sought to further test our proposed underlying process by using a moderation-by-process design (Spencer, Zanna, and Fong 2005). It followed a 2 (exposure to: moral violation vs. innocent error) \times 2 (majority morality: immoral vs. control) between-subjects design. We followed exactly the same procedures as in Experiment 1 to manipulate exposure to moral violations. Then participants were asked to make a choice between joining a majority-endorsed and a minority-endorsed book club, and we manipulated

the perceived morality of the two clubs by varying the occupation information of the book club members. We find that exposure to moral violation (vs. innocent error) increased preference for the majority book club only if the majority book club is perceived as neutral or moral (44.7% vs. 25.4%; $p=.014$). The effect disappears if the majority club is perceived as immoral (19.2% vs. 23.4%; $p>.53$).

Taken together, this research provides fresh insights to the morality and conformity literature by (a) documenting a novel downstream consequence of exposure to moral violations on consumer choice and (b) advancing our understanding of the psychological functions of conformity in coping with negative consequences of witnessing moral violations. Theoretical contributions and marketing implications will be discussed.

REFERENCES

- Barasch, Alixandra, Emma E. Levine, Jonathan Z. Berman, and Deborah A. Small (2014), "Selfish or selfless? On the signal value of emotion in altruistic behavior," *Journal of Personality and Social Psychology*, 107(3), 393–413.
- Baron, Jonathan, and Mark Spranca (1997), "Protected Values," *Organizational Behavior and Human Decision Processes*, 70(1), 1–16.
- Berger, Jonah, and Chip Heath (2007), "Where Consumers Diverge From Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34(2), 121–34.
- Berman, Jonathan Z., Emma E. Levine, Alixandra Barasch, and Deborah A. Small (2015), "The Braggart's Dilemma: On the social rewards and penalties of advertising prosocial behavior," *Journal of Marketing Research*, 52 (1), 90–104.
- Brammer, Stephen J. & Stephen Pavelin (2006). Corporate Reputation and Social Performance: The Importance of Fit. *Journal of Management Studies*, 43(3), 435–55.
- Carpenter, Gregory S. and Kent Nakamoto (1989), "Consumer Preference Formation and Pioneering Advantage," *Journal of Marketing Research*, 26(3), 285–298.
- Chernev, Alexander and Sean Blair (2015), "Doing Well by Doing Good: The Benevolent Halo of Corporate Social Responsibility," *Journal of Consumer Research*, 41(6), 1412–25.
- Coleman, Nicole Verrochi and Patti Williams (2013), "Feeling Like My Self: Emotion Profiles and Social Identity," *Journal of Consumer Research*, 40(2), 203–22.
- Dong, Ping, Xianchi Dai, and Robert S. Wyer (2015), "Actors Conform, Observers React: The Effects of Behavioral Synchrony on Conformity," *Journal of Personality and Social Psychology*, 108(1), 60–75.
- Elfenbein, Daniel W., and Brian McManus (2010), "A Greater Price for a Greater Good? Evidence That Consumers Pay More for Charity-Linked Products," *American Economic Journal: Economic Policy*, 2(2), 28–60.
- Gaskell, George, Martin W. Bauer, John Durant, and Nicholas C. Allum (1999), "Worlds Apart? Reception of Genetically Modified Foods in Europe and the U.S.," *Science*, 285, 384–397.
- Graham, Jesse, Jonathan Haidt, Sena Koleva, Matt Motyl, Ravi Iyer, Sean P. Wojcik, and Peter H. Ditto (2013), "Moral foundations theory: The pragmatic validity of moral pluralism," *Advances in Experimental Social Psychology*, 47, 55–130.
- Gross, James J. and Ross A. Thompson (2007), "Emotion regulation: Conceptual foundations," in *Handbook of Emotion Regulation*, J. J. Gross, ed., Guilford Publications, 3–24.
- Haidt, Jonathan (2001), "The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment," *Psychological Review*, 108(4), 814–34.
- Haidt, Jonathan (2012), *The Righteous Mind: Why Good People are Divided by Politics and Religion*, New York: Pantheon.
- Harmon, Amy (2013), "Golden Rice: Lifesaver?" (accessed March 4, 2017), [available at <http://www.nytimes.com/2013/08/25/sunday-review/golden-rice-lifesaver.html>]
- Huang, Xun (Irene), Ping Dong, and Anirban Mukhopadhyay (2014), "Proud to Belong or Proudly Different? Lay Theories Determine Contrasting Effects of Incidental Pride on Uniqueness Seeking," *Journal of Consumer Research*, 41(3), 697–712.
- International Service for the Acquisition of Agri-Biotech Applications (2016), "Pocket K No. 16: Biotech Crop Highlights 2015" (accessed March 4, 2017), [available at <http://www.isaaa.org/resources/publications/pocketk/16/>]
- Kamins, Michael A. and Frank H. Alpert (2004), "Corporate Claims as Innovator or Market Leader: Impact on Overall Attitude and Quality Perceptions and Transfer to Company Brands," *Journal of Personality and Social Psychology*, 89(6), 899–913.
- Loewenstein, George and Drazen Prelec (1993), "Preferences for Sequences of Outcomes," *Psychological Review*, 100(1), 91–108.
- Maignan, Isabelle, Odies Collins Ferrell, and G. Tomas M. Hult (1999), "Corporate Citizenship: Cultural Antecedents and Business Benefits," *Journal of the Academy of Marketing Science*, 27(4), 455–69.
- Mandel, Gregory N., Anne A. Fast, and Kristina R. Olson (2015), "Intellectual Property Law's Plagiarism Fallacy," *BYU Law Review*, 915–84.
- Murray, Damian R., and Mark Schaller (2012), "Threat(s) and Conformity Deconstructed: Perceived Threat of Infectious Disease and Its Implications for Conformist Attitudes and Behavior," *European Journal of Social Psychology*, 42(2), 180–88.
- Newman, George E., and Daylian M. Cain, (2014), "Tainted Altruism When Doing Some Good Is Evaluated as Worse Than Doing No Good at All," *Psychological Science*, 25(3), 648–55.
- Newman, George E., and Paul Bloom (2012). "Art and Authenticity: The Importance of Originals in Judgments of Value," *Journal of Experimental Psychology: General*, 141(3), 558–669.
- Newman, George E., and Rosanna K. Smith (2016), "Kinds of Authenticity," *Philosophy Compass*, 11(10), 609–18.
- Niedrich, Ronald W. and Scott D. Swain (2003), "The Influence of Pioneer Status and Experience Order on Consumer Brand Preference: A Mediated-Effects Model," *Journal of the Academy of Marketing Science*, 31(4), 468–480.
- Robinson, William T. (1988), "Sources of Market Pioneer Advantages: The Case of Industrial Goods Industries," *Journal of Marketing Research*, 25(1), 87–94.
- Robinson, William T., and Claes Fornell (1985), "Sources of Marketing Pioneering Advantages in Consumer Goods Industries," *Journal of Marketing Research*, 22(3), 305–17.
- Rozin, Paul (1999), "The Process of Moralization" *Psychological Science*, 10(3), 218–221.

- Schultz, P. Wesley (2001). "The Structure of Environmental Concern: Concern for the Self, Other People, and the Biosphere," *Journal of Environmental Psychology*, 21(4), 327–339.
- Scott, Sydney E., Yoel Inbar, and Paul Rozin (2016), "Evidence for Absolute Moral Opposition to Genetically Modified Food in the United States" *Perspectives on Psychological Science*, 11(3), 315-324.
- Sen, Sankar, and Chitra Bhanu Bhattacharya (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility," *Journal of Marketing Research*, 38(2), 225-43.
- Siegrist, Michael (2000), "The Influence of Trust and Perceptions of Risks and Benefits on the Acceptance of Gene Technology," *Risk Analysis*, 20, 195–203.
- Spencer, Steven J., Mark P. Zanna, and Geoffrey T. Fong (2005), "Establishing a Causal Chain: Why Experiments Are Often More Effective than Mediational Analyses in Examining Psychological Processes," *Journal of Personality and Social Psychology*, 89(6), 845-51.
- Szczurek, Lauren M., Benoit Monin, and James J. Gross (2012), "The Stranger Effect: The Rejection of Affective Deviants," *Psychological Science*, 23(10), 1105–11.
- Tamir, Maya, Christopher Mitchell, and James J. Gross (2008), "Hedonic and instrumental motives in anger regulation," *Psychological Science*, 19(4), 324–28.
- Urban, Glen L., Theresa Carter, Steven Gaskin, and Zofia Mucha, (1986), "Market Share Rewards to Pioneering Brands: An Empirical Analysis and Strategic Implications," *Management Science*, 32(6), 645–659.
- Vandervoort, Frances, (1995), "Can scientific integrity be taught?," *Science Teacher*, 62(4), 38–42.
- Vlachos, Pavlos A., Argiris Tsamakos, Adam P. Vrechopoulos, and Panagiotis K. Avramidis, (2009), "Corporate Social Responsibility: Attributions, Loyalty, and the Mediating Role of Trust," *Journal of the Academy of Marketing Science*, 37(2), 170-80.

A Bouquet of Scents: Olfactory Effects on Product Evaluation & Consumption

Chairs: Zachary Estes, Bocconi University, Italy
Varun Sharma, Bocconi University, Italy

Paper #1: Seeing is Smelling: Visual Images can Induce Olfactory Imagery and Improve Product Evaluations

Varun Sharma, Bocconi University, Italy
Zachary Estes, Bocconi University, Italy

Paper #2: I smell it as if it were here: Can scented advertising boost product appeal?

Ruta Ruzeviciute, Vienna University of Economics and Business, Austria
Bernadette Kamleitner, Vienna University of Economics and Business, Austria
Dipayan Biswas, University of South Florida, USA

Paper #3: Follow Your Nose When it Sounds Right: How Brand Names Moderate the Influence of Olfactory Cues on Consumer Preferences

Marina Carnevale, Fordham University, USA
Rhonda Hadi, University of Oxford, UK
Ruth Pogacar, University of Cincinnati, USA
David Luna, City University of New York, USA

Paper #4: The Effects of Warm versus Cool Ambient Scents on Calorie Consumption

Sarah Lefebvre, Murray State University, USA
Dipayan Biswas, University of South Florida, USA

SESSION OVERVIEW

The session addresses the broad question of how scents affect product evaluations and consumption. The session serves as a cohesive all-around inquiry, set up in diverse contexts of scent expression, like product scents, scented ads, olfactory imagery and ambient scents. The papers also introduce several novel effects, like scent as a cue for transferring product-essence and for inferring ambient temperature.

Sharma and Estes point out that although scent can be a powerful marketing tool, it is difficult to implement via advertising and packaging. They therefore investigate how pictures of scented objects (e.g., lavender, lemon) in ads and product labels affect product evaluations. Across four studies, they show that pictures of scented objects can evoke olfactory imagery, hence positively impacting product evaluations. However, this visual-olfactory effect occurs only when the scent is pleasant, when scents are relevant to the product, and when the offering is utilitarian. It backfires if the product category is scent-irrelevant or the associated scent is unpleasant.

Ruzeviciute, Kamleitner, and Biswas examine how scented ads improve the appeal and attractiveness of a product. They suggest that scents are able to transfer the essence of the product. In three studies, they show that scents increase the product appeal because of enhanced perceived proximity of the product to the consumer. However, scents increase perceived proximity only when there are scent expectations from the product, whereas the importance of scents to the product and explicitly informing consumers of the scent do not matter. The authors also rule out imagery as a potential alternate mechanism.

Carnevale, Hadi, Pogacar, and Luna focus on how brand names influence consumers' responses to a product's scent. In a field experiment and two lab experiments, they show that olfactory cues from a product affect consumer preferences when the brand name

is category-congruent, but not when the brand name is category-incongruent. They further show that this effect is mediated by increased fluent processing of category-congruent brand names. On the other hand, unpleasant smelling products (e.g., blue cheese) can benefit from using category-incongruent brand names, as the unpleasant olfactory cues are discounted from evaluations in this case.

Lefebvre and Biswas investigate how warm or cool ambient scents affect food/beverage consumption. In a field experiment and three lab experiments they show that warm ambient scents decrease calorie consumption and reduce the likelihood of choosing high-calorie foods, compared with cool scents. They further show that this effect is due to a difference in perceived ambient temperature by consumers. They theorize that lower perceived temperature in the case of cooler scents might signal higher anticipated energy expenditure, leading to an increase in high calorie food consumption. Surprisingly, this effect reverses with beverages instead of foods.

This session connects scents with product evaluations and consumption with several novel theoretical links, mechanisms and boundary conditions along with relevant practical implications to managers. These papers together show how scents can have broad as well as specific effects, hence illustrating the widespread effects of scent on a multitude of consumer behaviors.

Seeing is Smelling: Visual Images can Induce Olfactory Imagery and Improve Product Evaluations

EXTENDED ABSTRACT

Scented products are increasing in prevalence, so marketers need to advertise and package them effectively. Using scents in ads and in stores improves product evaluations (Morrin 2009), but the incorporation of scents is expensive in advertising and impractical in packaging. Alternatively, given that consumers may be "able to experience the sensation of smell when an appropriate stimulus is absent" (*olfactory imagery*; Stevenson and Case 2005), we investigated whether pictures of scent-inducing objects (like lavender) in ads or product packages can increase product evaluations via olfactory imagery (*visual-olfactory effect*).

Pictures lie at the heart of advertising and packaging, but the link between pictures and olfactory imagery is unexplored in consumer behavior. Murray et al. (2005) showed that visual exposure to an object can activate representations in other modalities, including smell. Moreover, because visual and olfactory neural circuits overlap substantially (Jadaui et al. 2012), the mere presence of a visual stimulus can evoke olfactory imagery. But does olfactory imagery affect product evaluations?

A large literature on scent suggests a positive impact of pleasant scents on consumer evaluation and behavior (Bosmans 2006; Morrin 2009). Olfactory imagery and olfactory perception exhibit highly similar hedonic patterns in the brain (Bensafi et al. 2007), therefore, we expect a positive impact of olfactory imagery on consumer evaluations. For example, Krishna et al. (2014) showed that olfactory imagery of food can increase consumption. We similarly expect a positive impact of olfactory imagery on consumer evaluations in non-food products (without the gustatory sense), avoiding interfering mechanisms like cravings (Kemps et al. 2004) and activation of taste and reward areas in the brain (Simmons et al. 2005). We further ruled

out an impact of other sensory modalities by using products with limited or no haptic or auditory involvement.

Study 1 tested whether product labels that evoke stronger (versus weaker) olfactory imagery are preferred. 95 participants viewed two product labels of a lemon-scented dishwashing liquid with a picture of either cut lemon or whole lemon. They indicated the label they preferred and rated the olfactory imagery and visual attractiveness of the labels. A significant majority of participants (77%) preferred the label with cut lemons, which evoked stronger olfactory imagery. A logistic regression showed a significant effect of olfactory imagery on likelihood of choosing the cut lemon label ($t=2.48, p<.05$), controlling for visual attractiveness.

In an ad/package, using pictures to indicate removal of unpleasant scents is common (e.g., air-freshener ads) but are such pictures beneficial or harmful for product evaluation? Study 2 compared pictures of pleasant or unpleasant scented objects, which we expected to increase and decrease product evaluations respectively. 292 respondents saw an oven cleaner with one of three labels between-participants: pleasant (lemon picture), unpleasant (fish picture) and no-scent (oven picture). All packages included the statements: "LEMON SCENTED" and "NEUTRALIZES FISHY SMELL". A one-way ANOVA confirmed more positive attitudes, $F(2,292)=77.79, p<0.001$, and more positive olfactory imagery, $F(2,292)=142.41, p<0.001$, in the pleasant condition than in the control condition, which was higher than the unpleasant condition. Mediation analysis showed that the lemon picture increased product attitudes via olfactory imagery (CI=.08 to .27), whereas the fish picture decreased attitudes via olfactory imagery (CI=-.77 to -.34).

The contextual-correction literature (Bosmans 2006) indicates that when consumers are aware of biasing effects of scents (like pictures impacting evaluations), they discount it while evaluating. We hypothesized that the visual-olfactory effect would be moderated by the relevance of scent to the product category (scent-relevant: cleaning-spray; scent-irrelevant: umbrella), because in the scent-irrelevant condition its biasing effect is apparent to the consumer. In study 3, 392 online respondents were assigned to one of 2 (Scent relevance: relevant, irrelevant) * 2 (image: present, absent) between-participants conditions. All packages were clearly labeled "LEMON FRAGRANCE". ANOVA showed a significant interaction on product attitudes, $F(1, 388)=11.29, p=.001$. The picture of a lemon on the package improved attitudes for the scent-relevant product (cleaning spray), $t(191)=2.25, p<.05$, but decreased attitudes for the scent-irrelevant product (umbrella), $t(197)=-2.06, p<.05$. A moderated-mediation analysis showed that for the scent-relevant product, the picture increased product attitudes via olfactory imagery (CI=.1 to .33), while for the scent-irrelevant product there was no mediation (CI=-.04 to .17).

Hedonic offerings are inherently emotional and sensorial (Voss et al. 2003), so counter-intuitively, the addition of a picture may have relatively little benefit to hedonic ads. That is, because hedonic offerings are already highly sensory, an additional sensory attribute (olfactory imagery) may have "diminishing returns" on attitudes. Utilitarian offerings, in contrast, tend to have fewer sensory attributes, so adding a picture could have an especially large effect on olfactory imagery and evaluation. In Study 4, 399 respondents were randomly assigned to one of 2 (service type: utilitarian, hedonic) * 2 (picture: present, absent) between-participant conditions. Participants saw a laundry service ad, with service type manipulated through typeface and textual content to be more utilitarian or hedonic, while a picture of lavender was present or absent from the ad. A 2 (service type) * 2 (picture) ANOVA on product attitudes indicated a marginally significant interaction, $F(1, 394)=2.11, p=.053$. The picture of

lavender improved attitudes for a utilitarian ad, $t(200)=2.35, p<.05$, but not for a hedonic ad ($p>.72$). A moderated-mediation analysis showed that the conditional indirect effect of the picture on attitude was significant (CI=.11 to .29) for the utilitarian ad, but not for the hedonic ad (CI=-.01 to .12).

These studies show that pictures of pleasant scented objects can improve evaluations via generation of olfactory imagery (a *visual-olfactory effect*). Our research extends the multisensory theory of evaluations to imagined scents. This research is the first to demonstrate in consumer research that pictures can implicitly generate olfactory imagery. It is also one of the few studies (e.g., Krishna et al. 2014) establishing positive impacts of pleasant olfactory imagery. Another important contribution of the paper is to establish that olfactory imagery is a controlled process. This effect is activated only when the product is scent-relevant, which strikes a conversation with the scent-congruence literature (Spangenberg et al. 2006). Similarly, we show that the visual-olfactory effect occurs only for utilitarian products.

I Smell it as if it Were Here: Can Scented Advertising Boost Product Appeal?

EXTENDED ABSTRACT

Drawing on the literature on magical contagion and essence transfer (Argo, Dahl, and Morales 2008; Nemeroff and Rozin 1994) we propose that scented advertising copy can boost the advertised product's appeal. More specifically, we suggest that it does so because scents are able to capture and convey essential qualitative information (Yeshurun and Sobel 2010) or even the very essence of their source (Meir 2005) and thus, serve as a cue for object proximity. Scent molecules are part of the scent emitting object itself (Köster 2002) and they can represent the object in its absence (Nemeroff and Rozin 1994). The ability of scent to traverse immediate experiences could also explain why, from early childhood onwards, certain scents are used for regulating distances to desired people or objects when they are physically absent (Shoup, Streeter, and McBurney 2008). For example, toddlers simulate the presence of the parent by smelling their favorite toy or comfort blanket when staying at a daycare facility (Schaal 1988). Likewise, sniffing at an unwashed partner's t-shirt enables adults to enhance felt proximity to an absent partner (Shoup et al. 2008). Given that print ads represent physically absent products, we propose that scent behaves similarly in the context of advertising – transfers the essence of the product and, thus, brings about the feeling of its proximity. Notably, as generally liked targets become even more appealing if they are proximate (Kahn and McGaughey 1977; Williams et al. 2014) we further posit that the scent elicited sense of proximity in turn enhances the appeal of the advertised product.

In three experiments, we test perceived proximity as a mechanism through which scented ads may affect advertised product appeal. In addition, we highlight the moderating effect of product category. Specifically, we show that a scented ad enhances proximity and appeal only if it credibly represents the essence of the advertised product. Moreover, we rule out imagery (Lwin, Morrin, and Krishna 2010) as an alternative process account.

In study 1, we tested the hypotheses and explored their robustness across different scent presentation strategies. Participants were randomly exposed to either a lavender scented or unscented soap print advertisement. Additionally, participants who received scented ads were either alerted about the scent on the ad (explicit scent presentation) or not (implicit presentation). All participants reported perceived proximity to (feels close/here), attractiveness

of and purchase intentions for the advertised soap (7-point scales). The results revealed a main effect of scent on perceived proximity ($F(2,114) = 8.38, p < .05$). Scented ads yielded higher perceived proximity ratings than control ads, regardless of scent presentation strategy. As predicted, scent elicited product proximity and in turn increased product attractiveness and purchase intentions (SPSS PROCESS, model 4, 95% CI's excluded zero).

Study 2 investigated product category moderation for the previously observed effect. We predicted that scenting an ad should only work if the scent can be considered part of the product. Additionally, we aimed to demonstrate robustness of the effect using different products and scents than in Study 1. Prior literature shows that scents facilitate vivid processing of information (Lwin et al. 2010) and that vivid product imagery leads to favorable product reactions (Kisielius and Sternthal 1986). Therefore, study 2 also addressed product imagery vividness as an alternative process. Participants were randomly assigned to an ad featuring a glass that was either framed as a drinking glass (scent unexpected) or as a glass containing an aroma-candle (scent expected). The ad was either unscented or had a vanilla scent. Using the same measures as in the previous studies, we find the predicted interaction. Scent increased the perceived product proximity ($F(1, 177) = 4.88, p < .05$) only when advertising a candle but not a glass. A moderated mediation analysis (SPSS PROCESS, model 7) confirmed the scent induced proximity mediation on increased product attractiveness and purchase intentions, but only for the product with scent expectations (candle) (95% CI's excluded zero). We further explored the role of mental imagery (assessed with mental imagery scale, Babin and Burns 1998) in driving product appeal in response to scented ads. However, we neither observed a main effect of scent nor an interaction with the product category (p 's $> .20$). A moderated mediation (model 7) test confirmed the limited role of mental imagery in driving product appeal when using scented ads, regardless of the advertised product (all 95% CI's included 0).

Even if we typically associate a product with a scent this does not mean that we consider its scent very important. Therefore, study 3 investigated whether the effect of scent on advertised product proximity could generalize across products that generally enjoy high scent expectations, but differ in how important scent is for a product. Study participants were exposed to a scented or unscented soap ad as in study 1. To manipulate importance of scent for a product, we additionally framed the soap as either moisturizing (less important) or aromatherapy (more important). Additionally to the measures used in studies 1 and 2, we assessed willingness to pay a price premium for the advertised soap. The results revealed only a main effect of scent ($F(1,182) = 14.10, p < .001$), signaling the effectiveness of scented ads in boosting product proximity regardless of soap type. A moderated mediation test (model 7) corroborated these findings and showed no evidence for moderation by soap type. Yet as predicted, scented advertising through elicited product proximity increased promoted soap attractiveness, its purchase intentions and the willingness to pay a price premium for it (95% CI's excluded zero).

Taken together, the studies show that scent can enhance consumer responses to the advertised product because it is able to transfer the essence of the product and thus, acts as its proximity cue. However, the hypothesized process only works for products whose essence could be credibly represented using scent, that is, products that are expected to have embedded scent. These results add to the literatures on multisensory marketing and proximal product experiences.

Follow Your Nose When it Sounds Right: How Brand Names Moderate the Influence of Olfactory Cues on Consumer Preferences

EXTENDED ABSTRACT

Product scents can be powerful differentiation tools for marketers, and academic research suggests olfactory cues can profoundly influence consumer memory and evaluations (e.g., Krishna, Lwin, and Morrin 2010). However, while the influence of product scent on consumer behavior has been examined, it has mostly been assessed in isolation, without investigating how other product-based cues may moderate its influence.

We begin to address this gap by examining how brand names might shape consumer responses to a product's olfactory properties. This examination is practically relevant, given that consumers typically see a product's brand (e.g., on packaging) before being exposed to its scent. However, this exploration is also theoretically motivated by the phonetic symbolism and olfactory processing literatures. Consumer research in phonetic symbolism suggests that the phonetic properties of a brand name can influence consumer perceptions (e.g., Klink 2000; Lerman and Garbarino, 2002; Lowrey, Shrum, and Dubitsky 2003). For non-word brand names, even the smallest unit of sound can evoke specific meaning. For example, front (back) vowels, such as the English sound "ee" ("o") are associated with lightness (heaviness) and softness (hardness; Klink 2000). Accordingly, certain brand names may be more or less congruent with particular product categories, and such congruity may influence consumer preferences (Lowrey and Shrum 2007). For instance, if lightness is typical in a category (e.g., tissues), a front vowel (e.g., the brand name "Deetal") would be category-congruent while a back vowel (e.g., "Dutal") would be category-incongruent.

Importantly, phonetic congruity (versus incongruity) not only affects product perceptions, but can also prompt more fluent (versus disfluent) processing (Topolinski and Strack 2010). The facilitation of fluent processing is critical to the current research, given that sensory cues in general (Stephenson and Palmgreen 2001) and olfactory cues in particular (DeBono 1992) tend to be processed in a peripheral, heuristic manner. Accordingly, a product's brand name should act as a germane antecedent determining the extent to which consumers rely on subsequent olfactory information when making product-based judgments and choices. Specifically, we propose that category-congruent brand names will encourage more fluent processing and facilitate consumer reliance on a product's olfactory cues, whereas category-incongruent brand names will generate disfluency, leading consumers to discount subsequent olfactory information.

Study 1 (N=191) was a field experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Unscented vs. Pleasant Scent) between-subjects design. Experimenters set up a table in a public space and offered passerby \$5 to sample a lip balm. The lip balm was either unscented or vanilla-scented (a pretest suggested vanilla was a desirable scent for this product category), and was packaged with a brand name pretested as being either congruent ("Frosh") or incongruent ("Frish") with the lip balm category. After trying the lip balm, participants were told they could either "purchase" it for \$1 of their compensation, or relinquish it and receive full compensation. Logistic regression results revealed a significant interaction of Brand Name x Scent on purchase likelihood ($\chi^2=5.41, p=.02$, Odds ratio=5.83). Specifically, when the brand name was category-congruent, participants were significantly more likely to purchase the vanilla (versus unscented) lip balm (52% vanilla vs. 8% unscented; $\chi^2=17.62, p<.001$, Odds ratio=.08). However, when the brand name was category-incongruent, there was no significant difference in

purchase likelihood between the two scent conditions (36% vanilla vs. 21% unscented; $\chi^2=2.50$, $p>.1$, Odds ratio=.48).

Study 2 (N=140) was a laboratory experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Congruent vs. Incongruent) between-subjects design. Participants sampled a hand lotion that had either a category-congruent (lavender) or category-incongruent (pine) scent (previous research suggests category-congruent olfactory cues are preferred, e.g., Krishna, Lwin, and Morrin, 2010), and was packaged with a brand name that was pretested as being either category-congruent (“Sait”) or category-incongruent (“Soot”). After sampling the product, participants were given the option to either keep the product, or choose an alternative lotion to take home with them. Results confirmed a significant interaction of Brand Name x Scent on Product Choice ($\chi^2=3.95$, $p<.05$, Odds ratio=11.66), and the pattern of contrasts mirrored those of study 1: when the brand name was category-congruent, participants chose the lavender (versus pine) lotion more often (23% lavender vs. 5% pine; $\chi^2=4.05$, $p<.05$, Odds ratio=.18). However, when the brand name category-incongruent, there was no significant difference in choice likelihood between the two scent conditions (6% lavender vs. 11% pine; $\chi^2=.70$, $p>.1$, Odds ratio=2.13).

Our final study (N=121) was a laboratory experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Pleasant vs. Unpleasant) between-subjects design. The objective was to investigate the underlying mechanism and test whether an incongruent brand name might attenuate negative effects of mildly aversive product scents. Participants sampled a hand sanitizer that had either a pleasant (orange) or unpleasant (musty pine) scent (according to pretest results), and was packaged with pretested category-congruent (“Gimmel”) or category-incongruent (“Gommel”) brand names. After sampling the product, participants evaluated it on a series of bipolar dimensions (e.g., good-bad), and their evaluation time was measured as a proxy for processing fluency (Schwarz 2004). Results confirmed a significant Brand Name x Scent interaction on Product Evaluation ($F(117)=4.68$, $p<.05$). When the brand name was category-congruent, participants evaluated the orange (versus musty pine) sanitizer more highly. However, when the brand name was category-incongruent, there was no significant difference in evaluation between scent conditions. Further, a moderated mediation analysis (Model 8 of Hayes 2013) confirmed that when the brand name was congruent, processing fluency explained the effects of scent on evaluation (95% CI=-.37, -.01), but this was not the case when the brand name was category-incongruent (95% CI=-.02, .23).

Our research suggests that brand names can play a pivotal role in determining the influence of olfactory cues on consumers’ judgements and behaviors, and this has important managerial implications. For instance, when scent is an important selling point in a product (e.g., candles), category-congruent brand names may enhance consumer valuation of the scent. However, for products with inherently bad scent (e.g., nail polish, blue cheese), marketers may benefit from category-incongruent brand names, so that the influence of unpleasant olfactory cues on consumer responses is attenuated.

The Effects of Warm versus Cool Ambient Scents on Calorie Consumption

EXTENDED ABSTRACT

Can the temperature dimension of ambient scent influence total calories consumed? That is, can warm versus cool ambient scents (Krishna, Elder, and Caldara 2010; Madzharov, Block, and Morrin 2015) impact how much food a consumer eats? The results

of four studies show that warm (e.g., cedarwood) versus cool (e.g., eucalyptus) ambient scents influence the amount of food consumed and even choices between high versus low-calorie food options. Overall, we examine the sensory cross-modal influences of olfactory cues on haptic perceptions, which in turn influence gustatory factors

The human physiological system attempts to maintain an optimal core body temperature (at ~98°F). Research within physiology shows when ambient temperature becomes colder, the body evokes thermal regulation by increasing activities that will generate heat (e.g., shivering). As a result, there is greater energy expenditure and an increase in appetite to counteract the loss of stored calories (Moellering and Smith 2012; Warwick and Busby 1990; Westerterp-Plantenga et al. 2002). As a corollary, an increase in ambient temperature leads to loss of appetite due to reduced desire for activity (Herman 1993; Murray 1987).

Very little research has examined a temperature dimension of scent, with the two notable exceptions being Krishna, Elder, and Caldara (2010) and Madzharov, Block, and Morrin (2015); however, neither of which these studies examine the effects of warm/cool scents within a food context. We build on these two studies to develop our conceptual framework. From an evolutionary/historical perspective, scents associated with fire (e.g., sandalwood, cinnamon) came to be associated as warm scents and subsequently used during winter, while scents associated with watery properties (e.g., eucalyptus, peppermint), became associated as being cool scents and subsequently used for their cooling properties (Zarzo 2013).

Building on the physiological effects of ambient temperature and the emerging literature on the temperature dimension of scent, we hypothesize that ambient scents that induce warmer (vs. cooler) temperatures will lead to decreased calorie consumption and reduced choice likelihood of calorific foods. We test our hypotheses with the help of a field experiment and a series of lab studies.

Study 1a, a field experiment at an optometrist’s office, had two manipulated conditions (ambient scent: warm vs. cool). For the experimental manipulations, two commercial grade scent nebulizers were placed at the opposite ends of the retail store, which also functioned as the waiting area for patients. A glass bowl with individually wrapped chocolates was placed on the reception desk where all customers were required to sign in. There was a main effect of ambient scent on calories consumed ($M_{\text{warm}} = 29.55$ vs. $M_{\text{cool}} = 54.87$; $F(1, 2) = 47.09$, $p < .05$) supporting our primary hypothesis.

Study 1b replicated the findings of study 1a in a controlled laboratory environment with a mindless eating task. Consistent with the results of study 1a, participants in the warm (vs. cool) ambient scent condition consumed a lower amount of calories from the bite-sized breakfast biscuits ($M_{\text{warm}} = 53.21$ vs. $M_{\text{cool}} = 101.0$; $F(1, 51) = 10.31$, $p < .01$). The results replicate the main effects of study 1a in a controlled lab setting. Next, study 2 examines the extension of the effect of scent on choice and the underlying process.

Study 2 investigated the effect of ambient scent on food choice and the underlying process of perceived ambient temperature. Participants were given the choice of a low versus high calorie choice and asked to rate the temperature in the room as cold versus warm. We found those in the warm scent chose the low calorie item significantly more than those in the cold scent (Wald = 3.37, $p = .066$; $P_{\text{warm}} = 78\%$ vs. $P_{\text{cold}} = 56\%$). Mediation tests showed that the total indirect effect of a temperature dimension of ambient scent through the mediator, perceived ambient temperature, on food choice had a bootstrap 90% CI of .0168 to .7169 with an estimate of .8612, supporting mediation.

Study 3 examined the effects of warm/cool ambient scents on consumption of food versus beverages. We propose that the

effects will be in opposite directions for foods versus non-alcoholic beverages. This is because in hot environments additional beverage consumption cools the body and hence an increased ambient temperature is associated with a higher amount of beverage consumption (Wansink 2004). Participants were told in appreciation for their participation in the lab, they were provided with either a snack or a beverage. Results revealed a significant interaction effect of ambient scent and food/beverage on consumption volume ($F(1, 93) = 13.07, p < .001$). Follow-up analysis showed that in the “food” conditions, participants in the cool ambient scent consumed more ($M_{cool} = 50.2\%$) than those in the warm ambient scent ($M_{warm} = 20.54\%$; $F(1, 93) = 13.03, p < .001$). In the “beverage” condition those in the warm ambient scent drank more ($M_{warm} = 28\%$) than those in the cool ambient scent ($M_{cool} = 15.77\%$). The results indicate a reversal in consumption volume for food vs. beverage due to the temperature dimension of scent

The results of four studies showed that a warm (vs. cool) ambient scent leads to a reduced amount of food consumption both in field settings as well as in laboratory environments. The findings of this research contribute to our understanding of cross-modal influences involving olfactory cues, haptic perceptions, and gustatory outcomes. Specifically, while ambient scent is an olfactory cue, perceived warmth/coolness is a haptic perception, and food consumption is related to gustatory factors. This is possibly the first research to link olfactory cues to haptic perceptions and with outcomes for gustatory factors. Hence, the findings of this research contribute to the growing literature in the domain of sensory marketing (Krishna 2012).

Our findings have important conceptual and practical implications, especially given widespread concerns about obesity and the related focus on food overconsumption. Moreover, given the ease with which different types of ambient scents can be administered, consumers and marketers can potentially use the findings of this research to nudge healthful consumption.

REFERENCES

- Argo, Jennifer, Darren Dahl, and Andrea Morales (2008), “Positive Consumer Contagion: Responses to Attractive Others in a Retail Context,” *Journal of Marketing Research*, 45 (December), 690-701.
- Babin, Laurie A., and Alvin C. Burns (1998), “A Modified Scale for the Measurement of Communication-Evoked Mental Imagery,” *Psychology & Marketing*, 15 (May), 261-78.
- Bensafi, Moustafa, Noam Sobel, and Rehan M. Khan (2007), “Hedonic-specific activity in piriform cortex during odor imagery mimics that during odor perception,” *Journal of Neurophysiology*, 98 (December), 3254-3262.
- Bosmans, Anick (2006), “Scents and sensibility: When do (in) congruent ambient scents influence product evaluations?” *Journal of Marketing*, 70 (July), 32-43.
- Cirrincone, Armando, Zachary Estes, and Antonella Carù (2014), “The effect of ambient scent on the experience of art: Not as good as it smells,” *Psychology & Marketing*, 31 (August), 615-627.
- DeBono, K. G. (1992), “Pleasant Scents and Persuasion: An Information Processing Approach,” *Journal of Applied Social Psychology*, 22 (June), 910-919.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis*, New York, NY: Guilford.
- Herman, P. Chris (1993), “Affect of Heat on Appetite in Nutritional,” in *Nutritional Needs in Hot Environments*, ed. Bernadette M. Marriott, Washington, D.C.: National Academies Press.
- Jadauji, Jahan B., Jelena Djordjevic, Johan N. Lundström, and Christopher C. Pack (2012), “Modulation of olfactory perception by visual cortex stimulation,” *Journal of Neuroscience*, 32 (February), 3095-3100.
- Kemps, Eva, Marika Tiggemann, Davinia Woods, and Belinda Soekov (2004), “Reduction of food cravings through concurrent visuospatial processing,” *International Journal of Eating Disorders*, 36 (July), 31-40.
- Kisielius, Jolita, and Brian Sternthal (1986), “Examining the Vividness Controversy: An Availability-Valence Interpretation,” *Journal of Consumer Research*, 12 (March), 418-31.
- Klink, Richard R. (2000), “Creating Brand Names with Meaning: The Use of Sound Symbolism,” *Marketing Letters*, 11 (February), 5-20.
- Krishna, Aradhna (2012), “An Integrative Review of Sensory Marketing: Engaging the Senses to Affect Perception, Judgment and Behavior,” *Journal of Consumer Psychology*, 22 (July), 332-51.
- Krishna, Aradhna, Maureen Morrin, and Eda Sayin (2014), “Smellizing cookies and salivating: A focus on olfactory imagery,” *Journal of Consumer Research*, 41 (June), 18-34.
- Krishna, Aradhna, Ryan S. Elder, and Cindy Caldara (2010), “Feminine to Smell but Masculine to Touch? Multisensory Congruence and Its Effects on the Aesthetic Experience,” *Journal of Consumer Psychology*, 20 (October), 410-18.
- Krishna, Aradhna, Lwin, May, and Maureen Morrin (2010), “Product Scent and Memory,” *Journal of Consumer Research*, 37 (June), 57-67.
- Lerman, Dawn, and Ellen Garbarino (2002), “Recall and recognition of brand names: A comparison of word and nonword name types,” *Psychology & Marketing*, 19 (July-August), 621-639.
- Lowrey, Tina M. and L.J. Shrum (2007), “Phonetic symbolism and brand name preference,” *Journal of Consumer Research*, 34 (October), 406-414.
- Lowrey, Tina M., L. J. Shrum, and Tony M. Dubitsky (2003), “The relation between brand-name linguistic characteristics and brand-name memory,” *Journal of Advertising*, 32 (April), 7-17.
- Lwin, May O., Maureen Morrin, and Aradhna Krishna (2010), “Exploring the Superadditive Effects of Scent and Pictures on Verbal Recall: An Extension of Dual Coding Theory,” *Journal of Consumer Psychology*, 20 (July), 317-26.
- Madzharov, Adriana, Lauren Block, and Maureen Morrin (2015), “The Cool Scent of Power: Effects of Ambient Scent on Consumer Preferences and Choice Behavior,” *Journal of Marketing*, 79 (January), 83-96.
- Meir, Asher (2005), *Meaning in Mitzvot*, Jerusalem: Achy.
- Morrin, Maureen (2009), “Scent marketing an overview,” in *Sensory Marketing: Research on the Sensuality of Products*, ed. A. Krishna, New York: Routledge, 75-86.
- Murray, Micah M., John J. Foxe, and Glenn R. Wylie (2005), “The brain uses single-trial multisensory memories to discriminate without awareness,” *Neuroimage*, 27 (August), 473-478.
- Murray, Ross (1987), “The Effects of Consuming Carbohydrate-Electrolyte Beverages on Gastric Emptying and Fluid Absorption During the Following Exercise,” *Sports Medicine*, 4 (September), 322-51.
- Nemeroff, Carol, and Paul Rozin (1994), “The Contagion Concept in Adult Thinking in the United States: Transmission of Germs and of Interpersonal Influence,” *Ethos*, 22 (June), 158-86.

- Schaal, Benoist (1988), "Olfaction in Infants and Children: Developmental and Functional Perspectives," *Chemical Senses*, 13 (June), 145-90.
- Schwarz, Norbert (2004), "Metacognitive Experiences in Consumer Judgment and Decision Making," *Journal of Consumer Psychology*, 14 (October), 332-348.
- Shoup, Melanie L., Sybil A. Streeter, and Donald H. McBurney (2008), "Olfactory Comfort and Attachment within Relationships," *Journal of Applied Social Psychology*, 38 (December), 2954-63.
- Simmons, W. Kyle, Alex Martin, and Lawrence W. Barsalou (2005), "Pictures of appetizing foods activate gustatory cortices for taste and reward," *Cerebral Cortex*, 15 (October), 1602-1608.
- Spangenberg, Eric R., Ayn E. Crowley, and Pamela W. Henderson (1996), "Improving the store environment: do olfactory cues affect evaluations and behaviors?" *Journal of Marketing*, 60 (April), 67-80.
- Stephenson, M., & Palmgreen, P. (2001), "Sensation seeking, perceived message sensation value, personal involvement, and processing of anti-marijuana PSAs," *Communication Monographs*, 68 (October), 49-71.
- Stevenson, Richard J., and Trevor I. Case (2005), "Olfactory imagery: a review," *Psychonomic Bulletin & Review*, 12 (April), 244-264.
- Topolinski, S., & Strack, F. (2010), "False Fame Prevented: Avoiding Fluency Effects Without Judgmental Correction," *Journal of Personality and Social Psychology*, 98 (May), 721 - 733.
- Voss, Kevin E., Eric R. Spangenberg, and Bianca Grohmann (2003), "Measuring the hedonic and utilitarian dimensions of consumer attitude," *Journal of Marketing Research*, 40 (August), 310-320.
- Wansink, Brian (2004), "Environmental Factors that Increase the Food Intake and Consumption Volume of Unknowing Consumers," *Annual Review of Nutrition*, 24, 455-79.
- Yeshurun, Yaara, and Noam Sobel (2010), "An Odor Is Not Worth a Thousand Words: From Multidimensional Odors to Unidimensional Odor Objects," *Annual Review of Psychology*, 61, 219-41.
- Zarzo, Manuel (2013), "What is a Fresh Scent in Perfumery? Perceptual Freshness is Correlated with Substantivity," *Sensors*, 13 (January), 463-83.

Choosing How to Choose: New Perspectives on Information Avoidance and Disclosure for Consumer Decision Making

Chairs: Kaitlin Woolley, Cornell University, USA

Jane L. Risen, University of Chicago, USA

Paper #1: Delegating Decisions: Recruiting Others to Make Choices We Might Regret

Mary Steffel, Northeastern University, USA

Elanor F. Williams, Indiana University, USA

Paper #2: Avoiding Information to Protect a Strong Intuitive Preference

Kaitlin Woolley, University of Chicago, USA

Jane L. Risen, University of Chicago, USA

Paper #3: Disclosure and the Dog That Didn't Bark: Consumers Are Too Forgiving of Missing Information

Sunita Sah, Cornell University, USA

Daniel Read, University of Warwick, UK

Krishna Savani, Nanyang Technological University, Singapore

Paper #4: Graphic Warning Labels Curb Purchasing of Sugar-Sweetened Beverages

Grant E. Donnelly, Harvard University, USA

Laura Y. Zatz, Harvard University, USA

Daniel A. Svirsky, Harvard University, USA

Leslie K. John, Harvard University, USA

SESSION OVERVIEW

Consumers engage in various strategies when facing difficult decisions, many of which can operate against their goals or interests. At times, for example, consumers delay the decision or avoid making a decision at all (Luce 1998; Luce, Payne, and Bettman 1999). Other times, they make uninformed decisions even when receiving relevant information would be costless (Ehrich and Irwin 2005; Golman, Hagmann, and Loewenstein 2017; Thunström et al. 2016; Wansink and Chandon 2005). And even when information is automatically provided, people may not incorporate it into their decisions (Downs, Wisdom, Wansink, and Loewenstein 2013). This previous research raises important questions pertaining to consumer decision making and the role of information in consumer choice. This special session provides new perspectives on this topic, connecting four papers that explore novel strategies consumers use when making difficult decisions, and identifying how information – whether it is present or absent – influences consumer choice.

The first two papers focus on strategies consumers use when faced with a hard choice. Steffel and Williams identify decision delegation as a novel way that people cope with anticipated regret when choices feel difficult. Nine experiments demonstrate that people prefer to delegate difficult decisions to others, regardless of the decision's importance or the potential surrogate's expertise. In the second paper, Woolley and Risen investigate information avoidance as an outcome of choice difficulty. Five experiments identify intuitive-deliberative conflict as a driver of information avoidance. Although consumers avoid information to protect an intuitive preference, they use the information when it is provided, suggesting consumers make a mistake either in avoiding information they use, or using information they would prefer to avoid.

The last two papers further explore how information influences consumers' decisions, specifically in the health domain. Sah, Read, and Savani examine the fallout when doctors fail to disclose negative information about their trustworthiness and conflicts of interest.

Rather than make negative inferences about these doctors, patients rate these doctors more positively than they would have otherwise, and are just as likely to select doctors with missing information to care for them as doctors with available, positive information. Finally, in a large-scale field experiment, Donnelly, Zatz, Svirsky, and John examine the influence of warning labels on the consumption of sugar-sweetened beverages (SSB). Whereas calorie and text-warning labels were ineffective at reducing the purchase of SSBs, graphic-warning labels successfully reduced SSB purchase from baseline by 14%.

Together these papers connect research on consumer's preferences when making difficult decisions, and the role of information in consumer choice. Further, by identifying the factors that lead consumers to avoid choices or information, and how withholding or providing this information influences decisions, these findings highlight important implications for encouraging consumers to make better decisions. This session should have broad appeal to scholars interested in decision making, choice deferral, disclosure, and information avoidance, as well as the connections between them.

Delegating Decisions: Recruiting Others to Make Choices We Might Regret

EXTENDED ABSTRACT

People generally cherish the freedom to make their own decisions. Even when choosing is costly, people prefer to choose themselves rather than let another person choose for them (Botti and Iyengar 2004; Botti and McGill 2006, 2011; Botti, Orfali, and Iyengar 2009). If the desire to make one's own choices is often so pervasive, when might people prefer to delegate? We suggest that delegation may often be an appealing alternative to choosing oneself because it enables people to avoid responsibility and regret for potentially choosing suboptimally while still enabling them to get something rather than nothing out of a decision. We predict that people are especially likely to delegate when choices feel difficult and the chance of choosing badly is high.

We first examine whether, despite their general preference for making their own choices, people prefer to have others choose on their behalf when choices feel difficult. In Experiment 1, an incentive-compatible design, participants were more likely to delegate a choice of headphones to take home after the experiment when given a difficult choice between two similar sets of earphones than an easy choice between two dissimilar sets of earphones (28% vs. 11%; $\chi^2(1, N = 366) = 16.72, p < .001, \phi = .21$). Experiment 2 found that people delegate difficult decisions regardless of the importance of the decision: participants were more likely to delegate a difficult than an easy decision, both for an important choice that was binding and for which switching was costly (41% vs. 29%; $\chi^2 = (1, N = 406) = 5.55, p = .02, \phi = .12$) and for a less important choice that was nonbinding and where switching was costless (48% vs. 28%; $\chi^2 = (1, N = 409) = 17.62, p < .001, \phi = .21$). And, Experiment 3 found that, although expertise made delegation overall more appealing, people delegated difficult decisions regardless of the expertise of the potential surrogate: participants were more likely to delegate a difficult than an easy decision, both when the surrogate had relevant expertise (79% vs.

57%; $\chi^2 = (1, N = 201) = 11.37, p < .001, \phi = .24$) and when they did not (54% vs. 30%; $\chi^2 = (1, N = 202) = 11.07, p < .001, \phi = .23$).

Experiment 4 tests whether people delegate to avoid the regret associated with being responsible for bringing about that bad outcome or to avoid the disappointment associated with a bad outcome, independent of whether they choose it or not. We manipulated choice difficulty by making the available options in the set either close or distant in appeal, and we manipulated the overall appeal of the choice options by making them all either attractive or unattractive. Participants were more likely to delegate when the difference in relative attractiveness was small and the choice was difficult than when it was large and the choice was easy ($F(1, 819) = 7.00, p = .008, \eta_p^2 = .008$), but equally likely when both options were attractive and when both options were unattractive ($F(1, 819) = .86, p = .36, \eta_p^2 = .001$). A serial mediation model (PROCESS Model 6) indicated that our relative attractiveness manipulation increased difficulty ($\beta = .71, SE = .12, t = 6.15, p < .001$), difficulty increased anticipated regret ($\beta = .29, SE = .03, t = 10.54, p < .001$), and anticipated regret increased delegation ($\beta = .14, SE = .06, t = 2.34, p = .02$).

Experiment 5 explored whether delegation may be preferred to deferral when choices feel difficult, so long as the options are somewhat appealing, because it enables people to avoid responsibility and regret for potentially choosing suboptimally while still enabling them to get something rather than nothing out of the decision. Indeed, when given the option to choose, delegate, or defer, participants were more likely to delegate than choose themselves when given a difficult choice between options that were close in relative attractiveness than when given an easy choice between options that were far in attractiveness (42% vs. 32%; Wald's $\chi^2 = 8.88, p = .003$, Odds Ratio = .48). This was especially true when the options were appealing (44% vs. 27%; Wald's $\chi^2 = 8.88, p = .003$, Odds Ratio = .48) than when they were unappealing (41% vs. 36%; Wald's $\chi^2 = .50, p = .48$, Odds Ratio = .83), but not when the options were both attractive versus when they were both unattractive (38% vs. 36%; Wald's $\chi^2 < .001, p = .99$, Odds Ratio = 1.00). Unsurprisingly, participants were more likely to defer their choice when the options were both unattractive than when they were both attractive (9% vs. 1%; Wald's $\chi^2 = 18.97, p < .001$, Odds Ratio = .11), but was equally common regardless of the relative attractiveness of the options (4% vs. 5%; Wald's $\chi^2 = .49, p = .48$, Odds Ratio = .74).

Finally, Experiment 6 tested whether giving people the option to delegate reduces choice deferral in situations in which people are otherwise prone to leaving empty-handed. We varied set size and salesperson presence and found a significant interaction between set size and salesperson presence on purchases (Wald's $\chi^2 = 8.90, p < .005$). When a salesperson was not present, fewer participants chose to make a purchase when there were many options than when there were few (37% vs. 64%; $\chi^2(1, 63) = 4.22, p < .05$). However, when a salesperson was present, *more* participants made a purchase when there were many options than when there were few (86% vs. 61%; $\chi^2(1, 69) = 5.13, p < .05$).

The present research provides new insight into the preference for choice determination by showing that the anticipated regret associated with being responsible for a bad choice can overwhelm people's general preference for making their own choices. Moreover, our work shows that the social context and the presence of a potential surrogate have a meaningful effect on consumers' choices, including whether or not to choose in the first place.

Avoiding Information to Protect a Strong Intuitive Preference

EXTENDED ABSTRACT

Rationally, more (relevant) information is better. But consumers sometimes choose to remain ignorant. Consumer behavior research largely conceptualizes information avoidance as a means of protecting emotions (Ehrich and Irwin 2005; Zane, Irwin, and Rezek 2015). The current research broadens this view to include the goal of protecting a preference, developing a theory of information avoidance within the context of intuitive-deliberative conflict.

We predict that when consumers have a strong intuitive desire that conflicts with their deliberative reasoning, they will avoid information in order to protect their intuitive preference. That is, if the information could encourage them to make a "rational" decision, they may avoid the information to make it easier and more likely that they will make the intuitive decision instead. Although people with an intuitive preference may also avoid information to minimize unpleasant emotions or challenges to their beliefs, we demonstrate that avoidance is driven in part by the motivation to protect the decision itself.

A pilot study established intuitive-deliberative conflict for the four situations used in the paper. We defined intuitive preferences for participants as "immediate, intuitive, emotionally-charged, gut reactions (e.g., follow your heart)" and contrasted this with deliberative preferences that result from "slow, deliberate, thoughtful, reasoned reflection (e.g., follow your head)" (Sloman 2014; see also System 1 vs. System 2: Kahneman and Frederick 2002; 2005; Milkman, Chugh, and Bazerman 2009; head vs. heart: Shiv and Fedorikhin 1999). Participants indicated their intuitive preference by answering, "Which option would you choose if you were following your heart?" and their deliberative preference by answering "Which option would you choose if you were following your head?" People's intuitive and deliberative preferences diverged in each of the scenarios ($ps < .001$).

Confirming that our scenarios reflect intuitive-deliberative conflicts, we test the prediction that people avoid information when they hold a strong intuitive preference, but use this information when it is provided. Participants in Study 1 imagined being tempted to order dessert even though they are concerned with healthy eating. Before deciding whether to order dessert, they indicated whether they want to know the dessert's nutritional information. A majority of participants (62.7%) choose not to receive calorie information. However, when assigned to receive information (385, 550, of 700 calories), the information influenced their decision to order dessert ($\beta = -.64, SE = .24, p = .007$), both for those who wanted to receive the information and those who wanted to avoid it.

Study 2A examined information avoidance for a decision with real financial consequences. Participants received a choice between working on a fun task that offered no bonus payment and working on a boring task that paid a real bonus. Before deciding which task to work on, participants indicated whether they wanted to know how much the boring task paid. Even though a majority (62.7%) choose to avoid learning the value of the bonus payment, when assigned to receive this information, it influenced their decision ($\beta = -.99, SE = .41, p = .017$). In a follow-up (Study 2B), we find that avoidance is predicted by the strength of participants' intuitive preference. The stronger participants' intuitive preference for the fun task, the more likely they were to avoid the bonus information ($\beta = .23, SE = .07, p = .002$). Again, as in Study 2A, participants were influenced by the information ($\beta = 1.49, SE = .43, p < .001$), even for those who preferred to avoid it.

Across Studies 3-5, participants decide whether to learn how much money they could earn by accepting an intuitively-unappealing investment (earning money if a sympathetic student performs poorly in a class or if a hurricane hits a third-world country). Although intuitively-unappealing, the investments are financially rational because they only have financial upside. If people avoid information to protect their intuitive preference, then avoidance should be more likely when an intuitive preference is especially strong and when information could influence the decision. In Study 3, we find that the strength of the intuitive preference moderates information avoidance. People who could earn money if a student performed poorly in class were more likely to avoid learning how much they would win than those who could earn money if the student performed well (57.8% vs 42.9%; $\chi^2(1, N = 200) = 4.49, p = .034$).

In Study 4A, we test whether information is avoided more when it can influence a decision (i.e., a decision has not yet been made) than when it cannot (i.e., a decision has already been made for participants). Participants imagined choosing a retirement plan. One plan included a "catastrophe bond" which would payout in the event of a hurricane striking a third world country. People were more likely to avoid learning how much this bond paid out when they had to make a decision about which plan to invest in than when they were automatically enrolled in the plan with this bond (58.4% vs. 41.4%; $\chi^2(1, N = 200) = 5.78, p = .016$). In a follow-up (Study 4B), learning the payout of the cat-bond influenced participants to make the financially rational decision (enroll in the plan with the cat-bond).

Study 5 tested this prediction for a consequential decision. Conceptually replicating Study 4A, participants avoided information more when they had a decision to make (i.e., to accept or refuse a bet that a student performs poorly) than if they were automatically assigned to accept the bet (61.2% vs. 43.4%; $\chi^2(1, N = 197) = 6.25, p = .012$).

Overall, we find that consumers avoid information to protect an intuitive preference, and that they are most likely to do so when the information is most valuable to have. When people have a strong intuitive preference that conflicts with a deliberative response, people avoid information that would make it harder for them to follow their intuition. Despite avoiding this information, people incorporate it into their decision when it is provided, suggesting that people may make a mistake, either in avoiding information they would otherwise use, or in using information they would prefer to avoid.

Disclosure and the Dog That Didn't Bark: Consumers Are Too Forgiving of Missing Information

EXTENDED ABSTRACT

According to rational disclosure theory, if there is an information asymmetry between two parties, and if the knowledgeable party can provide their private information credibly, then, unless the information is the worst possible from the perspective of the less knowledgeable party, they will disclose it. Similarly, the less knowledgeable party should interpret any failure to disclose as being due to the missing information being the worst possible. This is the central premise for 'unraveling' theory (Brown, Camerer and Lovallo 2012; Grossman and Hart 1983). We test unraveling theory in five experiments in which (mock) doctors decide how much of their record to disclose, and (mock) patients evaluate those doctors. The information of interest concerns the doctor's trustworthiness and any conflicts of interest he or she has. We find, contrary to standard theory, that (a) doctors almost always withhold even mildly negative information, and (b) patients are relatively unresponsive to that missing information, so that they judge doctors with missing informa-

tion as being fairly average on the missing dimension rather than, as unraveling theory would predict, very poor, and are just as likely to select doctors with missing information to care for them as doctors with good levels of present information. When asked, the doctors largely assume patients will not infer much from missing information, and believe that expressing it will be bad for business. We test whether the responses of patients are due to not noticing the missing information (salience hypothesis) or due to interpreting the missing information in an unduly positive light, even when its absence is noticed (charitability hypothesis). We find evidence for both salience and charitability effects. As the absence of information is made increasingly salient, first by adding empty boxes onscreen where missing information should be, then by indicating the doctor "declined" to provide the information in the box (and so on), patients judge the doctor as increasingly worse, supporting the salience hypothesis. But patient judgments never get close to the "worst possible" suggested by theory, and even when they directly reflect on the missing information and estimate the absent value they rate the doctor as much better than the worst possible on those dimensions. To encourage patients to make more rational inferences from withheld information, we created an intervention in which some patients were asked how likely doctors with high, medium, or low ratings would be to release their information, thus making salient the relationship between the service providers' quality and their likelihood to release versus withhold information. This manipulation brought patients' judgments closer to that predicted by the rational model: Compared to patients in the control condition, those in the intervention condition estimated that a doctor with a missing "patient satisfaction rating" received a lower rating and were less likely to choose that doctor. These findings reveal a different equilibrium for voluntary disclosure than unraveling theory would predict, and show that mandatory disclosure rules are likely to be essential if we wish to ensure consumers make informed decisions. In the absence of mandatory disclosure rules, an intervention that help consumers think more deeply about the lack of missing information can help them make the inferences in line with unraveling theory.

Graphic Warning Labels Curb Purchasing of Sugar-Sweetened Beverages

EXTENDED ABSTRACT

Consumption of sugar-sweetened beverages (SSBs) contributes to obesity (Ludwig, Peterson, and Gortmaker 2001) and has been linked to other health problems including diabetes (Schulze et al. 2004), heart disease (Fung et al. 2009), and dental caries (Heller, Burt, and Eklund 2001). To reduce purchasing and consumption of SSBs, several municipalities and states have proposed warning labels. San Francisco recently passed a policy, although not yet implemented, requiring text-warning labels on SSB advertisements (Wiener, Mar, Cohen and Avalos 2015).

How might warning labels impact SSB purchasing? They aim to educate consumers about the health risks associated with SSBs and increase their salience at the point of beverage selection. Indeed, research shows that text warning labels on tobacco products are associated with increased perception of health risks, motivation to quit, and sustained abstinence (Hammond 2011). However, informing people that their behavior is self-harmful does not always lead to positive change. In order to be effective, health information must be noticed, understood, and incorporated into the decision process while overcoming any cognitive biases or preferences toward unhealthy choices (Downs, Loewenstein, and Wisdom 2009). It is not

clear whether SSB text warning labels meet these criteria in the real world.

Prior research underscores the limits of information provision in inducing healthy behavior change (e.g., past research finds mixed evidence on whether calorie labels reduce purchasing of calories; Downs et al. 2013). Unlike calorie labels, however, text-warning labels *also* convey direct information about potential harm to health—which might increase their potency.

Health information *can* induce behavior change when communicated in a salient and intuitively comprehensible way (Korff et al. 2013). The potency of nutritional information is enhanced when conveyed in a simple red-yellow-green scale (Thorndike et al. 2012), and when calories are expressed in physical activity equivalents (Bleich, Barry, Gary-Webb, and Herring 2014). Such translation is even more compelling when it triggers a visceral response (Loewenstein 1996). Visually evocative cigarette warnings are more likely to be noticed and elicit negative visceral responses, perhaps helping to increase their effectiveness (Terry-McElrath et al. 2005). This suggests an opportunity to improve SSB warning labels.

Given the lack of field studies testing text or graphic SSB warning labels, we conducted a field experiment on the impact of calorie, text warning, and graphic warning labels on SSB purchasing.

The field experiment occurred in a hospital cafeteria in Massachusetts beginning with a two-week baseline to collect beverage sales data. Next, each SSB labeling intervention ran for two weeks, each followed by a two-week washout period when no labels were displayed. The hospital defined SSBs as any beverage with more than 12 grams of sugar per container (excluding milk and 100% juice). Drinks not meeting these criteria were not labeled.

The calorie label followed an FDA regulation and read: “120–290 calories per container. 2,000 calories a day is used for general nutrition advice, but calorie needs vary.” The text warning label used the language that will be implemented in San Francisco: “WARNING: Drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay.” The graphic warning label included the same text but also included images portraying obesity, diabetes, and tooth decay.

Our primary outcome measure was the daily proportion of bottles purchased that were SSBs. For secondary outcomes, we assessed changes in absolute beverage sales, beverage calories sold, and share of drink types.

During the study period an average of 2,617 ($SD = 323.2$) bottled drinks were purchased weekly (NS between weeks), approximately 21% of which were SSBs. During baseline, 21% of purchased drinks were SSBs, statistically indistinguishable from the share during both calorie (21%, $p = 0.99$) and text warning label (21%, $p = 0.94$) treatments. However, during the graphic warning labels treatment, the share of SSBs purchased decreased to 18%—a 14 percent reduction relative to baseline ($p < .01$). It was also significantly lower relative to both the calorie ($p < 0.01$) and text warning labels ($p < .01$). With the graphic warning label, the average calories per drink purchased dropped from 87 in baseline to 74 ($p < 0.001$). The substitution analysis indicated that during the graphic warning treatment, the proportion of water drinks purchased rose from 24% to 28% ($p < .01$), while the tendency to buy other drink types went unchanged. Therefore, it seems that graphic warning labels caused some consumers to buy water drinks in lieu of SSBs.

Our findings suggest that graphic warning labels reduce SSB purchasing, whereas calorie and text warning labels do not, and we find that this reduction is accompanied by a shift towards water drinks. We also find that SSB purchasing rebounded to baseline after

the graphic warnings were removed, which suggests the need for continued and salient exposure.

These findings suggest that evocative and visceral health warnings are much more effective at encouraging behavior change than messaging that appeals to intellect by providing information.

REFERENCES

- Bleich, Sara N., Colleen L. Barry, Tiffany L. Gary-Webb, and Bradley J. Herring (2014), “Reducing Sugar-Sweetened Beverage Consumption by Providing Caloric Information: How Black Adolescents Alter Their Purchases and Whether the Effects Persist,” *American Journal of Public Health*, 104 (12), 2417-24.
- Botti, Simona, and Sheena S. Iyengar (2004), “The Psychological Pleasure and Pain of Choosing: When People Prefer Choosing at the Cost of Subsequent Outcome Satisfaction,” *Journal of Personality and Social Psychology*, 87 (3), 312-26.
- , and Ann L. McGill (2006), “When Choosing Is Not Deciding: The Effect of Perceived Responsibility on Satisfaction,” *Journal of Consumer Research*, 33 (2), 211-9.
- , and ——— (2011), “The Locus of Choice: Personal Causality and Satisfaction with Hedonic and Utilitarian Decisions,” *Journal of Consumer Research*, 37 (6), 1065-78.
- , Kristina Orfali, and Sheena S. Iyengar (2009), “Tragic Choices: Autonomy and Emotional Responses to Medical Decisions,” *Journal of Consumer Research*, 36 (3), 337-52.
- Brown, Alexander L., Colin F. Camerer, and Dan Lovallo (2012), “To Review or Not to Review? Limited Strategic Thinking at the Movie Box Office,” *American Economic Journal: Microeconomics*, 4 (2), 1–26.
- Downs, Julie S., George Loewenstein, and Jessica Wisdom (2009), “Strategies for Promoting Healthier Food Choices,” *The American Economic Review*, 99 (1), 159-64.
- , Jessica Wisdom, Brian Wansink, and George Loewenstein (2013), “Supplementing Menu Labeling with Calorie Recommendations to Test for Facilitation Effects,” *American Journal of Public Health*, 103 (9), 1604-9.
- Ehrich, Kristine R. and Julie R. Irwin (2005), “Willful Ignorance in the Request for Product Attribute Information,” *Journal of Marketing Research*, 42 (3), 266-77.
- Fung, Teresa T., Vasanti Malik, Kathryn M. Rexrode, JoAnn E. Manson, Walter C. Willett, and Frank B. Hu (2009), “Sweetened Beverage Consumption and Risk of Coronary Heart Disease in Women,” *American Journal of Clinical Nutrition*, 89 (4), 1037-42.
- Golman, Russell, David Hagmann, and George Loewenstein (2017), “Information Avoidance,” *Journal of Economic Literature*.
- Grossman, Sanford J., and Oliver D. Hart (1983), “An Analysis of the Principal-Agent Problem,” *Econometrica*, 51 (1), 7-45.
- Hammond, David (2011), “Health Warning Messages on Tobacco Products: A Review,” *Tobacco Control*, tc-2010.
- Heller, Keith E., Brian A. Burt, and Stephen A. Eklund (2001), “Sugared Soda Consumption and Dental Caries in the United States,” *Journal of Dental Research*, 80 (10), 1949-53.
- Kahneman, Daniel, and Shane Frederick (2002), “Representativeness Revisited: Attribute Substitution in Intuitive Judgment,” in *Heuristics and Biases: The Psychology of Intuitive Judgment*, Thomas Gilovich, Dale Griffin, and Daniel Kahneman, eds. New York: Cambridge University Press, 49-81.

- , and ——— (2005), "A Model of Heuristic Judgment," in *The Cambridge Handbook of Thinking and Reasoning*, Keith J. Holyoak and Robert G. Morrison, eds. Cambridge, MA: Cambridge University Press, 267-93.
- Korfage, Ida J., Andrea Fuhrel-Forbis, Peter A. Ubel, Brian J. Zikmund-Fisher, Sarah M. Greene, Jennifer B. McClure, Dylan M. Smith, Sharon Hensley Alford, and Angela Fagerlin (2013), "Informed Choice about Breast Cancer Prevention: Randomized Controlled Trial of an Online Decision Aid Intervention," *Breast Cancer Research*, 15 (5), R47.
- Loewenstein, George (1996), "Out of Control: Visceral Influences on Behavior," *Organizational Behavior and Human Decision Processes*, 65 (3), 272-92.
- Luce, Mary Frances (1998), "Choosing to Avoid: Coping with Negatively Emotion-Laden Consumer Decisions," *Journal of Consumer Research*, 24 (4), 409-33.
- , John W. Payne, and James R. Bettman (1999), "Coping with Unfavorable Attribute Values in Choice," *Organizational Behavior and Human Decision Processes*, 81 (2), 274-99.
- Ludwig, David S., Karen E. Peterson, and Steven L. Gortmaker (2001), "Relation between Consumption of Sugar-Sweetened Drinks and Childhood Obesity: A Prospective, Observational Analysis," *The Lancet*, 357 (9255), 505-8.
- Milkman, Katherine L., Dolly Chugh, and Max H. Bazerman (2009), "How Can Decision Making Be Improved?" *Perspectives on Psychological Science*, 4 (4), 379-83.
- Schulze, Matthias B., JoAnn E. Manson, David S. Ludwig, Graham A. Colditz, Meir J.
- Stampfer, Walter C. Willett, and Frank B. Hu (2004), "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women," *Jama*, 292 (8), 927-34.
- Shiv, Baba, and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 26 (3), 278-92.
- Slooman, Steven A. (2014), "Two Systems of Reasoning, an Update," in *Dual Process Theories of the Social Mind*, Jeffrey W. Sherman, Bertram Gawronski, and Yaacov Trope, eds. Guilford Press, 69-79.
- Terry-McElrath, Yvonne, Melanie Wakefield, Erin Ruel, George I. Balach, Sherry Emery, Glen Szczypka, Katherine Clegg-Smith, and Brian Flay (2005), "The Effect of Antismoking Advertisement Executional Characteristics on Youth Comprehension, Appraisal, Recall, and Engagement," *Journal of Health Communication*, 10 (2), 127-43.
- Thorndike, Anne N., Lillian Sonnenberg, Jason Riis, Susan Barraclough, and Douglas E. Levy (2012), "A 2-Phase Labeling and Choice Architecture Intervention to Improve Healthy Food and Beverage Choices," *American Journal of Public Health*, 102 (3), 527-33.
- Thunström, Linda, Jonas Nordström, Jason F. Shogren, Mariah Ehmke, and Klaas van't Veld (2016), "Strategic Self-Ignorance," *Journal of Risk and Uncertainty*, 52 (2), 117-136.
- Wansink, Brian, and Pierre Chandon (2006), "Can 'Low-Fat' Nutrition Labels Lead to Obesity?" *Journal of Marketing Research*, 43 (4), 605-17.
- Weiner, Scott, Eric Mar, Malia Cohen, and John Avalos (2015), "Sugar-Sweetened Beverage Warning for Advertisements," in *Francisco CaCoS*, ed. 100-15.
- Zane, Daniel M., Julie R. Irwin, and Rebecca Walker Reczek (2015), "Do Less Ethical Consumers Denigrate More Ethical Consumers? The Effect of Willful Ignorance on Judgments of Others," *Journal of Consumer Psychology*, 26 (3), 337-49.

The Interplay between Power and Lay Theories in Influencing Consumer Behavior

Chairs: Alison Jing Xu, University of Minnesota, USA

Sharon Shavitt, University of Illinois, USA

Paper #1: Too Nice to Be Dominant: How Warmth Impacts an Embodiment of Power in Brands

Jennifer L. Stoner, University of North Dakota, USA

Carlos J. Torelli, University of Illinois, USA

Paper #2: Turning a Blind Eye: When Views of Power Differentials Increase Deal Attractiveness

Michael J. Barone, University of Louisville, USA

Xingbo Li, University of Louisville, USA

Keith B. Lyle, University of Louisville, USA

Karen P. Winterich, Pennsylvania State University, USA

Paper #3: The Effects of Power on Emotional Responses to Self-Failure and Self-Success

Claire Heeryung Kim, McGill University, Canada

DaHee Han, McGill University, Canada

Derek D. Rucker, Northwestern University, USA

Adam Duhachek, Indiana University, USA

Paper #4: Captivated by Change: A Motivational Consequence of Being Powerless

Alison Jing Xu, University of Minnesota, USA

Sharon Shavitt, University of Illinois, USA

Derek D. Rucker, Northwestern University, USA

SESSION OVERVIEW

Power is defined by the asymmetric control over valued resources in a social relationship (Magee and Galinsky 2008). Although a significant amount of research has provided important insights on the consequences of power states and their implications for consumer behavior, little is known regarding the lay theories that underlie how consumers think about and are influenced by power states (Galinsky, Rucker, and Magee 2015). In this session, we bring together some of the leading researchers on power to present four papers demonstrating the interplay between power and lay theories in influencing consumer behavior. Across these papers, we discuss, (a) What are the lay beliefs that people have regarding the associations between brand power and other brand images? (b) How do perceptions of power differentials in a society influence the heuristics (i.e., lay theories) that people develop to make inferences about numeric information? (c) Why might feeling powerful magnify the influence of lay theories that people apply when making attributions? (d) How do consumers' lay theories on the changeability of their current power state (i.e., entity theorists vs. incremental theorists) moderate a motivational consequence of feeling powerless?

The first paper by Stoner and Torelli discovers that one means through which brands embody power is through perceptions of market dominance. However, brands with a warm image will be perceived as less market dominant and, thus, less powerful. This effect occurs because consumers hold the lay belief that being warm is in conflict with being powerful.

The second paper by Barone, Li, Lyle, and Winterich proposes that recognizing power differentials in a society can stimulate a vertical orientation, which in turn impacts the heuristics that consumers apply when judging the difference between vertically presented original price and deal price. Specifically, consumers with a vertical orientation tend to infer that vertically presented original and deal prices are very different from each other, regardless of their actu-

al difference. As a result, consumers with high vertical orientation judge small deals to be equally attractive as large deals.

The third paper by Kim, Han, Rucker, and Duhachek demonstrates that feeling powerful can magnify the influence of lay theories of attributing success to oneself and attributing failure to others (i.e., fundamental attribution error). Consequently, when encountering a self-failure, individuals who feel powerful generate stronger negative emotions of anger. When encountering a self-success, individuals who feel powerful also generate stronger positive emotions of pride.

The fourth paper by Xu, Shavitt, and Rucker explores the moderating role of lay theories (entity theorists vs. incremental theorists) in understanding a motivational consequence of feeling powerless. They propose and find that being in a state of low-power motivates individuals to change their current aversive state, and this motivation spills over to increase their preferences for messages or products signaling change over neutral ones or those signaling consistency. Moreover, the allure of change only holds for consumers who chronically believe, or have activated, the lay theory that their current (low power) state will not change naturally (i.e., entity theorists). That is, when people view their states as fixed, they seek change in power-irrelevant domains.

Given the important role of power in people's daily lives and the variety of novel findings uncovered by leading scholars in this research area, this session should be of interest to a diverse audience, from academics studying power to those researching branding, advertising, and pricing more broadly. Making connections between two research areas on power and lay theories also provides important avenues for future research.

Too Nice to Be Dominant: How Warmth Impacts an Embodiment of Power in Brands

EXTENDED ABSTRACT

A variety of constructs from psychology have been applied to brands (Aaker 1997, Torelli et al. 2012). The construct of power has yet to be applied to brands. What is a "powerful brand"? How are perceptions of power for a brand built?

In a pilot study, we discover that one means through which brands embody power is through perceptions of market dominance. This study confirms that a perception of market dominance is significantly correlated with an overall perception of brand power ($r = .62$). Therefore, we find it valuable to understand how consumers form perceptions of market dominance.

Research has shown that consumers are unaware of brands' market dominance (Kamins, Alpert, and Perner 2007), but even misperception as a market leader leads to positive consumer evaluations (Kamins, Alpert, and Perner 2003). Past research demonstrates that brand images can be used as cues for inferences regarding product quality (Jacoby, Olson, and Haddock 1971) and brand extensions (Aaker and Keller 1990). We hypothesize that when consumers are lacking direct knowledge about a brand's market dominance, the brand's image is used as an inference cue: specifically, brands with a warm image will be perceived as less market dominant.

Research shows that powerful people, a desire for leadership and perceptions of leaders have been related to dominance and dominant behaviors (Fragale, Overbeck, and Neale 2011; Lord, De Vader,

and Alliger 1986), which we propose conflicts with the image of high warmth brands (Aaker, Garbinsky, and Vohs 2012). We hypothesize and find that consumers perceive high warmth brands as being less market dominant due to market dominance's embodiment of power. Because competitiveness is believed as necessary for market dominance (Stalk, Evans, and Shulman 1992) and warmth has been negatively related to competitiveness (Fiske et al. 2002; Fiske et al. 1999; Russell and Fiske 2008), we further hypothesize that the negative impact of brand warmth on perceptions of market dominance is driven by decreased perceptions of market competitiveness.

Six experiments were conducted to investigate the impact of warmth on consumers' perceptions of market dominance. Studies 1 and 2 use real and fictitious brands to find evidence for our main hypothesis: warmth can negatively impact perceptions of market dominance. Study 3 explores perceptions of competitiveness as the mechanism behind our effect. Study 4 and 5 explore the boundary conditions and test the moderating roles of a) compatibility between warmth and dominance, and b) product category knowledge. Finally, Study 6 demonstrates downstream implications of this effect for brand preferences.

In Studies 1 and 2, we use real (Study 1) and fictitious brand (Study 2) in four product categories: cough syrup and fabric softener (Study 1) and pens and adhesive bandages (Study 2). Each participant was presented with two brands from each category: a high warmth brand and a low warmth brand. Participants were asked to estimate the market share of each brand. Consistent with our hypothesis, the high warmth brands were estimated to have lower market shares (Study 1: $M_s = 21.30$ vs 30.73 , $F(1, 103) = 26.62$, $p < .001$; Study 2: $M_s = 15.83$ vs 20.30 , $F(1, 80) = 21.94$, $p < .001$).

Study 3 builds on the first two studies by demonstrating that the effect of brand warmth on perceptions of market dominance is driven by reduced perceptions of competitiveness. This study used the cough syrup brands from Study 1 and scale measures of perceptions of competitiveness and market dominance. Again the high warmth brand was judged to be less market dominant ($M_s = 3.95$ vs 4.85 , $F(1, 102) = 10.98$, $p = .001$). Furthermore, this effect was significantly mediated by perceptions of competitiveness (95% CI of the indirect effect = $-.47$ to $-.02$).

Study 4 finds the effect disappears if the conflict between warmth and dominance is resolved. Participants completed either a neutral control sentence scramble task or one with sentences communicating compatibility of warmth and dominance (e.g. "The helpful nurse won the trophy"). Participants were asked the market share of the pen brands from Study 2. The interaction of compatibility and brand was significant ($F(1, 99) = 4.14$, $p < .05$). The high warmth brand was less market dominant than the low warmth brand ($M_s = 19.65$ vs 23.74 , $t(99) = 1.91$, $p = .06$) in the control condition, but this effect was attenuated in the compatibility condition ($M_s = 21.76$ vs 19.73 , $t(99) = 0.96$, *ns*).

In Study 5, we investigate category knowledge as a boundary condition. We used real brands in the product category, soup, where knowledge is highly variant for our college student participants. Consumers with high category knowledge should be more reliant on their own knowledge and less on inferential cues such as brand image. Thus, the high warmth brand image should not have the same negative impact on market dominance for knowledgeable consumers. Therefore, knowledge should positively predict perceptions of market dominance for a high warmth, market dominant brand. We find that category knowledge is a predictor of market dominance for a dominant, high warmth brand ($\beta = .41$, $t(55) = 3.79$, $p < .001$), but not for a low warmth brand ($\beta = .10$, $t(55) = .94$, *ns*).

Our final study demonstrates the downstream consequences of this effect on brand preference. Prior literature finds that dominant brands are preferred only when the choices are self-relevant (Kim et al 2008), therefore, high warmth brands that are perceived as being low in dominance should decrease brand preference in high self-relevant condition, but not in the low self-relevant condition. Participants picked products either to try themselves (high self-relevant) or for others to try (low self-relevant). They then viewed pairs of brand pictures for four product categories that communicated either high or low warmth. Participants responded with their brand preference on a 9-point scale (1 = Definitely Brand A, 9 = Definitely Brand B). Again, the high warmth brands were perceived as less dominant, but they were evaluated less favorably only in the high self-relevant condition ($M_s = 5.77$ vs 5.20 , $F(1, 124) = 6.35$, $p < .05$).

Turning a Blind Eye: When Views of Power Differentials Increase Deal Attractiveness

EXTENDED ABSTRACT

Across online retail websites and in-store displays, the regular price and sale price are frequently presented together, usually with one above or below the other. Although presenting prices vertically might be an unstated norm, the current research suggests that businesses may benefit from such presentations without offering a heavy discount. This research examines a novel factor that affects consumers' evaluations of deals with vertically presented prices: a vertical orientation (i.e., knowledge structure reflecting power differentials; Oyserman 2006).

High- (vs. low) vertical individuals possess strong associations between power differential and spatial locations, which likely guides information processing (Briley, Wyer, and Li 2014; Shavitt et al. 2009). Specifically, since vertical layout is associated with differentials in power, status, and standing in the minds of high- (vs. low) vertical people, high- (vs. low) vertical people likely infer that entities (e.g., prices) in vertical layouts must possess different levels of power, status, and standing (e.g., magnitude). Since the difference in price magnitude between regular and sale prices is inferred from merely the layout, the actual sale information is not attended to and the deal depth (difference between the regular price and sale price) is not processed systematically by high- (vs. low) vertical people. We hypothesize that for vertical layouts low-vertical people respond more favorably when deal depth is high than low and high-vertical people are indifferent of deal depth, and for horizontal layouts both high and low vertical people respond more favorably when the deal depth is high than low. In particular, the effect on vertical layout is driven by low-vertical (high-vertical) people's greater (equal) attention to sale price and higher (equal) motivation to process the deal when deal depth is high than low.

In study 1, participants ($n = 200$ undergraduate students) first responded to a scale that measured vertical orientation (Triandis and Gelfand 1998), and then reviewed a pizza cutter advertisement with regular price \$7 and sale price \$5. There were two versions for the advertisement: a vertical layout where sale price was below regular price and a horizontal layout where sale price was alongside the regular price. Finally, participants indicated their purchase likelihood of the pizza cutter. Regressing verticality (continuous), deal depth ('0' for low, '1' for high), layout condition ('0' for horizontal, '1' for vertical), and all possible interactions on purchase likelihood revealed a significant verticality \times layout \times deal depth interaction ($F(1, 192) = 4.14$, $p = .04$). The results showed that when price information was presented horizontally, both high- (+1 *SD*) and low- (-1 *SD*) vertical participants are more likely to purchase the pizza cutter when the

deal depth is high than low (high-vertical: $B = 2.18, t = 3.21, p < .001$; low-vertical: $B = 1.14, t = 1.59, p = .11$). More importantly, consistent with our hypothesis, when the prices were presented vertically, high-vertical participants (+1 *SD*) are equally likely to purchase the pizza cutter regardless of deal depth ($B = -.13, t = -0.20, p = .84$), but low-vertical participants (-1*SD*) are more likely to purchase the pizza cutter when the deal depth is high than low ($B = 1.57, t = 2.56, p < .05$).

Study 2 was similar to earlier studies but examined attention to sale price as a mediator to test the underlying mechanism. Participants ($n = 130$ mTurk workers) responded to the vertical orientation scale, viewed a pizza cutter advertisement with a vertical layout that varied in deal depth (high vs. low), indicated likelihood to purchase the pizza cutter, as well as how much attention they paid to the sale price. Regression analysis revealed a significant verticality \times deal depth interaction ($F(1, 124) = 4.49, p = .04$). As hypothesized, low-vertical participants (-1*SD*) are more likely to purchase the pizza cutter when the deal depth is high than low (-1 *SD*: $B = 2.22, t = 4.36, p < .01$), whereas high-vertical participants (+1 *SD*) are equally likely to purchase the pizza cutter regardless of deal depth (+1 *SD*: $B = .71, t = 1.41, p = .16$). In addition, attention to the sale price mediated the interaction of verticality \times deal depth on purchase likelihood (Hayes 2015; Model 8; indirect effect = $-1.99, se = 1.40, 90\% CI: -4.9735$ to $-.1835$). These results support that high- (vs. low) vertical consumers rely on the layout instead of sale price to when processing deals.

Study 3 ($n = 118$ undergraduate students) replicates this pattern when vertical orientation is temporarily activated. In the high (low) vertical condition, participants were asked to select two out of three statements taken from the vertical orientation scale (e.g., one should respect the decisions made by others who are more competent) with which they most agreed (disagreed) and to write a short paragraph detailing the reasons for their agreement (disagreement). Next, participants examined a promotion for dental floss in a vertical layout that varied in deal depth (high vs. low). Finally, participants indicated their deal evaluations, as well as how motivated they were while processing the price comparison. A 2×2 ANCOVA revealed a significant verticality \times deal depth interaction ($F(1, 59) = 4.09, p < .05$). Specifically, low-vertical participants were more likely to purchase the floss with a large ($M = 4.48, SD = .39$) than small ($M = 3.30, SD = .30$) deal depth ($F(1, 114) = 5.74, p = .02$). However, high-vertical participants were equally likely to purchase the floss with a large ($M = 2.84, SD = .30$) or small deal depth ($M = 3.41, SD = .39; F(1, 114) = 1.34, p = .25$). Also, processing motivation mediates the effect of verticality \times deal depth on purchase likelihood (Model 8: indirect effect = $-.4777, se = .29, 95\% CI: -1.2117$ to $-.0315$).

The current research adds to the literature that vertical orientation guides information processing in spatial space (Moeller et al. 2008; Robinson et al. 2008). Specifically, high (vs. low) vertical individuals assume price differentials upon seeing vertical layouts without processing information related to deal depth.

The Effects of Power on Emotional Responses to Self-Failure and Self-Success

EXTENDED ABSTRACT

Previous research suggests that power influences one's expression and experience of emotions (Berdahl and Martorana 2006; Keltner et al. 2003; Van Kleef et al. 2006). Specifically, high power results in increased positive emotions, whereas low power leads to elevated negative emotions. However, scant research has examined how power influences the experience of specific negative emotions. To fill this gap, the current research finds a context in which power

affects discrete negative emotion with a focus on anger and suggests that high power leads to greater anger when individuals encounter self-failure. The current research focuses on anger because the previous literature on anger in the context of self-failure suggests two competing predictions. Thus, the current research aims at resolving these competing predictions.

According to cognitive-appraisal theories of emotion (Lerner and Keltner 2001; Smith and Ellsworth 1985), individuals feel angry when they believe that others are responsible for negative outcomes or have high control over negative events (Averill 1983). Given that individuals in high power positions (i.e., leaders) feel more responsible for and control over a task than those in low power positions (i.e., employees, Anderson and Berdahl 2002), one may predict that high power will lead to reduced anger in the face of self-failure. However, given that increased power activates approach-related tendencies due to increased rewards and freedom whereas decreased power activates inhibition-related tendencies due to elevated threat, punishment, and social constraint (Keltner et al. 2003) and that anger is associated with an approach orientation (Labroo and Rucker 2010), one may posit that individuals in high power will feel greater anger when encountering self-failure. To resolve these two opposite predictions, the current research empirically examines the effect of power on anger in the self-failure contexts.

Additionally, this research suggests these emotional differences elicited by different levels of power are contingent on whether the task outcome is positive or negative. Specifically, we focused on pride (anger) as a focal positive (negative) emotion and examined how high power influences pride (anger) when individuals have success (failure) as an outcome. Prior work revealed that high power leads individuals to have agentic orientation because those who have high power are less dependent on others due to the greater ability and freedom (Rucker et al. 2012). Agentic orientation results in "self-protection, self-assertion and self-expansion" (Bakan 1966, p. 14-15). Thus, individuals with high power will be more likely to attribute one's success to them. According to self-agency appraisals, one feels pride when attributing positive outcomes to the self (Agrawal et al. 2013). Therefore, we posit that when facing a success, high (vs. low) power will lead to greater pride.

Study 1 examined the effects of power on anger when encountering the individual task failure to resolve the competing hypotheses. We predict that individuals in high (vs. low) power will be more likely to exhibit anger in the context of failure in the individual task. Although low (vs. high) power results in a more negative mood, we argue that high power may amplify the experience of anger when coupled with self-failure. It is because individuals in high power would be motivated to solve the negative events driving failure whereas those in low power would be less motivated (Keltner et al. 2003), and anger might help to solve the problem since it facilitates an effort to overcome the violation of what ought to be (Fischer and Roseman 2007). Participants were assigned to either the high or low power condition. We manipulated high (low) power by asking them to imagine to be a boss (employee) at a company. They read about the role and were instructed to vividly imagine that what it would be like to be in this role (Rucker, Dubois, and Galinsky 2011). After, all participants were asked to solve five insight problems and were informed that their score would be reported to them after completion. After 30 seconds of completion, all participants read that they failed the test. Next, participants indicated the degree to which they felt angry after learning about their test results (frustrated, angry, and irritated; Richins 1997). A one-way ANOVA with power as the independent variable and anger as the dependent variable revealed that

participants in the high power condition felt angry to a greater extent than did those in the low power condition ($p < .05$).

Study 2 investigated whether an outcome of the task (i.e., success versus failure) moderates the effects of power on emotions. In this study, participants were randomly assigned to one of four conditions in a 2 (Power: high vs. low) \times 2 (Outcome: success vs. failure) between-participants design. The power manipulation was identical to that in Study 1. However, in the success condition, participants were told that they passed the test. A two-way ANOVA as power and outcome as the independent variables and anger as the dependent variable a significant interaction ($p < .05$). Simple contrasts revealed that in the failure condition, participants in the high (vs. low) power condition reported anger to a greater extent ($p < .05$). However, in the success condition, there was no difference between high and low power conditions ($p > .7$). In addition, a two-way ANOVA as power and outcome as the independent variables and pride as the dependent variable a significant interaction ($p < .05$). Simple contrasts revealed that in the success condition, participants in the high (vs. low) power condition reported pride to a greater extent ($p < .05$). However, in the failure condition, there was no difference between high and low power conditions ($p > .2$).

Overall, our findings contribute to the consumer literature by providing evidence to understand the relationship between power and consumer's emotional responses to an outcome in a task as a function of the valence of the outcome.

Captivated by Change: A Motivational Consequence of Feeling Powerless

EXTENDED ABSTRACT

For generations, brands have used advertising appeals that position their products around change from the status quo. Apple's iconic "1984" commercial introduced the Macintosh personal computer as a heroine that gave humanity an alternative to conventional computers. Yet, surprisingly, little research exists on factors that affect whether and when consumers are receptive to persuasive appeals that emphasize change.

In this work, we explore how a critical psychological factor— one's sense of power— affects consumers' response to the idea of change. Given the aversive nature of a low-power state (Rucker and Galinsky 2008), we propose that being in a state of low-power triggers a desire, even unbeknownst to consumers, for change. As a consequence, triggering a low-power state in consumers can increase consumers' preferences for messages or products that signal the prospect for change over neutral ones or those that signal consistency. Moreover, we reveal this association is dependent upon consumers' implicit theories of whether their current states will naturally change. The allure of change only holds for consumers who chronically believe, or have activated, the implicit theory that their current (low power) state will not change naturally (i.e., entity theorists). Consequently, they seek messages or products that signal change. We conducted five experiments to test the above hypotheses.

Experiment 1 tested the automatic link between a low-power state and enhanced evaluations of change-related constructs using an Implicit Association Test (IAT). We first manipulated high versus low power by asking participants to recall a previous personal experience in which they felt powerful or powerless (Galinsky, Gruenfeld, and Magee 2003). Participants then completed a valence IAT (Greenwald, McGhee, and Schwartz 1998; Richeson and Ambady 2003) in which they categorized words from four categories including *change* (e.g., alteration, adjustment, shift), *stability* (persistent, enduring, lasting), *good* (joy, love, peace), and *bad* (agony, terrible, horrible)

in two main blocks of test trials. This study found that transient feelings of low power made change constructs evaluatively more positive and made stability constructs evaluatively more negative. This provides the first piece of evidence suggesting that a low-power state enhances the preference for things that symbolize change.

Experiment 2 investigated whether power affects conscious decisions that reveal a preference between change from the status quo and stability of the status quo. Power state was manipulated via the same power recall task as in experiment 1 and then reinforced by a Bonus Allocation Game in which participants played the role of either a powerful boss who made bonus allocation decisions for employees, or a powerless employee who indicated how much bonus she/he expected to get. In a subsequent consumer survey, participants saw twenty-seven adjectives that can describe the characteristics of suits, a third of which implied change/being different (i.e., trendy, up-to-date, recent), a third implied no change/staying the same (i.e., classic, standard, timeless), and a third were neutral (i.e., tidy, striped, lightweight). Participants were asked to check five adjectives that could best describe what they would find appealing if they were shopping for a new suit for themselves. The results revealed that participants placed in a low-power (compared to high-power) state chose more adjectives implying change/being different, fewer adjectives implying no change/staying the same, and the same number of neutral adjectives.

Experiment 3a and 3b explored the moderating role of people's implicit theory regarding the extent to which they believe their current states would change naturally. By both manipulating (experiment 3a) and measuring (experiment 3b) people's implicit theory, we demonstrated that the influence of low-power states on preference for change-signaling messages emerges among entity theorists, but not among incremental theorists. In experiment 3a, participants were randomly assigned into one of four conditions with a 2 (power: high vs. low; between-subjects) \times 2 (implicit theory: entity theory vs. incremental theory; between-subjects) \times 2 (slogan theme: change vs. control; within-subjects) mixed design. To manipulate participants' implicit theory, they read an excerpt from a news article, which supported either the entity theory or the incremental theory, and then wrote an essay to support the claims of the article (Park and John 2014). Participants' high versus low power state was manipulated by the same power recall tasks. Finally, participants evaluated four slogans embedded in banner ads that were designed for two brands, IBM and Panasonic. For each brand, one slogan indicated change whereas the other was the control. We calculated a relative preference for change index by subtracting the average evaluations of two control slogans from the average evaluations of two change slogans. A greater value indicated a stronger preference for change slogans. Analyzing this relative preference for change index as a function of power and implicit theory in ANOVA yielded a significant power \times implicit theory interaction. Planned contrasts indicated that primed entity theorists had a stronger preference for change slogans in the low-power condition than in the high-power condition. In contrast, among primed incremental theorists, power did not influence their preference for change slogans, *ns*. Experiment 3b used a similar design and measured participants' implicit theory. The results replicated Experiment 3a.

A final experiment replicated the basic effect of low power on motivation to seek signals of change, and also showed as expected that the effect was specific to the aversive state of low power and did not emerge for a more malleable negative state (negative mood induction).

REFERENCES

- Aaker, David A., and Kevin Lane Keller (1991), "Consumer Evaluations of Brand Extensions," *Journal of Marketing*, 54 (1), 27-41.
- Aaker, Jennifer L. (1997), "Dimensions of Brand Personality," *Journal of Marketing Research*, 34 (August), 347-56.
- Aaker, Jennifer L., Emily N. Garbinsky, and Kathleen D. Vohs (2012), "Cultivating Admiration in Brands: Warmth, Competence and Landing in the 'Golden Quadrant'," *Journal of Consumer Psychology*, 22 (2), 191-94.
- Agrawal, Nidhi, DaHee Han, and Adam Duhachek (2013), "Emotional Agency Appraisals Influence Responses To Preference Inconsistent Information," *Organizational Behavior and Human Decision Processes*, 120 (1), 87-97.
- Anderson, Cameron, and Jennifer L. Berdahl (2002), "The Experience of Power: Examining the Effects of Power on Approach and Inhibition Tendencies," *Journal of Personality and Social Psychology*, 83 (6), 1362-377.
- Averill, James R. (1983), "Studies on Anger and Aggression: Implications for Theories of Emotion," *American Psychologist*, 38 (11), 1145-160.
- Bakan, David (1966), *The Duality of Human Existence*, Boston, MA: Beacon Press.
- Berdahl, Jennifer L. and Paul Martorana (2006), "Effects of Power on Emotion and Expression during a Controversial Group Discussion," *European Journal of Social Psychology*, 36 (4), 497-509.
- Briley, Donnel A., Robert S. Wyer Jr, and En Li (2014), "A dynamic view of cultural influence: A review," *Journal of Consumer Psychology*, 24 (4), 557-71.
- Fischer, Agneta H. and Ira J. Roseman (2007), "Beat Them or Ban Them: The Characteristics and Social Functions of Anger and Contempt," *Journal of Personality and Social Psychology*, 93 (1), 103-15.
- Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu (2002), "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow From Perceived Status and Competition," *Journal of Personality and Social Psychology*, 82 (6), 878-902.
- Fiske, Susan T., Jun Xu, Amy C. Cuddy, and Peter Glick (1999), "(Dis)respecting versus (Dis)liking: Status and Interdependence Predict Ambivalent Stereotype of Competence and Warmth," *Journal of Social Issues*, 55 (3), 473-89.
- Fragale, Alison R., Jennifer R. Overbeck, and Margaret A. Neale (2011), "Resources versus Respect: Social Judgments Based on Targets' Power and Status Positions," *Journal of Experimental Social Psychology*, 47 (4), 767-75.
- Galinsky, Adam D., Deborah H. Gruenfeld, and Joe Magee (2003), "From Power to Action," *Journal of Personality and Social Psychology*, 85 (3), 453-66.
- Galinsky, Adam D., Derek D. Rucker, and Joe C. Magee (2015), "Power: Past Findings, Present Considerations, and Future Directions," In Mario Mikulincer and Phillip R. Shaver (Ed.), *APA Handbook of Personality and Social Psychology (Vol. 3: Interpersonal Relationships, pp. 421-460)*, Washington, DC: American Psychological Association.
- Greenwald, Anthony G., Debbie E. McGhee, and Jordan L. K. Schwartz (1998), "Measuring Individual Differences in Implicit Cognition: The Implicit Association Test," *Journal of Personality and Social Psychology*, 74 (6), 1464-468.
- Jacoby, Jacob, Jerry C. Olson, and Rafael A. Haddock (1971), "Price, Brand Name, and Product Composition Characteristics as Determinants of Perceived Quality," *Journal of Applied Psychology*, 55 (6), 570-79.
- Kamins, Michael A., Frank H. Alpert, and Lars Perner (2003), "Consumers' Perception and Misperception of Market Leadership and Market Pioneership," *Journal of Marketing Management*, 19 (7-8), 807-34.
- Kamins, Michael A., Frank H. Alpert, and Lars Perner (2007), "How Do Consumers Know Which Brand is the Market Leader or Market Pioneer? Consumers' Inferential Processes, Confidence and Accuracy," *Journal of Marketing Management*, 23 (7-8), 591-611.
- Keltner, Dacher, Deborah H. Gruenfeld, and Cameron Anderson (2003), "Power, Approach, and Inhibition," *Psychological Review*, 110 (2), 265-84.
- Kim, JongHan, Scott T. Allison, Dafna Eylon, George R. Goethals, Michael J. Markus, Sheila M. Hindle, and Heather A. McGuire (2008), "Rooting for (and Then Abandoning) the Underdog," *Journal of Applied Social Psychology*, 38 (10), 2550-573.
- Labroo, Aparna A. and Derek D. Rucker (2010), "The Orientation-Matching Hypothesis: An Emotion-Specificity Approach to Affect Regulation," *Journal of Marketing Research*, 47 (5), 955-66.
- Lerner, Jennifer S. and Dacher Keltner (2001), "Fear, Anger, and Risk," *Journal of Personality and Social Psychology*, 81 (1), 146-59.
- Lord, Robert G., Christy L. De Vader, and George M. Alliger (1986), "A Meta-Analysis of the Relation between Personality Traits and Leadership Perceptions: An Application of Validity Generalization Procedures," *Journal of Applied Psychology*, 71 (3), 402-10.
- Magee, Joe C. and Adam D. Galinsky (2008), "Social Hierarchy: The Self-Reinforcing Nature of Power and Status," *Academy of Management Annals*, 2, 351-398.
- Moeller, Sara K., Michael D. Robinson, and Darya L. Zabelina (2008), "Personality Dominance and Preferential Use of the Vertical Dimension of Space Evidence from Spatial Attention Paradigms," *Psychological Science*, 19 (4), 355-61.
- Oyserman, Daphna (2006), "High Power, Low Power, and Equality: Culture Beyond Individuals and Collectivism," *Journal of Consumer Psychology*, 16 (4), 353-57.
- Park, Ji Kyung and Deborah Roedder John (2014), "I Think I Can, I Think I Can: Brand Use, Self-Efficacy, and Performance," *Journal of Marketing Research*, 51 (2), 233-47.
- Richeson, Jennifer and Nalini Ambady (2003), "Effects of Situational Power on Automatic Racial Prejudice," *Journal of Experimental Social Psychology*, 39 (2), 177-83.
- Richins, Marsha L. (1997), "Measuring Emotions in the Consumption Experience," *Journal of Consumer Research*, 24 (2), 127-46.
- Robinson, Michael D., Darya L. Zabelina, Scott Ode, and Sara K. Moeller (2008), "The vertical nature of dominance-submission: Individual differences in vertical attention," *Journal of Research in Personality*, 42 (4), 933-48.
- Rucker, Derek D. and Adam Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35 (2), 257-67.
- Rucker, Derek D., Adam D. Galinsky, and David Dubois (2012), "Power and Consumer Behavior: How Power Shapes Who and What Consumers Value," *Journal of Consumer Psychology*, 22 (3), 352-68.

- Rucker, Derek D., David Dubois, and Adam D. Galinsky (2011), "Generous Paupers and Stingy Princes: Power Drives Consumer Spending on Self versus Others," *Journal of Consumer Research*, 37 (6), 1015-29.
- Russell, Ann Marie T. and Susan Fiske (2008), "It's All Relative: Competition and Status Drive Interpersonal Perception," *European Journal of Social Psychology*, 38 (7), 1193-201.
- Schwarz, Norbert (2002), "Situating cognition and the wisdom of feelings: Cognitive tuning," in *The Wisdom in Feelings*, ed. L. Feldman Barrett and P. Salovey, New York: Guilford Press, 144-66.
- Schwarz, Norbert (2011), "Feelings-as-information theory," in *Handbook of Theories of Social Psychology*, Vol. 1, ed. P. Van Lange, Thousand Oaks, CA: SAGE, 289-308.
- Shavitt, Sharon, Carlos J. Torelli, and Jimmy Wong (2009), "Identity-based motivation: Constraints and opportunities in consumer research," *Journal of Consumer Psychology*, 19 (3), 261-66 .
- Smith, Craig A. and Phoebe C. Ellsworth (1985), "Patterns Of Cognitive Appraisal in Emotion," *Journal of Personality and Social Psychology*, 48 (4), 813-38.
- Stalk, George, Philip Evans, and Lawrence E. Shulman (1991), "Competing on Capabilities: The New Rules of Corporate Strategy," *Harvard Business Review*, 70 (2), 57-69.
- Torelli, Carlos J., Aysegül Özsomer, Sergio W. Carvalho, Hean Tat Keh, and Natalia Maehle (2012), "Brand Concepts as Representations of Human Values: Do Cultural Congruity and Compatibility Between Values Matter?," *Journal of Marketing*, 76 (4), 92-108.
- Triandis, Harry C., and Michele J. Gelfand (1998), "Converging measurement of horizontal and vertical individualism and collectivism," *Journal of Personality and Social Psychology*, 74 (1), 118-28.
- Van Kleef, Gerben A., Carsten KW De Dreu, Davide Pietroni, and Antony SR Manstead (2006), "Power and Emotion in Negotiation: Power Moderates the Interpersonal Effects of Anger and Happiness on Concession Making," *European Journal of Social Psychology*, 36 (4), 557-81.

Viewing Social Exclusion with a Broader Scope: Contemporary Consequences of Social Exclusion

Chairs: Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Lei Su, Hong Kong Baptist University, Hong Kong

Paper #1: How The Experience of Social Exclusion Influences Visual Density Preference

Lei Su, Hong Kong Baptist University, Hong Kong
Echo Wen Wan, University of Hong Kong, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Paper #2: The Impact of Social Exclusion on Consumers' Attitudes Toward Probabilistic Selling

Linying (Sophie) Fan, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Paper #3: The Broken Bargain: Social Exclusion Reduces Willingness to Incur Personal Costs for the Sake of Society

Iman Naderi, Fairfield University, USA
Nicole L. Mead, University of Melbourne, Australia

Paper #4: Is it Still Important to be a Moral Person When You are Lonely?

Jinfeng (Jenny) Jiao, SUNY Binghamton University, USA
Jing (Alice) Wang, University of Iowa, USA

SESSION OVERVIEW

This special session highlights recent research about social exclusion and consumer behavior in four diverse and impactful contexts: visual marketing, probabilistic selling, environmental behavior, and moral identity. Social exclusion (being alone, isolated, or ostracized) and loneliness are common experiences that shape consumer behavior (Duclos, Wan, and Jiang 2013; Lee and Shrum 2012; Mead et al. 2011; Wan, Xu, and Ding 2014; Wang, Zhu, and Shiv 2012). Although the existing research has greatly advanced our knowledge, some critical and important questions have yet to be unanswered. In particular, the research highlighted in this session answers questions about the effects of social exclusion on critical marketing activities and substantive problems facing society. For the former, how does feeling excluded influence judgement and decision making about visual marketing elements (e.g., density of a design pattern) and sales promotion practices (probabilistic selling)? For the latter, how does social exclusion influence pro-environmental behaviors like sustainable consumption and moral identity?

The first paper, by Su, Wan and Jiang, examines the relationship between social exclusion and visual density preference. The authors demonstrate that consumers who perceive themselves as socially excluded prefer products with visually-dense patterns more than their peers who do not feel socially excluded, and that the effect is mediated by feelings of emptiness.

The second paper, by Fan and Jiang focuses on studying the relationship between social exclusion and attitudes towards probabilistic selling. Probabilistic selling is when consumers are given the opportunity to purchase a product 'blind', knowing only broadly what they will receive. For example, an overseas holiday, but without knowing the destination. Social exclusion and probabilistic selling both involve a loss of control. As social exclusion dampens people's sense of control, and people always have a desire to defend against a loss of control, social exclusion was found to decrease consumers' favorability for probabilistic selling.

The third paper, by Naderi and Mead examines the influence of social exclusion on pro-environmental behavior. They examined competing mechanisms for the effect: reduced empathy (which has been shown to reduce helping) and willingness to sacrifice for society. They found that excluded people become reluctant to engage in pro-environmental behaviors because they are not willing to incur costs for the benefit of society, thereby shedding new light on the mechanisms through which social exclusion may impair other-oriented behavior.

Finally, the last paper, by Jiao and Wang investigates the impacts of loneliness in the context of moral behaviors. It reveals that, when participants are lonely, those with high (vs. low) empathy had higher moral identity. The paper has implications for moral consumption and draws further attention to the role of loneliness, an increasing phenomenon, on consumer behavior.

Taken together, these four papers shed light on how social exclusion and loneliness may influence and inform important marketing practices and timely societal problems. Given that the experience of social exclusion and loneliness is becoming increasingly prevalent, the session will be of interest to a broad audience at the Association for Consumer Research conference 2017.

How The Experience of Social Exclusion Influences Visual Density Preference

EXTENDED ABSTRACT

The experience of social exclusion is a painful but common part of our daily life. People often feel rejected, ignored, or left alone by individuals or social groups (Baumeister et al. 2005; Williams 2007). As social interaction is one of the most universal and fundamental human needs, social exclusion significantly impacts people's psychological and physiological functioning (DeWall and Baumeister 2006; Twenge et al. 2001; Williams 2007). The current research looks at a novel impact of social exclusion on consumer behavior: a preference for visual density involved in product aesthetic design.

We first propose that social exclusion will result in a feeling of emptiness – a sense of an inner void caused by perceived self-incompletion or a missing part of the self (Austin 1989; Bronstein 2014; Hazell 1984). Social exclusion effects two aspects of the self-concept; the personal self (aspects that differentiate one's self), and the relational self (aspects that reflect assimilation to others or significant social groups) (Sedikides and Brewer 2001). First, based on prior literature (Williams 2007), social exclusion threatens individual's values and sense of meaningful existence, which are basic elements of the personal self (Schulenberg et al. 2010). Secondly, social exclusion deprives individuals of their social interactions (Warburton and Williams 2005) dampens their sense of belongingness (Mead et al. 2011; Williams 2007), which constitute the relational self (Aron and Aron 1986).

Across the personal and relational selves, social exclusion leads to a loss in meaningful existence, belongingness, and connectedness. This triggers the feeling part of self-identity is missing, which is felt as emptiness. Emptiness is a *psychological* state of inner void, with the opposite state being a psychological perception of fillingness (Hazell 1984). Emptiness is unpleasant and painful; hence people

are motivated to suppress or remove the unappealing feeling of emptiness by metaphorically “filling in” their inner void.

Visual density refers to the number of visual elements or units contained in a unit area of a visual image (Geissler, Zinkhan, and Watson 2006; Morrison and Dainoff 1972; Rosenholtz, Li, and Nakano 2007). Embodied cognition states sensory input or bodily sensations -such as visual density- are metaphorically linked to cognitive or abstract thoughts (Landau, Meier, and Keefer 2010; Krishna and Schwarz 2014). We posit that visually-dense patterns provide a *visual* sense of fullness, which metaphorically compensates for the *psychological* need for filling psychological emptiness among socially excluded people. Stated formally,

Hypothesis 1: Socially excluded consumers have higher preference toward visually-dense patterned products than socially included consumers.

Hypothesis 2: Socially excluded consumers will have stronger feelings of emptiness than socially included consumers, which will mediate the effect of social exclusion on attitude for visually-dense patterned products.

Four experiments were conducted to test these possibilities.

First we tested the proposed effect by examining participants' real behavior. Participants (N = 154) were first randomly assigned to one of three conditions (exclusion, inclusion, and neutral) to prime social exclusion with a recall task (Mead et al. 2011). Next, the participants were requested to design a visual pattern for a smartphone case for themselves with a stamp. We measured the number of stamps each participant put on their smartphone case and found that social exclusion led participants to put a larger number of visual stamps on their smartphone cases (i.e., denser visual designs), than their counterparts in the socially included or neutral conditions.

Experiment 2 tested the proposed underlying mechanism of the feeling of emptiness by directly testing its mediational role. A 2 (exclusion vs. inclusion) × 2 (dense-patterned vs. sparse-patterned product) between-subjects design was used (N=158). We first manipulated social exclusion versus inclusion with the Cyberball game (Williams et al. 2000). Participants then rated their feeling of inner emptiness on three items (e.g., “I feel empty inside”; “I feel as though part of me is missing”; Poreh et al. 2006). They also reported their mood (Williams et al. 2000). Finally, participants were presented with and requested to rate either a dense-patterned or sparse-patterned T-shirt. The socially excluded consumers had a higher attitude towards the dense-patterned products than the socially included ones. No difference was found regarding sparse-patterned products. More importantly, the results from PROCESS 14 revealed that feelings of emptiness, not mood, mediated the evaluation of dense-patterned products.

In experiment 3, we further tested the filling-in-the-inner-emptiness mechanism by introducing a physical filling action as the moderator. A 2 (exclusion vs. inclusion) × 2 (filling vs. emptying action) between-subjects design was used (N=165). After manipulating social exclusion versus inclusion and measuring feeling empty, we had participants either fill or empty a water bottle. Afterwards, all participants evaluated a dense-patterned painting composed of various elements clustered in the center. While the effect of social exclusion was replicated in the emptying condition, we found that filling in the water bottle weakened the effect as it at least partially fulfilled the excluded participants' need for filling in their sense of emptiness.

In experiment 4, we extended our results by providing a different opportunity to fill the inner emptiness. A 2 (social relationship: exclusion vs. inclusion) × 2 (temporal density: busy vs. control) between-subjects factorial design was used. After manipulating social exclusion versus inclusion, the participants' sense of temporal density was too manipulated using a survey about life (Kim et al. 2015). Afterwards, all the participants evaluated a dense-patterned curtain. While social exclusion effect was replicated in the control condition, we found the social exclusion effect weakened if participants perceived themselves having a lot of tasks packed into a busy schedule.

Our research findings offer novel insights into how and why social exclusion leads to a preference for visually-dense patterned products. They add to the repertoire of behavioral consequences of social exclusion, and identify emptiness as a new psychological consequence of exclusion. This research also contributes to the product aesthetics design literature by focusing on the under-researched area of visual density. Finally, this work enriches the understanding of emptiness, which has hitherto been investigated by clinical psychologists.

The Impact of Social Exclusion on Consumers' Attitudes toward Probabilistic Selling

EXTENDED ABSTRACT

Probabilistic selling refers to the marketing practice in which a seller offers buyers a purchase choice involving a probability of obtaining a subset of the whole set of distinct products or services offered by a company (Fay and Xie 2008, 2010, 2015). Facilitated by its managerial advantages, an increasing number of companies have started to use this innovative marketing strategy, such as the fukubukuro (i.e., grab bags) from Apple, mystery flights/ hotels services from KAYAK, and blind vacation bookings from Srprs. me. From a consumer psychology perspective, the current research examines the impact of social exclusion on consumers' attitudes toward probabilistic selling.

Establishing and maintaining stable social relationships is essential for human survival (Baumeister and Leary 1995), yet social exclusion continues to be a characteristic of human society. Social exclusion refers to the situation in which an individual is ignored, rejected, or isolated (e.g., Baumeister et al. 2005). Recently, consumer researchers have demonstrated the impact of social inclusion and exclusion on various consumer behavior domains, such as affiliation-related consumption (Mead et al. 2011), financial risk-taking (Duclos, Wan, and Jiang 2013), uniqueness-seeking (Wang, Zhu, and Shiv 2012), and consumer switching behavior (Su et al. 2017).

One important consequence of social exclusion is that it deprives people of their sense of personal control; hence, excluded individuals usually exhibit high vigilance to additional threats to their sense of control (e.g., Williams 2001, 2007). Probabilistic selling is also likely to be considered a threat to one's sense of personal control because in a probabilistic selling context consumers cannot observe directly how the final outcome of their purchasing behavior (i.e., the product or service) is determined by their input (Alloy, Clements, and Koenig 1993). Therefore, we hypothesize that social exclusion decreases consumers' favorability toward probabilistic selling, driven by the defensive system they use to guard against further loss of personal control (e.g., Kay et al. 2008; Kay, Moscovitch, and Laurin 2010). We further predict that the effect is weakened when the lack of personal control is compensated for in other ways, or when vivid information about the probabilistic offer is provided.

In experiment 1, we first manipulated participants' feeling of social relationship through an imagination task (Pfundmair et al. 2015). Specially, college students ($N = 105$) were asked to put themselves into the role of the person in an either exclusion or inclusion scenario. After the participants finished imagining the scenario, an experimenter there told them that they could choose either a fixed reward option (a local restaurant coupon) or a probabilistic reward option (a mystery stationery bag containing various random stationery items) of similar monetary value. As expected, excluded participants were significantly less likely to choose the probabilistic reward than those in the inclusion condition.

Experiment 2 demonstrates that the observed effect was due to feelings of social exclusion decreasing the probability of consumers favoring probabilistic offerings, but not increasing consumers' evaluations of the fixed offering option. To do so, college students ($N = 194$) were randomly assigned to the four conditions of a 2 (exclusion vs. inclusion) \times 2 (fixed offering vs. probabilistic offering) between subject design. First, participants' feeling of social inclusion/exclusion was manipulated with a recall task (e.g., Duclos, Wan, and Jiang 2013). Then, as an ostensibly unrelated task, participants were asked to imagine they have ordered a laptop online and evaluated a delivery plan offering either an undetermined date or a fixed date (the undetermined date would be 4-8 days earlier than the fixed date). Consistent with our expectation, the excluded participants exhibited a more negative attitude toward the undetermined but earlier delivery offering than those in the inclusion condition. However, for the fixed offering condition, there was no significant difference between the preferences toward the delivery option by the two groups. This suggests that social exclusion does not enhance willingness to choose fixed options.

Experiment 3 provides direct process evidence by showing the mediating role of control deprivation and the moderating role of control restoration. We employed a 2 (exclusion vs. inclusion) \times 2 (control restoration vs. no restoration) between subject design. After participants ($N = 226$) finished the same recall task we used in experiment 2, we manipulated their sense of control through a reading comprehension task. The participants in the control restoration condition read and summarized an article about the controllability of people's health while the participants in the no-restoration condition read and summarized an article about the visual abilities of monkeys (Cutright and Samper 2014). Next, the participants responded to the three questions measuring their feeling of control (Cutright 2011). Finally, all participants imagined that they were given a mystery bag filled with random products—as a free gift. We found that the feeling of personal control mediated the effect of social relationship on probabilistic marketing offerings evaluation. And the previously observed effect of social exclusion disappeared when the feeling of control was restored via an external source.

Experiment 4 reveals a possible way to overcome consumers' negative attitudes by demonstrating the moderating role of information vividness through a 2 (exclusion vs. inclusion) \times 2 (high vividness vs. low vividness) between subject design. We first asked college students ($N = 105$) to complete the same imagination task used in experiment 1. Then, participants imagined that they were scheduled to take individual trips and evaluated a mystery hotel booking services. Information vividness was manipulated by either providing participants with pictures of the outcome of the probabilistic service, or not. As expected, when vivid product information was provided, the negative effect of social exclusion disappeared.

Taken together, the current research is the first to systematically examine the psychological mechanism under which consumers react to probabilistic selling. In addition, this research extends

our understanding of social relationship and personal control in the marketing context. Further, our research offers rich practical implication for marketers in terms of how to increase the acceptance and effectiveness of probabilistic strategies.

The Broken Bargain: Social Exclusion Reduces Willingness to Incur Personal Costs for the Sake of Society

EXTENDED ABSTRACT

People are lonelier than ever before (e.g., Klinenberg 2013). At the same time, the earth's natural resources may be in greater danger than ever before. Is there a relationship between the two?

Previous research suggests the answer may be yes. People who were socially excluded (vs. included) displayed less prosocial behavior (e.g., helping, cooperation) and that effect was explained by reduced empathic processing (i.e., lack of sensitivity for others' feelings; Twenge et al. 2007). If one assumes that pro-environmental consumption is an instance of prosocial behavior, then one would predict that social exclusion reduces sustainable consumption through reduced empathy.

It is possible, however, that prosocial and pro-environmental behaviors rely on different psychological processes. While empathy may be critical for motivating helping and cooperation toward specific group members (Batson 1991), it may not be so important for motivating behaviors that benefit the broader social group. Instead, behaviors that benefit the broad social group may be governed by an implicit bargain between the self and society. That is, people are willing to make sacrifices as long as they think the costs of those behaviors are offset by the rewards that come from belonging to a social group (Baumeister et al. 2005). If sustainable consumption is governed by an implicit bargain between the self and society, then exclusion from the social group should reduce sustainable consumption because it makes people unwilling to make sacrifices for the sake of society.

In four studies, we tested the theory that trait and state deficiencies in the need to belong are associated with reduced engagement in pro-environmental behavior. In addition, we tested the competing mechanisms for that effect – reduced empathy or a breakdown in the implicit bargain.

Study 1 was a basic test of the hypothesis that deficiencies in belonging are associated with reduced engagement in pro-environmental behaviors. One-hundred and fifty American MTurkers completed the 10-item UCLA loneliness scale (Russell 1996). Then they reported their engagement in a variety of environmentally-friendly behaviors (e.g., frequency of recycling; Karp 1996). As predicted, loneliness was negatively related to conservation behaviors, over and above the previously established demographic predictors of gender and income.

Study 2 tested the causal relationship between social exclusion and pro-environmental consumption. Eighty-seven undergraduate students were randomly assigned to write about a time they were either rejected or accepted (Maner et al. 2007). Preference for a “green” car versus a regular car was the dependent measure. As predicted, exclusion (versus acceptance) decreased participants' preference for the ecologically-friendly car.

In study 3 ($N = 87$), we aimed to elucidate the explanation for why social exclusion reduces pro-environmental consumption. To manipulate exclusion, participants were given bogus feedback about the future implications of their personality-test results (Twenge et al. 2001). Participants were told that their future would be full of social relationships (social inclusion), devoid of social relationships (social

exclusion), or full of mishaps and misfortune (misfortune-control condition). The latter group was included as a control for negative feedback that was not social in nature.

To measure empathic concern, participants read and responded to an essay that was ostensibly written by another student and which described a recent romantic-relationship breakup; participants indicated their feelings toward the peer (e.g., sympathetic, compassionate; Batson et al. 1995). To measure the breakdown of the implicit contract, completed a willingness to sacrifice for society scale developed by Stern et al. (1999; e.g., *I would be willing to accept cuts in my standard of living to benefit the society*). Participants then indicated their preference between two backpacks that were of the same brand and price: a regular backpack, which was superior on performance, and a green backpack, which was environmentally superior.

Conceptually replicating study 2, socially-excluded participants reported a lower preference for the green product relative to the socially-included condition. Consistent with the theory that reduced desire to buy the green backpack was due to negative feedback about one's social connections specifically rather than negative information generally, socially-excluded participants reported a lower preference for the green product than did misfortune-control participants. There was no difference between the misfortune-control and social-inclusion conditions. Process analyses which included empathy and willingness to sacrifice as competing mediators revealed that the indirect effect was significant for willingness to sacrifice but not empathy. Hence, reduced willingness to sacrifice for the sake of society was a better explanation for the effect of social exclusion on green consumption than empathy.

In Study 4, we framed the same green product as conferring social or financial benefits, expecting that social (vs. financial) benefits would restore excluded participants' willingness to buy pro-environmental products. To test this hypothesis, we presented a green car as a fuel-efficient model whose benefits were social (owners were perceived by others as nice, caring, and altruistic) or economical (saving money) The social exclusion manipulation was the recall task used in Study 2 (Maner et al., 2007). Sure enough, participants who recalled a time they felt socially excluded reported higher intentions to purchase the car when the benefits were social than utilitarian. In contrast, the opposite pattern was found among participants who recalled a time of acceptance.

The current research provides two novel insights into the critical challenge of motivating sustainable consumption. One, the need to belong is key to engagement in sustainable consumption. When people's need to belong was threatened by social exclusion or by feelings of loneliness, they became unwilling to incur the costs of sustainable consumption. Two, sustainable consumption is not merely another instance of prosocial behavior. Instead, the two outcomes can be explained by different psychological processes.

Is It Still Important To Be A Moral Person When You Are Lonely?

EXTENDED ABSTRACT

Most people feel lonely at some point in their life. It is estimated that about one out of five people feel lonely at any given time (Cacioppo & Patrick, 2008). The widespread use of screen-based communication in the last two decades has also contributed to social isolation and low attachment to parents and peers (Gross, 2004). Despite the pervasiveness of loneliness, how it affects consumers' moral behaviors remains to be an underexplored area. In this research, we examine how consumers' felt loneliness affects their moral identity and moral behaviors.

Loneliness refers to a complex set of feelings that occur when an individual feels socially isolated. Such undesirable subjective feelings of social isolation drive individuals to fulfill their need for social connections (Hawkley & Cacioppo, 2010). Loneliness is related to, but different from, social exclusion. Loneliness refers to either a chronic personality (Cacioppo & Patrick, 2008) or a temporary state of feelings that arise from a social exclusion incident. By contrast, social exclusion emphasizes a particular behavior or event (e.g., purposely excluding or ignoring someone in a group online game) (Wan et al, 2014), but it does not stipulate how the recipient feels or reacts to the behavior. Depending on the context and the individual personality, a particular social exclusion incident may or may not result in the individual's felt loneliness. In our research, we examine how loneliness moderates the effect of empathy on moral behaviors, whether the feeling of loneliness comes from chronic personalities or specific exclusion incidents.

Moral identity refers to the degree to which being moral is important for one's identity (Hardy & Carlo, 2011). Previous research has demonstrated that one important antecedent of moral judgment and behaviors is empathy. For example, empathy motives people to help those who suffer, even at a cost to oneself (Batson, 1991). Empathy can also reduce punishment for others. When participants felt empathetic toward another individual, punishment of a cheater disappeared, even though the cheater clearly intended to cheat and had no remorse in doing so (Condon & DeSteno, 2011).

Extant research has revealed a negative relationship between empathy and loneliness in both younger and older adults (Beadle, Brown, Keady, Tranel, & Paradiso, 2012; Margalit & Ronen, 1993; Marshall, Champagne, Brown, & Miller, 1998). Davis (1983) shows that lonely people have less empathy, which explains their reduced accuracy in perceiving the thoughts and feelings of others, because lonely people lack the ability to accurately detect others' thoughts and intentions in the social context. The negative correlation between loneliness and empathy (Beadle, et al., 2012; Margalit & Ronen, 1993; Marshall, et al., 1998) suggests that lonely people have lower levels of empathy than non-lonely people. If that were the case, the previously found effect of empathy on moral identity should be moderated by consumers' felt loneliness. Because socially-connected people already have high levels of empathy, an additional increase in empathy will not lead to higher levels of moral identity any more. On the other hand, a boost in empathy among the lonely consumers could potentially lead to higher moral identity.

Hence we predict that loneliness moderates the effect of empathy on moral identity. Specifically, when lonely people experience a higher level of empathy, they should have increased moral identity and be more likely to engage in moral behaviors. However, such effect of empathy on moral identity and moral behaviors should be much less pronounced for non-lonely people.

We present five studies to test our hypotheses that loneliness moderates the effect of empathy on moral identity. Study 1 (N=167) employed a 2 (loneliness: lonely vs. non-lonely) by empathy (continuous) between-subjects design. Participants in the lonely (*non-lonely*) condition wrote a story about a time they felt very lonely (*connected*). They then completed the empathy scale (Davis, 1980) and the moral identity scale (Aquino & Reed, 2002). As predicted, we found a significant interaction between loneliness and empathy ($b = .06, p < .01$), such that when participants were asked to write a lonely story, they had a higher moral identity when the empathy was high than low ($b = .17, p < .001$). When participants wrote a non-lonely story, empathy had a much less pronounced (though still significant) effect on moral identity ($b = .06, p = .01$). In study 2, we manipulated loneliness and empathy independently and replicated

the results of study 1. In study 3, we manipulated loneliness and measured empathy. We also added consumer ethics scale (Muncy & Vitell, 1992) as an additional dependent variable. We show that when participants were temporarily induced to feel lonely, those with high (vs. low) empathy had higher moral identity and were more likely to engage in ethical consumer behaviors. Whereas empathy also increased moral identity among non-lonely participants in this study, it did not affect their ethical consumer behaviors. In study 4, we manipulated loneliness and empathy independently and allowed participants to engage in real immoral behaviors (Amaral and Meyers-Levy, 2013). Again, we replicated the results of previous studies. In study 5, we measured loneliness, manipulated empathy, and gave participants an opportunity to cheat (Mazar, Amir, & Ariely, 2008). Our results showed that when participants were lonely, those in the high empathy condition cheated less than those in the low empathy condition. However, when participants were not lonely, there was no significant difference between the two empathy conditions.

Results across five studies provide strong and converging evidence that loneliness moderates the effect of empathy on moral behavior. We have demonstrated the same results with different operationalizations of moral identity (e.g., measured moral identity, measured consumer moral ethics, and tasks involving real moral behaviors). Our research integrates three substantial areas of literature and establishes connections among loneliness, empathy, and consumer moral identity.

REFERENCES

- Alloy, Lauren B, Caroline M. Clements, and Linda J. Koenig (1993), "Perceptions of control: Determinants and mechanisms," In Weary, Gifford, Faith Gleicher and Kerry L Marsh (Eds), *Control Motivation And Social Cognition*, 1st ed., New York, NY: Springer New York.
- Amaral, Nelson and Joan Meyers-Levy (2013), "The Effect of Construal Level on Consumers' Anticipated and Actual Ethical Behavior," In *Advances in Consumer Research* (Vol. 41). Chicago, IL: Association for Consumer Research.
- Austin, Adriana G. (1989), "Becoming Immune to LONELINESS Helping the Elderly Fill a Void," *Journal of Gerontological Nursing*, 15(9), 25-28.
- Aquino, Karl, Brent McFerran, and Marjorie Laven (2011), "Moral identity and the experience of moral elevation in response to acts of uncommon goodness," *Journal of Personality and Social Psychology*, 100, 703.
- Aquino, Karl and Americus Reed II (2002), "The self-importance of moral identity," *Journal of Personality and Social Psychology*, 83, 1423-1440.
- Batson, Daniel C. and Laura L. Shaw (1991), "Evidence for altruism: Toward a pluralism of prosocial motives," *Psychological Inquiry*, 2, 107-122.
- Baumeister, Roy F., Nathan C. DeWall, Natalie J. Ciarocco, and Jean M. Twenge (2005), "Social Exclusion Impairs Self-Regulation," *Journal of Personality and Social Psychology*, 88 (4), 589-604
- Baumeister, Roy F., Nathan C. DeWall, Nicole L. Mead, and Kathleen D. Vohs (2008), "Social rejection can reduce pain and increase spending: Further evidence that money, pain, and belongingness are interrelated," *Psychological Inquiry*, 19, 145-147.
- Baumeister, Roy F. and Mark R. Leary (1995), "The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation," *Psychological Bulletin*, 117 (3), 497-529.
- Baumeister, Roy F, Jean M. Twenge, and Christopher K. Nuss (2002), "Effects of social exclusion on cognitive processes: anticipated aloneness reduces intelligent thought," *Journal of Personality and Social Psychology*, 83, 817.
- Beadle, Janelle N., Brian Keady, Vanessa Brown, Daniel Tranel, and Sergio Paradiso (2012), "Trait Empathy As A Predictor Of Individual Differences In Perceived Loneliness," *Psychological Reports*, 110, 3-15.
- Bronstein, Catalina (2014), "'I am not crying. I am rubbing my eyes': Annie and the Hollow Object," *Journal of Child Psychotherapy*, 40(2), 135-149.
- Cacioppo, John. T. and William Patrick (2008), "Loneliness: Human nature and the need for social connection," WW Norton & Company.
- Cameron, C. Daryl and Keith B. Payne (2012), "The Cost of Callousness Regulating Compassion Influences the Moral Self-Concept," *Psychological Science*, 23, 225-229.
- Cutright, Keisha. M. (2011), "Out of Control: *When and Why Consumers Yearn for Boundaries*," Unpublished doctoral thesis, Duke University, Durham, North Carolina.
- Cutright, Keisha. M. and Adriana Samper (2014), "Doing it the Hard Way: How Low Control Drives Preferences for High-Effort Products and Services," *Journal of Consumer Research*, 41 (3), 730-45.
- Davis, Mark. H. (1980), "A multidimensional approach to individual differences in empathy," Unpublished white paper.
- DeWall, Nathan C. and Roy F. Baumeister (2006). "Alone But Feeling No Pain: Effects of Social Exclusion on Physical Pain Tolerance and Pain Threshold, Affective Forecasting, and Interpersonal Empathy," *Journal of Personality and Social Psychology*, 91 (July), 1-15.
- Duclos, Rod., Echo Wen Wan, and Yuwei Jiang (2013), "Show Me the Honey! Effects of Social Exclusion on Financial Risk Taking," *Journal of Consumer Research*, 40 (1), 122-35.
- Fay, Scott. and Jinhong Xie (2008), "Probabilistic Goods: A Creative Way of Selling Products and Services," *Marketing Science*, 27 (4), 674-90.
- (2010), "The Economics of Buyer Uncertainty: Advance Selling vs. Probabilistic Selling," *Marketing Science*, 29 (6), 1040-57.
- (2015), "Timing of Product Allocation: Using Probabilistic Selling to Enhance Inventory Management," *Management Science*, 61 (2), 474-84.
- Geissler, Gary. L., George M. Zinkhan, and Richard T. Watson (2006), "The Influence of Home Page Complexity on Consumer Attention, Attitudes, and Purchase Intent," *Journal of Advertising*, 35 (2), 69-80.
- Gross, Elisheva F. (2004), "Adolescent Internet use: What we expect, what teens report," *Journal of Applied Developmental Psychology*, 25, 633-649.
- Hawkey, Louise. C., and John T. Cacioppo (2010). "Loneliness matters: a theoretical and empirical review of consequences and mechanisms," *Annals of Behavioral Medicine*, 40, 218-227.
- Hazell, Clive G. (1984), "Experienced Levels of Emptiness and Existential Concern with Different Levels of Emotional Development and Profile of Values," *Psychological Reports*, 55 (December), 967-76.

- Kay, Aaron C., Danielle Gaucher, Jamie L. Napier, Mitchell J. Callan, and Kristin Laurin (2008), "God and the Government: Testing a Compensatory Control Mechanism for the Support of External Systems," *Journal of Personality and Social Psychology*, 95 (1), 18–35.
- Kay, Aaron C., David A. Moscovitch, and Kristin Laurin (2010), "Randomness, Attributions of Arousal, and Belief in God," *Psychological Science*, 21 (2), 216–18.
- Krishna, Aradhna and Norbert Schwarz (2014), "Sensory marketing, embodiment, and grounded cognition: A review and introduction," *Journal of Consumer Psychology*, 24(2), 159-168.
- Kim, JeeHye C., Monica Wadhwa, and Amitava Chattopadhyay (2015), "Too Busy to Lose Control: Impact of Busyness on Indulgent Consumption Behaviors," in *NA-Advances in Consumer Research*, Vol. 43, ed. Kristin Diehl and Carolyn Yoon, Duluth, MN: Association for Consumer Research, 147-51.
- Lee, Saerom., Karen P. Winterich, and William T. Ross, Jr. (2014), "I'm Moral, But I Won't Help You: The Distinct Roles of Empathy and Justice in Donations," *Journal of Consumer Research*, Forthcoming.
- Margalit, Malka and Tommie Ronen (1993), "Loneliness and social competence among preadolescents and adolescents with mild mental retardation," *Mental Handicap Research*, 6, 97-111.
- Marshall, W. L., Frances Champagne, Christine Brown, and Sarah Miller (1998), "Empathy, intimacy, loneliness, and self-esteem in nonfamilial child molesters: A brief report," *Journal of Child Sexual Abuse*, 6, 87-98.
- Maner, Jon K., Nathan C. DeWall, Roy F. Baumeister, and Mark Schaller (2007), "Does Social Exclusion Motivate Interpersonal Reconnection? Resolving the 'Porcupine Problem.'," *Journal of Personality and Social Psychology*, 92 (1), 42-55.
- Mazar, Nina., On Amir, and Dan Ariely (2008), "The dishonesty of honest people: A theory of self-concept maintenance," *Journal of Marketing Research*, 45, 633-644.
- Mead, Nicole L., Roy F. Baumeister, Tyler F. Stillman, Catherine D. Rawn, and Kathleen D. Vohs (2011), "Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation," *Journal of Consumer Research*, 37 (5), 902–19.
- Morrison, Bruce J. and Marvin J. Dainoff (1972), "Advertisement Complexity and Looking Time," *Journal of Marketing Research*, 9 (November), 396-400.
- Muncy, James A., and Scott J. Vitell (1992), "Consumer ethics: An investigation of the ethical beliefs of the final consumer," *Journal of Business Research*, 24, 297-311.
- Pfundmair, Michaela, Verena Graupmann, Dieter Frey, and Nilüfer Aydin (2015), "The Different Behavioral Intentions of Collectivists and Individualists in Response to Social Exclusion," *Personality and Social Psychology Bulletin*, 41 (3), 363–78.
- Poreh, Amir. M., David Rawlings, Gordon Claridge, Justine L. Freeman, Catherine Faulkner, and Clare Shelton (2006), "The BPQ: A Scale for the Assessment of Borderline Personality Based on DSM-IV Criteria," *Journal of Personality Disorders*, 20 (3), 247-60.
- Rosenholtz, Ruth, Yuanzhen Li, and Lisa Nakano (2007), "Measuring Visual Clutter," *Journal of Vision*, 7 (August), 1-22.
- Russell, Dan (1996), "The UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure," *Journal of Personality Assessment*, 66 (1), 20-40.
- Schulenberg, Stefan E., Lindsay W. Schnetzer, Michael R. Winters, and Robert R. Hutzell (2010), "Meaning-Centered Couples Therapy: Logotherapy and Intimate Relationships," *Journal of Contemporary Psychotherapy*, 40(2), 95-102.
- Sedikides, Constantine and Marilyn M. Brewer (2001), "Individual, relational, and collective self: partners, opponents, or strangers?," In C. Sedikides & M. B. Brewer (Eds.). *Individual self, relational self, collective self* (pp. 1–4). Philadelphia: Psychology.
- Sinha, Jayati and Jing Wang (2013), "How Time Horizon Perceptions and Relationship Deficits Affect Impulsive Consumption," *Journal of Marketing Research*, 50, 590-605.
- Stern, Paul C., Thomas Dietz, Troy Abel, Gregory A. Guagnano, and Linda Kalof (1999), "A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism," *Human Ecology Review*, 6 (2), 81-97.
- Su, Lei, Yuwei Jiang, Zhansheng Chen, and Nathan C. DeWall (2017), "Social exclusion and consumer switching behavior: A control restoration mechanism," *Journal of Consumer Research*, Forthcoming.
- Twenge, Jean M., Roy F. Baumeister, Nathan C. DeWall, Natalie J. Ciarocco, and Michael J. Bartels (2007), "Social exclusion decreases prosocial behavior," *Journal of Personality and Social Psychology*, 92, 56-66.
- Twenge, Jean M., Roy F. Baumeister, Dianne M. Tice, and Tanja S. Stucke (2001), "If You Can't Join Them, Beat Them: Effects of Social Exclusion on Aggressive Behavior," *Journal of Personality and Social Psychology*, 81 (December), 1058-69.
- Wan, Echo W., Jing Xu, and Ying Ding (2014), "To be or not to be unique? The effect of social exclusion on consumer choice," *Journal of Consumer Research*, 40(6), 1109-1122.
- Wang, Jing, Rui Zhu, and Baba Shiv (2012), "The Lonely Consumer: Loner or Conformer?," *Journal of Consumer Research*, 38, 1116-1128.
- Warburton, Wayne A. and Kipling D. Williams (2005), "When competing motivations collide. Social motivation: Conscious and unconscious processes," 294-313.
- Williams, Kipling D. (2001), "Ostracism: The Power of Silence," New York: Guilford.
- (2007), "Ostracism," *Annual Review of Psychology*, 58 (1), 425–52.
- Williams, Kipling D., Christopher K. Cheung, and Wilma Choi (2000), "Cyberostracism: Effects of Being Ignored over the Internet," *Journal of Personality and Social Psychology*, 79 (November), 748-62.

Challenging Intuitions on Intuitive Statistics

Chairs: Quentin André, INSEAD Europe Campus, France
Nicholas Reinholtz, University of Colorado Boulder, USA
Bart de Langhe, University of Colorado Boulder, USA

Paper #1: High Chances and Close Margins: How Different Forecast Formats Shape Beliefs

Oleg Urminsky, University of Chicago, USA
Sondre Skarsten, University of Chicago, USA
Luxi Shen, The Chinese University of Hong-Kong, China

Paper #2: It's Absolutely Relative: On the Processing of Absolute and Relative Differences

Dan R. Schley, Erasmus University, The Netherlands

Paper #3: Variance Spillover in Intuitive Statistical Judgments

Quentin André, INSEAD Europe Campus, France
Nicholas Reinholtz, University of Colorado-Boulder, USA
Bart de Langhe, Ramon Llull University, Spain

Paper #4: Combining Estimates of Epistemic and Aleatory Uncertainty to Reduce Overprecision

Daniel G. Goldstein, Microsoft Research, USA
David Rothschild, Microsoft Research, USA

SESSION OVERVIEW

Product prices, consumer report ratings, weather forecasts, or polls are only a few examples of the quantity and diversity of numerical information to which consumers are exposed to every day. In the last decade, the advent of data-driven marketing has generated a renewed interest in consumers' ability to navigate this complexity, and has rejuvenated an old debate between two perspectives.

A first perspective views the "man as an intuitive statistician". To them, probability theory and statistics are both a codification of individual's way of reasoning and a norm against which decisions and inferences can be judged (Peterson and Beach 1967). As such, they have advocated for people's ability to process numerical information to make better decisions. Other researchers have argued that people are "cognitive misers", who rely on heuristics that typically but not always provide correct answers (Kahneman and Tversky 1974). This perspective has encouraged sustained research efforts to uncover the many biases limiting people's ability to use numerical information.

The four papers presented in the session is taking a balanced stance, and highlight instances of accurate and biased intuitive statistics. In the first paper, **Urminsky, Skarsten, and Shen** documented a novel bias in statistical reasoning, and show that people judge a prediction to be more extreme when it is expressed as a chance forecast (chance of winning over opponent) than when it is expressed as a margin forecast (vote share margin over opponent). In the second paper, **Schley** investigates whether consumers are better at processing relative price differences (e.g. 10% off) versus absolute price differences (e.g. \$10 off). In the third paper, **André, Reinholtz, and de Langhe** show that if consumers can simultaneously learn the central tendencies of several distributions of prices, they cannot do so for the dispersion of prices. Finally, **Goldstein and Rothschild** discuss in a fourth paper the underlying causes of "the most significant of cognitive biases": overprecision (Kahneman, 2011).

We believe that this session provides a coverage of important questions, and that the research projects presented have significant implications for theory and practice. From a scholarly perspective first, as it is bringing together researchers with various training and therefore provides a nuanced view of consumers' abilities and

shortcomings in the processing of numerical information. From a methodological perspective second, as the papers are interrogating the appropriateness of certain elicitation techniques, and relying on state-of-the-art methods to collect and analyze consumers' perceptions (e.g. distribution builders, hierarchical Bayesian modeling). From a managerial perspective, finally, as our findings are not limited to identifying sources of errors, but also offer potential remedies and debiasing techniques.

For those reasons, we believe that the projects presented form a cohesive and important session, which should appeal to a large audience. Researchers who are themselves studying intuitive statistics first and foremost, but also researchers working on issues as diverse as pricing, consumer financial decision making, cognition, or decision under risk and uncertainty, would be interested in joining us to discuss the present and future of this stream of research.

High Chances and Close Margins: How Different Forecast Formats Shape Beliefs

EXTENDED ABSTRACT

Forecasts, for consumers and marketers alike, are a key tool for making sense of the future. While a large literature has studied how people make forecasts, and their accuracy under different circumstances, less is known about how lay people process and interpret forecasts. However, research on failures in normative statistical reasoning (Jones and Love 2011, Peters et al 2006, Tversky and Kahneman 1971, Urminsky 2016) suggests that people may not understand the uncertainty conveyed in forecasts in a statistically optimal way.

In this research, we contrast two common ways of communicating an uncertain forecast, either as a chance (e.g., the probability of winning a game) or as an expected margin (e.g., the point spread or predicted amount by which a game would be won). We find a robust chance-margin discrepancy, in which people tend to treat a chance forecast as conveying greater certainty about the directional outcome than the statistically equivalent margin forecast. This discrepancy is not explained by other accounts, such as anchoring or neglect of information, and has consequences for subsequent judgments.

Across five experiments, we tested this chance-margin discrepancy in voting, sports and statistical reasoning and with various judgment and decision variables. In Study 1 (N=126), we use forecasts from fivethirtyeight.com about the 2016 Presidential election, which were updated regularly based on aggregating public election polls, and which were communicated both in terms of the chances of each major candidate winning the election, as well as the expected vote margin. Participants were either presented with the site's forecast for chances and estimated the margin forecasts, or saw the margin forecasts and estimated the chance forecasts. When participants were shown the chance forecast (86.4% chance of Clinton winning) they over-estimated the forecast margin (64.7% vs. 54.2%, $t=3.87$, $p<.001$). Conversely, participants who were shown the margin forecast (54.2%) underestimated the chance forecast (62.8% vs. 86.4%, $t=11.46$, $p<.001$). This pattern was replicated in each of five other such studies conducted during the pre-election period, as the outcome forecasts varied (all $ps <.001$).

In Study 2 (N=143), we ruled out pre-existing beliefs and inattention to the forecasts as alternative explanations. Participants

It's Absolutely Relative: On the Processing of Absolute and Relative Differences

EXTENDED ABSTRACT

Consider a consumer deciding between a 40 inch TV and a 50 inch TV. When evaluating the difference in screen size the consumer can consider the absolute (i.e., 10 inches) or the relative (i.e., 25% larger) difference. Predominant decision theories assume that the marginal utility/value for additional inches of TV is a function of the absolute differences in size (Kahneman and Tversky 1979; von Neumann and Morgenstern 1947).

Although absolute and relative dimensions both reflect differences, they are not perfectly correlated, and consumers can as such use either or both dimensions when making decisions. For instance, prior research on proportion dominance has demonstrated sensitivity to relative differences. In the iconic jacket-calculator problem, 68% of participants were willing to drive 20 minutes to save \$5 on a \$15 calculator, but only 29% were willing to drive to save \$5 on a \$125 jacket (Tversky and Kahneman 1981).

The observation that consumers are sensitive to both absolute and relative differences is well documented (Krishna et al. 2002; Choi and Coulter 2009); however, disagreement exists regarding their respective influence. Within marketing and related literature, researchers have argued that processing relative differences is easier and more natural than processing absolute differences (Saini and Thota 2010; Azar 2007; Dehaene 2011; Choi and Coulter 2009). This line of reasoning suggests that when making decisions, consumer perceptions are informed by their Approximate Number System (ANS), the set of cognitive features that allow consumers to discriminate visual quantities (e.g., smaller vs. larger sets of dots). This system supposes that the mind only possesses a natural ability to process relative differences, and that representations of absolute differences must be constructed on the spot using this ANS. This system is what gives psychophysical functions their particular concave shapes (for a review see Dehaene 2011).

For consumer decisions that involve number-based judgments (e.g., was \$100 now \$90), researchers have made the opposite prediction, and suggested that processing relative differences is more cognitively taxing than processing absolute differences (Kruger and Vargas 2008; Chen and Rao 2007; Bettman, Johnson and Payne 1990). They argue that to understand that a sale price of \$90 is 10% off of an original \$100 price, the consumer has to first process the absolute difference (\$10) then divide by the base price (\$100). As such, the absolute difference is a necessary precondition for processing relative differences.

The current research aims to test the predictions of these two accounts and identify the cognitive antecedents of these two modes of processing. Whereas past research has studied these differences at the group level, the current research introduces a within-participant paradigm to assess the use of relative and absolute differences in different settings. In study 1, 301 participants were presented price promotions with relative (5%, 10%, 15%, 20%, 25% off) and absolute (\$5, \$10, \$15, \$20, \$25 off) discounts manipulated orthogonally.

For each level of prices promotion, participants indicated the furthest they would be willing to drive (WTD), in miles, to receive that particular promotion. To assess the influence of relative and absolute differences, data were analyzed using a Bayesian hierarchical linear model (HLM), allowing for the estimation of sensitivities to relative and absolute differences for each participant.

In study 1, participants were randomly assigned to either the control ("was \$A now \$B"), %-off ("was \$A now \$B, X% off"), or \$-off conditions ("was \$A now \$B, \$Y off"). Our results indicate that

saw either chance or share forecasts for the election in four unspecified states. We replicated over-estimation of share forecasts when shown chance forecasts and under-estimation of chance forecasts when shown share forecasts in each state. Furthermore, participant estimates were sensitive to the state-specific forecast information. In a follow-up study, we further address an anchoring account, by demonstrating that estimates based on forecasts were significantly different from (and less accurate than) estimates based on equivalent non-forecast anchors.

In Study 3 (N=220), we tested the discrepancy between beliefs based on chance forecasts and margin forecasts in a new domain. First, we used a similar design with forecasts of football game outcomes, both for forecasted chance of winning and margin of winning (e.g., point spread). Participants who were shown the point-spread significantly under-estimated the forecasted chance of winning (62% vs. 71%, $t=8.4$, $p<.001$). Participants who were shown the chances of winning only directionally over-estimated the point-spread (6.7 vs. 6.5, $t=1.31$, $p=.19$).

Study 4 (N=398) tested the effects of forecast framing using objective statistical information, and identified an important boundary condition. We presented participants with a statistical scenario involving a more or less informative sample of colored marbles drawn from one of two jars, for which we could calculate the objectively correct answers. When the sample was larger (and therefore more informative) participants shown the margin in the sample under-estimated the chance of the marbles coming from the more likely jar (60.7% vs. 78%, $t=15.1$, $p<.001$). Conversely, participants told the chances of the sample coming from the more likely jar overestimated the corresponding proportion in the sample (66.3% vs. 60%, $t=6.57$, $p<.001$). However, when the sample was small (and therefore less informative), both share and chance information yielded underestimation.

In the last study, we tested the consequences of forecast framing. In Study 5 (N=198), participants were shown the change over the prior ten days in fivethirtyeight.com's forecasts, either in terms of chances (from 85% Clinton/15% Trump to 69% Clinton/31% Trump) or in terms of margin (from 53% Clinton/47% Trump to 52% Clinton/48% Trump). Participants then answered several questions about their perceptions of the election, support for the candidates and behavioral intentions.

Participants who saw the change in chance forecasts (vs. change in margin forecasts) gave more extreme assessments of the change in the election ($t=3.25$, $p=.001$). Participants were more likely to judge the change in chance forecasts as "very good news" or "very bad news" (45%) than the equivalent change in margin forecasts (25.5%). The degree to which participants were worried about the election was unaffected. Participants' own intention to vote was high (77% "very likely") and unaffected by the forecast format. However, participants who were shown the change in chance forecasts were significantly more likely to say they would remind a friend or neighbor to vote (50% vs. 31.6% "very likely", $M=3.8$ vs. 3.2 , $t=2.71$, $p=.007$).

Overall, our results demonstrate that forecasts are seen as more extreme when framed as predicting chances rather than as predicting margins, even when the two formats are used to communicate equivalent information. Given that forecasts are often communicated in only one format, these findings suggest that the supposedly irrelevant choice of format for a forecast can have a remarkably meaningful impact on the interpretation of the forecast and even change one's attitude and behavioral intention.

participants in the control condition were more sensitive to absolute differences than relative differences ($b_{\text{absolute}} = 0.042$ vs. $b_{\text{relative}} = 0.009$, $p < .0001$). In the \$-off condition, the use of absolute (relative) differences increased (decreased) ($b_{\text{absolute}} = 0.050$ and $b_{\text{relative}} = 0.006$) compared to the control condition ($ps < .10$). This change was markedly larger in the %-off condition ($b_{\text{absolute}} = 0.030$ and $b_{\text{relative}} = 0.020$) compared to the control condition ($ps < .0001$), suggesting that participants are more prone to utilizing absolute differences, even when the relative-difference information is explicitly provided.

Results of study 1 also indicated strong negative correlations in the fixed ($rs = -.60$ to $-.34$) and random ($rs = -.47$ to $-.32$) effect parameters. Importantly these effects were asymmetric: while a greater reliance on absolute differences limits the use of relative differences, greater use of relative differences has a much larger attenuation effect on absolute-difference usage. This suggests that relative differences require fewer resources, and can thus be used while processing absolute differences. On the other hand, absolute differences are more cognitively taxing and prevent the use of relative differences. Taken together, those results can explain the conflicting evidence regarding absolute and relative differences: the within-participant-level analysis indicates that while relative-difference processing is indeed more automatic than absolute-difference processing, consumers utilize absolute differences despite its more laborious processing.

To ensure generalizability, studies 2a ($N=300$) and 2b ($N=299$) replicated the findings of study 1 using product attributes instead of prices (study 2a) and by only manipulating relative or absolute differences (study 2b). Similar results were found. In study 3, we investigated whether our findings would hold true when assessing visual quantities. Results suggest that visually-expressed quantities are more easily processed by relative differences compared to numeric quantities. Furthermore, consistent with study 1, processing of relative differences inhibited processing of absolute differences, but not the other way around.

A fourth study on 202 participants replicated the conditions from study 1, with the critical difference that the final price was omitted in the %-off and the \$-off conditions, so that the participants would have to compute it themselves. Opposite of study 1, results indicated a greater use of relative differences than absolute differences in both the %-off ($b_{\text{absolute}} = 0.015$ and $b_{\text{relative}} = 0.029$) and \$-off ($b_{\text{absolute}} = 0.020$ and $b_{\text{relative}} = 0.031$) conditions, $ps < .01$. Additionally, contrary to the previous studies, processing absolute differences inhibited relative-information processing and not the other way around. Taken together, results of studies 1-3 suggest that consistent with the numerical cognition argument, relative-information processing is more efficient, but consumers appear to utilize a different mode of processing quantitative differences when they must calculate the differences themselves (study 4).

Variance Spillover in Intuitive Statistical Judgments

EXTENDED ABSTRACT

For more than 50 years, researchers have been studying the intuitive statistical capabilities of humans (Peterson and Beach 1967). While some consensus has emerged, many unresolved questions remain. In this project, we address one of these questions, which has important marketing implications: Can consumers accurately encode and represent the distributional properties of multiple numerical distributions? Consumers frequently encounter numerical information (prices, qualities, quantities, etc.) and—to make optimal decisions—must remember and use this information. For example, when considering whether to buy a new computer, a consumer must assess the relative likelihood of finding a comparable computer at a better

price with continued search. The solution to this problem relies on the variance of computer prices on the market (and the consumer's search cost). Importantly, consumers make many decisions of this nature each year and thus—to make optimal decisions—must maintain mental representations of different price (and other numerical) distributions simultaneously.

When presented with a distribution of numerical values, previous investigations suggest that people are surprisingly accurate when making judgments about central tendency (e.g., the mean or median; Beach and Swensson 1966, Peterson and Miller 1964). However, there is less consensus regarding people's ability to judge dispersion (e.g., variance). People seem biased towards using absolute, rather than squared deviation, when judging variance (Beach and Scopp 1968, Goldstein and Taleb 2007). Further, people seem to conflate differences in coefficient of variation (variance divided by mean) with differences in variance (Hofstatter 1939, Lathrop 1967). Some recent research, however, is more optimistic. Goldstein and Rothschild (2014) found that people could reproduce distributions accurately from memory using a "distribution-builder", in which they can "draw" the distribution. This research suggests that people's mental representations of variance may be accurate and that previously identified biases may stem from the elicitation methods used.

The current investigation extends previous work to contexts in which people must learn about multiple numerical distributions at the same time: in the present research, distribution of prices for two different products. We believe this extension is particularly important for understanding consumer decision making. Consumers tend to learn about products over time through infrequent exposures to information and these exposures are often interspersed with exposures to information about other, different products. For example, you probably don't know the exact price of a banana at your local supermarket, but you probably have a pretty good idea, and could probably identify whether the current price is a good deal or a bad deal. However, you have probably never directed any real attention to learning about the price of bananas; instead, you've been exposed to banana prices irregularly and infrequently. And in the interim, you have seen prices for many other products (apples, cereal boxes...). In our research, we ask how accurately can people learn about numerical distributions in this type of context, and contribute to the literature on internal reference price formation (Mazumdar, Raj, and Sinha 2005).

In three studies, we presented people with a sample of prices for two different products (e.g., red wine and white wine, within the products there was no differentiation other than price). Prices were displayed one-at-a-time, for several seconds each, over-imposed on a picture of the target product. Prices for the two products were intermixed. After seeing all of the prices, participants were asked to reproduce the price distributions for each product individually (i.e., a separate distribution for each product) using a distribution builder tool (André 2016; Goldstein and Rothschild 2014). We then assessed the accuracy of these expressed distributions with respect to the actual distributions the participants had seen.

In study 1, we examined participants ability to simultaneously learn the central tendency of two different price distributions: prices of red wine and prices of white wine. Within each product category, the variance of prices was held constant ($SD = \$6$), but the mean price of each category varied between participants. The mean price for one product category was \$25 in all conditions (the focal product), but we varied whether the mean price of the other category was either \$10 higher, \$10 lower, or the same (the distractor product). This design allowed us to determine whether prices from the distractor distribution influence the estimate of central tendency from the

focal distribution. Our analysis suggests they do not: The means of the (reproduced) focal distribution were not different between conditions and, further, were not different than the true mean (\$25).

In studies 2 and 3, we instead examined participants ability to simultaneously learn the variance of two different price distributions. In study 2, we used a 2 x 2 between-participant design. In all conditions, the mean price of one product (e.g., red wine) was \$23 and the mean price of the other product (e.g., white wine) was \$28 (products were counterbalanced). We cross-manipulated the variances of the price distributions, such that each product was either high (SD = \$9) or low (SD = \$3). This design allowed us to test for “variance spillover”: whether participants’ impression of variance in prices for one category was influenced by the variance in prices for the other category. Our analysis suggests this is indeed the case: variances estimates were influenced by the true variance of the focal distribution, but also of the non-focal distribution. For example, when the true variance of the red wine price distribution was high, participants underestimated this variance when the variance of the white wine price distribution was low (vs. high).

In study 3, we examined a potential moderator of the variance spillover effect. This study largely reproduced study 2, but included an additional factor: whether the product categories were similar (red wine vs. white wine) or dissimilar (red wine vs. smartphone cases). We found that the variance spillover effect was attenuated, but not eliminated when the products were dissimilar. This suggests that categorization processes may underlie the observed result. In fact, the contamination of variance estimates may be adaptive from a Bayesian perspective—you can learn about the likely dispersion of one category by observing another similar category.

Combining Estimates of Epistemic and Aleatory Uncertainty to Reduce Overprecision

EXTENDED ABSTRACT

Overprecision, or excessive confidence that one knows the truth, is considered the most robust form of overconfidence (Moore, Tenney, Haran, 2016), and has been called “the most significant of the cognitive biases” (Kahneman, 2011). It is typically studied with the confidence-interval paradigm, in which people are asked to state two numbers that should bracket the true realization of an outcome with a given probability. Many prior demonstrations of overprecision show that people are miscalibrated: for example, stated 80% confidence intervals tend to contain the correct answers much less than 80% of the time.

Let us consider a person asked to construct a confidence interval for the price of gas at a given station in the USA. This person will face two sources of uncertainty. The first source is its epistemic uncertainty, which is tied to its ability to generate an accurate estimate about the average price of gas in the USA. Second, even if this person knew the average price of gas in the USA with absolute confidence, there would still remain some uncertainty about the price at this given station. This second type of uncertainty, called aleatory uncertainty, is tied to the standard deviation of the outcome: here, the typical amount by which a station deviates from the true average.

In the present research, we investigate the link between consumers’ perception of aleatory uncertainty, epistemic uncertainty, and overall uncertainty. In particular, we seek to uncover the sources of overprecision: is it a consequence of consumers’ inability to generate accurate estimates for aleatory and/or epistemic uncertainty? Or does it reflect a failure to incorporate both types of uncertainty when generating confidence intervals?

We develop a paradigm in which we ask people for three different kinds of confidence intervals. First, as done in past research on overprecision, we ask the standard confidence interval of what a particular outcome will be (such as the price of gas at a particular gas station, or the temperature on some future date in a particular city). Second, we ask participants to generate a measure of aleatory uncertainty, by asking them how much that value varies around the average (for example how much the price of gas around the country varies around the mean or how much the temperature in a particular city on a given day varies from year to year). Finally, we ask respondents to generate a measure of epistemic uncertainty, by asking them how far their estimate of the average is likely to be from the true average. Since the standard confidence interval should reflect both epistemic and aleatory, there is a direct theoretical relationship between first value (the standard confidence interval for the value), and the second and third values (variation around the true average and uncertainty in the location of the true average). As such, this paradigm allows us to investigate consumers’ accuracy in estimating aleatory and epistemic uncertainty, and their ability to combine both estimates into a single measure of confidence.

We observe, in line with previous research (e.g., Moore, Tenney, Haran, 2016), that people consistently create too-narrow confidence intervals: elicited 80% intervals contained the correct answer less than 80% of the time. We also document several important findings. First of all, we find that people have reasonable estimates of both aleatory uncertainty in the world and epistemic uncertainty in their minds. Second, the stated confidence intervals exhibit a strong correlation with the participants’ estimate of epistemic uncertainty, but a weak or null correlation with aleatory uncertainty. Those two effects are robust to the order of questions: if participants are asked to generate their measures of aleatory and epistemic uncertainty first, this does not make them incorporate both types of uncertainty into their predictions. In other words, consumers do not learn from the order of questions. However, we show that a procedure that combines peoples’ estimates of aleatory and epistemic uncertainty into a single estimate of confidence yield better-calibrated confidence intervals. The findings above are replicated in several consumer domains (such as estimates of prices and quality) as well as in general knowledge domains.

Our findings suggest that although people possess the ability to generate reasonably accurate estimates for both kinds of uncertainty, they do not incorporate aleatory uncertainty when asked to generate a confidence interval, they do possess the ability to do so with reasonable accuracy. This “aleatory uncertainty neglect” has significant implication for theory, as it suggests a strong causal mechanism for consumers’ overprecision. Furthermore, well-calibrated intervals can be obtained by mechanically combining separate estimates of two kinds of uncertainty. This result has implications the design of decision aids for consumers, and survey tools for pollsters and marketing researchers who wish to elicit well-calibrated confidence intervals.

REFERENCES

- André, Quentin (2016), DistributionBuilder (Version 1.0.0) [Computer Software].
- Azar, Ofer H. (2007), «Relative thinking theory,» *The Journal of Socio-Economics*, 36, (February), 1-14.
- Beach, Lee Roy and Richard G. Swenson (1966), “Intuitive estimation of means,” *Psychonomic Science*, 5 (4), 161–62.
- Beach, Lee Roy and Thomas S. Scopp (1968), “Intuitive statistical inferences about variances,” *Organizational Behavior and Human Performance*, 3 (2), 109–23.

- Bettman, James R., Eric J. Johnson, and John W. Payne (1990), "A componential analysis of cognitive effort in choice," *Organizational Behavior and Human Decision Processes*, 45 (February), 111-39.
- Choi, Pilsik and Keith S. Coulter (2012), "It's not all Relative: The Effects of Mental and Physical Comparative Prices on Absolute versus Relative Discounts," *Journal of Retailing*, 88 (4), 512-527.
- Dehaene, Stanislas (2011), *The Number Sense*, New York: Oxford.
- Goldstein, Daniel G. and David Rothschild (2014), "Lay understanding of probability distributions," *Judgment and Decision Making*, 9 (1), 1.
- Goldstein, Daniel G. and Nassim Nicholas Taleb (2007), "We Don't Quite Know What We Are Talking About," *The Journal of Portfolio Management*, 33 (4), 84-86.
- Hofstätter, Peter R. (1939), *Über die Schätzung von Gruppeneigenschaften*, Barth.
- Jones, M., & Love, B. C. (2011). "Bayesian fundamentalism or enlightenment? On the explanatory status and theoretical contributions of Bayesian models of cognition," *Behavioral and Brain Sciences*, 34(04), 169-188.
- Kahneman, Daniel (2011), *Thinking, fast and slow*, Macmillan.
- Kahneman, Daniel, and Amos Tversky (1979), "Prospect theory: An analysis of decision under risk," *Econometrica*, 47(March), 263-91.
- Kahneman, Daniel and Amos Tversky (1984), "Choices, values, and frames.," *American psychologist*, 39 (4), 341.
- Krishna, Aradhna, Richard Briesch, Donald R. Lehman, and Hong Yuan (2002), "A Meta-Analysis of the Impact of Price Presentation on Perceived Savings," *Journal of Retailing*, 78 (Summer), 101-18.
- Kruger, Justin, and Patrick Vargas (2008), "Consumer confusion of percent differences," *Journal of Consumer Psychology*, 18 (January), 49-61.
- Lathrop, Richard G. (1967), "Perceived variability.," *Journal of Experimental Psychology*, 73 (4p1), 498.
- Mazumdar, Tridib, S. P. Raj, and Indrajit Sinha (2005), "Reference price research: Review and propositions," *Journal of marketing*, 69 (4), 84-102.
- Moore, D. A., Tenney, E. R., & Haran, U. (2016). Overprecision in judgment. In G. Wu & G. Keren (Eds.), *Handbook of Judgment and Decision Making* (pp. 182-212). New York: Wiley.
- Peters, E., Västfjäll, D., Slovic, P., Mertz, C. K., Mazzocco, K., & Dickert, S. (2006). Numeracy and decision making. *Psychological science*, 17(5), 407-413.
- Peterson, Cameron R. and Lee R. Beach (1967), "Man as an intuitive statistician.," *Psychological bulletin*, 68 (1), 29.
- Peterson, Cameron and Alan Miller (1964), "Mode, median, and mean as optimal strategies," *Journal of Experimental Psychology*, 68 (4), 363-67.
- Saini, Ritesh, and Sweta C. Thota (2010), "The psychological underpinnings of relative thinking in price comparisons," *Journal of Consumer Psychology*, 20(April): 185-92.
- Tversky, A., & Kahneman, D. (1971). Belief in the law of small numbers. *Psychological bulletin*, 76(2), 105.
- Urminsky, O. (2016) Probability distributions of common repeated events are misestimated, Working paper
- Von Neumann, John, and Oskar Morgenstern, (1947), *Theory of games and economic behavior*. Princeton university press.

It's A Brave New World - The Consequences of Consumers' Self-Disclosure in Online Settings

Chairs: Francesca Valsesia, University of Southern California, USA
Kristin Diehl, University of Southern California, USA

Paper #1: See What I Did or See What I Have: Impression Management Using Experiences Versus Material Goods

Francesca Valsesia, University of Southern California, USA
Kristin Diehl, University of Southern California, USA

Paper #2: Temporary Sharing, Enduring Impressions: Self-Presentation in the Digital Age

Roland Ruppel, Università della Svizzera Italiana, Switzerland
Reto Hofstetter, Università della Svizzera Italiana, Switzerland
Leslie K. John, Harvard University, USA

Paper #3: Bragging through an Intermediary

Irene Scopelliti, City University London, UK
Joachim Vosgerau, Bocconi University, Italy
George Loewenstein, Carnegie Mellon University, USA

Paper #4: How Audience Engagement (in the Form of Likes vs. Comments) on Social Media Posts Influences Subsequent Self-Disclosure

Yuheng Hu, University of Illinois at Chicago, USA
David Gal, University of Illinois at Chicago, USA

SESSION OVERVIEW

People strategically disclose information about themselves as a mean of managing the impressions they make on others (Schlenker 1980, Berger 2014). The advent of social media such as Facebook, Instagram and Snapchat provided individuals not just with novel platforms but also novel practices to self-present easily and widely, using a range of topics and activities (e.g. purchases, trips, political opinions, etc.). Yet, many questions remain about the antecedents and consequences of these acts of self-disclosure. Connecting to well-established frameworks, this session explores the roles played by message, medium, senders and recipients in online self-presentation. Specifically, which type of personal information do consumers choose for self-presentation and which influences others' impressions the most? Which characteristics of the medium used for self-presentation play a significant role? For instance, does it matter whether the medium allows temporary (vs. permanent) sharing or whether the information is shared directly by the consumer or through an intermediary? Finally, how does feedback received to an act of self-disclosure influence subsequent self-disclosure decisions? The papers in this session address this set of related questions, with particular focus on information shared through social media platforms.

Valsesia and Diehl compare sharing information about one's material versus experiential purchases. They show that consumers strategically choose to share their experiential purchases when they want to make a favorable impression. This is a successful self-presentation strategy as those sharing experiential purchases are better liked, particularly in situations where individuals repeatedly share self-relevant content over time, as in the case of social media.

The next two papers address the role of the medium through which self-presentation occurs. **Ruppel, Hofstetter and John** ask whether temporary sharing using social media such as Snapchat influences what consumers choose to share and how it is perceived. They find temporary sharing causes people to take greater risks in their disclosures. This is driven by a dampening of privacy concerns

but can have negative consequences, as impressions based on indiscreet disclosures persist beyond the disclosure's temporary lifespan.

Scopelliti, Vosgerau and Loewenstein compare the effect of direct self-promotion to using an intermediary who delivers promotional content about a target individual. They show that promotional information elicits more positive and less negative emotions in recipients when disclosed by an intermediary (e.g. a friend, an agent) rather than oneself. Yet, while this practice enhances target perceptions it carries image costs for the intermediary.

Importantly, self-disclosure oftentimes involves feedback from others, which in social media takes the form of likes and comments. **Hu and Gal** examine how this feedback influences subsequent self-disclosure decisions. They find that the receipt of comments (vs. likes), particularly from distant others, reduces subsequent self-disclosure because comments are more likely perceived as a form of unwanted intimacy.

Taken together, these papers shed light on drivers and consequences of consumers' online self-presentation. All are at an advanced stage of completion with multiple studies completed. We expect this session to generate significant interest among researchers studying impression management, social influence and social judgment, as well as social media and word-of-mouth more broadly.

See What I Did or See What I Have: Impression Management Using Experiences Versus Material Goods

EXTENDED ABSTRACT

That people use material purchases to manage impressions is well established (e.g. Han et al 2010, Bellezza et al 2014, Warren & Campbell 2014, Griskevicius et al 2010). Experiential purchases, however, have not been examined as impression management tools, even though they play an important role in people's lives (e.g. Van Boven and Gilovich 2003). Prior work has not considered whether experiences can be used to manage impressions, likely because "on average, possessions are a more visible and more persistent signal" (Carter & Gilovich 2012 p. 1314).

However, there *do* exist various, common ways of making experiential purchases more observable and less ephemeral. For example, one may complement a fleeting, unobservable experiential purchase with a visible, lasting material purchase (e.g. buying a t-shirt at a concert and wearing it afterwards e.g. Goodman, Malkoc, Stephenson 2016). Further, with the advent of social media, making one's experiential purchases visible by posting about them online has become easy and prevalent (e.g. Barasch, Zauberger, and Diehl 2016).

Our research investigates the use of experiential purchases for impression management purposes. We show that consumers strategically use their experiential purchases to manage others' impressions of them because they consider experiential purchases to be better signals than material purchases. Moreover, we show that this is a successful strategy as those signaling with experiential purchases are indeed better liked compared to those using material purchases.

Four studies tackle our research goals. Study 1 is a field study testing the proposition that individuals trying to manage others' impressions favor using experiential over material purchases. During the first day of class, students were asked to write about a purchase that was important to them on a "Get to Know You" card. We varied

between sections whether they expected to read out their answers in front of the class (public) or not (private). Overall, students mentioned purchases that were more experiential than material in nature ($M=1.57$, $SD=2.92$, 95% CI [2.63, 3.27], $t(166)=6.98$, $p<.001$). Importantly though, and in line with our predictions, purchases in the public condition ($M_{Public}=2.02$, $SD=2.82$, 95% CI [1.42, 2.63]), were significantly more experiential than those in the private condition ($M_{Private}=1.11$, $SD=2.96$, 95% CI [0.46, 1.76], $F(1,165)=4.19$, $p=.042$, $\omega_p^2=.019$), presumably because the desire to make a favorable impression was particularly salient.

Study 2 provides further evidence for people favoring experiential purchases when trying to generate favorable impressions. We asked 112 mTurkers to write about a material or experiential purchase they had made. When asked whether they had actually posted about this purchase on social media, we find that they were more likely to have posted about their experiential rather than material purchase (56.9% vs. 20.4%, $X^2=15.64$, $p<.001$), in line with our predictions. Next, they wrote a Facebook post about their purchase and rated the impressions they expected post readers would form of them using a 4-item scale ($\alpha=.85$). Respondents expected to generate more favorable impressions if they posted about their experiential purchases ($M_{Exp}=6.75$ vs. $M_{Mat}=6.00$, $F(1,110)=10.31$, $p=.002$). Moreover, a mediation analysis with 2,000 bootstrap samples (Hayes 2013) showed expected impressions mediate the effect of purchase type on respondents' real-life decision of whether or not to *actually* post something about the purchase on social media (indirect=0.26, 95% CI =[0.036, 0.719]).

Study 2 also investigated how experiential purchases are actually perceived. A separate group of 148 mTurkers evaluated the posts written in the first part of the study on the same 4-item impressions scale ($\alpha=.90$). We combined the data of "writers" and "readers" and regressed impressions on the two manipulated variables: purchase type (1=experiential, -1=material), and evaluation (1=predicted, -1=actual). We only found an effect of purchase type ($B=0.410$, $t=3.39$, $p=.001$), suggesting that individuals are correct in expecting that others form better impressions of them based on experiential purchases.

Studies 3 and 4 tackle the questions of how *repeated* signals are chosen and received. Study 3 followed a 2 (purchase: experiential vs. material) x 2 (number of posts: 1 vs. 4) between-subjects design and examined how reading one versus four Facebook posts about either experiential or material purchases affects impressions. MTurkers ($N = 703$) reported forming more positive impressions when posts were experiential (vs. material) ($M_{Exp}=6.66$ vs. $M_{Mat}=5.82$, $F(1,699)=47.29$, $p<.001$) and when reading about one (vs. three) purchases ($M_{One}=6.40$ vs. $M_{Three}=6.08$, $F(1,699)=6.49$, $p=.011$). Most importantly, we found an interaction between purchase type and number of posts ($F(1,699)=4.10$, $p=.043$). Simple contrasts reveal that impressions decreased with the number of posts when posts mentioned material ($M_{One}=6.10$ vs. $M_{Three}=5.54$, $F(1,699)=10.56$, $p=.001$), but not experiential purchases ($M_{One}=6.70$ vs. $M_{Three}=6.63$, $F(1,699)=0.14$, $p=NS$), indicating that experiential purchases are better signals also in repeated impression management situations.

Finally, in Study 4 we asked 582 mTurkers (posters) to choose four consecutive times between posting an experiential or material purchase. Of these, 79.3% chose a combination of material and experiential purchases. Next, 543 different mTurkers (readers) evaluated the different Facebook profiles that emerged. As in Study 2 we combine poster and reader data and find that the number of experiential posts positively and significantly predicted impression formed by readers ($B=.19$, $t(1, 1121)=4.18$, $p<.001$). That effect, however, was not anticipated by posters for whom the number of experiential

purchases did not affect expected impressions ($B = -.04$, $SE = .06$, $t(1, 1121) = -.75$, $p = .456$), indicating that individuals are somewhat miscalibrated in repeated self-presentational efforts.

This research contributes to the literature on impression management by adding experiences to the repertoire of signals consumers use. It further contributes by examining whether and when experiential signals lead to favorable impressions and by testing how *repeated* signals affect impressions. Moreover, it adds to the literature on experiential versus material purchases by investigating how these different purchases affect *others*, rather than the purchaser herself. We expect these topics to be of interest to a wide range of researchers and expect it to generate interesting discussions and avenues for future research.

Temporary Sharing, Enduring Impressions: Self-Presentation in the Digital Age

EXTENDED ABSTRACT

In the advent of social media, the impressions people make on others are based increasingly on their digital disclosures. Yet such disclosures are forever catalogued in the cloud, and can thus come back to haunt (Rosen, 2010).

New technologies place expiration dates on online disclosures in order to balance the desire for privacy with the desire to disclose. Examples include Snapchat, with more than 150 million active users daily, which is now also the most popular social network amongst American young adults (Statista, 2017). From a narrow perspective, these technologies would seem to be a panacea. After all, content that no longer exists cannot come back to haunt.

Or can it? Prior research has shown that first impressions are sticky (Ambady & Rosenthal, 1992). Moreover, observers may overattribute sharing to the (bad) judgment of the sharer, and not adequately acknowledge the ephemerality of the sharing platform. Social psychologists have documented that people tend to overattribute others' behavior to enduring personality characteristics, failing to account for situational influence (Jones & Harris, 1967). We thus argue that that people's impressions of sharers are driven by the content of the photo, and not by sharers' choice of sharing medium.

This issue is potentially compounded because the promise of ephemerality may increase disclosure. Prior research points to this possibility. For one, in honoring the desire for privacy, it could assuage privacy concerns, causing people to "let their guard down," (Culnan & Armstrong, 1999), and in turn increase disclosure (Brandimarte, Acquisti, & Loewenstein, 2013). Therefore, we predict that temporary sharing causes people to take greater risks in their disclosures relative to more permanent forms of sharing and that this effect is driven by a dampening of privacy concerns. We tested our predictions in five experiments manipulating whether people shared content only temporarily or permanently.

In Experiment 1, we asked people ($N = 296$) in a public space on a Swiss university campus to take and share a selfie on a public display application and on Facebook either only temporarily or permanently.

People in the temporary condition were 1.22 times more likely to take and share a selfie relative to those in the permanent condition (70.00% versus 57.56%; $\chi^2(1) = 4.85$, $p < .05$). Moreover, participants in the temporary condition were 3.82 times more likely to take uninhibited selfies relative to the permanent condition ($M_{Temporary} = 46.67\%$ vs. $M_{Permanent} = 12.23\%$; $\chi^2(1) = 40.66$, $p < .01$). Finally, asking observers to rate the sharers and their photos indicated that those in the temporary condition were perceived as having worse judgment

than those in the permanent condition ($M_{\text{Temporary}} = 3.00$ vs. $M_{\text{Permanent}} = 3.88$; $F(1, 184) = 34.86$, $p < .01$).

We replicate this pattern of results in Experiment 2 in the lab: participants ($N = 191$), were asked to take and share a selfie via their webcams either permanently, temporarily or without any information regarding the lifespan of their sharing (baseline).

Sharers in the temporary condition were 1.77 times more likely to depict disinhibition relative to baseline ($M_{\text{Temporary}} = 48.28\%$ vs. $M_{\text{Baseline}} = 27.27\%$, $\chi^2(1) = 5.84$, $p < .05$); and 1.70 times more likely relative to the permanent condition ($M_{\text{Permanent}} = 28.36\%$, $\chi^2(1) = 5.26$, $p < .05$). Moreover, temporary sharers were viewed as having worse judgment relative to sharers from both the baseline ($M_{\text{Temporary}} = 3.72$ vs. $M_{\text{Baseline}} = 4.31$; $t(99) = 2.57$, $p < .01$) and permanent ($M_{\text{Temporary}} = 3.72$ vs. $M_{\text{Permanent}} = 4.26$; $t(99) = 2.32$, $p < .01$) conditions.

In Experiment 3 ($N = 201$) we asked participants to state how "goofy" (from 1-5) of a selfie they would share on a temporary (Snapchat) or a permanent sharing medium (iMessage) and measured their privacy concerns as well as predictions of the observers' attributions of their own sharing. Again, the temporary sharing medium induced uninhibitedness ($M_{\text{Temporary}} = 3.19$, $SD = 1.26$ vs. $M_{\text{Permanent}} = 2.17$, $t(199) = 6.02$, $p < .01$). Moreover, mediation analysis showed support for a mediating effect of a reduction in privacy concerns (Sobel test statistic = 2.35, $p < .05$), and participants were more likely to think that observers would attribute their disclosure choices to the platform warranting it in the temporary condition ($M_{\text{Temporary}} = 3.26$, $SD = 1.77$; $M_{\text{Permanent}} = 2.62$, $t(199) = 2.73$, $p < .01$).

In Experiment 4, we assessed the validity of this belief by testing whether observers temper their judgment of sharers based on the medium on which the selfies are shared. Each participant ($N = 428$) was shown either an uninhibited versus conventional selfie and; told that the subject had sent it on either a temporary medium (Snapchat) or a permanent medium (iMessage); and rated the extent to which the subject had good judgment.

Participants deemed people who appeared uninhibited as having worse judgment relative to those not appearing uninhibited ($M_{\text{Conventional}} = 5.11$ vs. $M_{\text{Uninhibited}} = 3.58$; $F(1, 424) = 104.13$, $p < .01$). These judgments were not tempered by sharing medium ($F(1, 424) = .03$, $p = .87$).

Experiment 5 tested whether observers' assessments of sharers' judgment may be tempered by personal experience with temporary sharing media. Participants ($N = 396$) were again shown either an uninhibited or conventional selfie and told that it had been shared on a temporary medium, before they rated the extent to which the target had good judgment. Prior to the rating task, half of participants were asked to upload and temporarily share a selfie of their own.

Again, participants deemed sharers who appeared uninhibited as having worse judgment relative to those not appearing uninhibited ($M_{\text{Conventional}} = 5.35$ vs. $M_{\text{Uninhibited}} = 4.00$; $F(1, 392) = 79.00$, $p < .01$). These judgments were not tempered by experience with temporary sharing ($F(1, 392) = .80$, $p = .37$).

In sum, we document psychological drivers behind the capacity for temporary sharing to induce disclosure: the dampening of privacy concerns and the false belief that others will factor the ephemerality of the medium into their judgments. Temporary sharing may bring back forgetting, but not without introducing new self-presentational challenges.

Bragging through an Intermediary

EXTENDED ABSTRACT

Self-promotion is a useful strategy to present a favorable image of themselves to others (Jones & Pittman, 1982), adopted in

situations where one needs to make her quality known to others, or is competing against others (Rudman, 1998). Self-promotion, however, can backfire and it reduces self-promoters' likeability when it is perceived as bragging (Godfrey, Jones, & Lord, 1986; Scopelitti, Loewenstein, & Vosgerau, 2015), suggesting the existence of a trade-off between conveying positive information about oneself and not being perceived as a braggart and as such undermining one's likeability. One possible strategy to address this trade-off would be to have another person disclose positive information on one's behalf. For example, Pfeffer, Fong, Cialdini, & Portnoy (2006) showed that job candidates and authors were perceived as more likeable when promoted by agents than when they were promoting themselves. Similar to the use of intermediaries to reduce perceived responsibility for morally questionable actions (cfr. Hamann, Loewenstein, & Weber, 2010), using an intermediary to convey positive descriptions may protect the individual being promoted from the adverse consequences of self-promotion (Inman, McDonald, & Ruch, 2004).

We argue that i) the use of an intermediary to convey positive information about a target person will elicit more positive and less negative emotions in recipients than direct self-promotion; ii) inter-mediation effectively enhances perceptions of the target person on the qualities being disclosed; iii) this effect persists irrespective of whether the intermediary is motivated by self-interest; iv) inter-mediation may damage the intermediary, in particular when the person praised has a higher status. We test these predictions in four experiments.

In Study 1, participants ($N = 190$) imagined logging into their Facebook account and reading a post about the volunteering activities in a developing country of one of their contacts. In the direct self-promotion condition, the post was in first person and appeared as being written by the protagonist. In the intermediary condition, a different person wrote the post and the protagonist was mentioned (tagged) in the post. Afterwards, participants indicated to what extent reading the post would make them experience *positive* and *negative feelings*, and a series of discrete emotions (*jealous, upset, happy, proud, annoyed, angry, inferior, and envious*) towards the protagonist. Direct self-promotion induced less positive and more negative emotions, and made readers feel more upset at, less happy for, less proud of, more annoyed by, and angrier at the protagonist ($ps < .001$) than the same information reported through an intermediary. No significant differences emerged for the three other emotions, i.e., envy, jealousy, and feelings of inferiority ($ps > .33$).

In Study 2, participants ($N = 133$) were assigned to one of two conditions (as in Study 1), reported their emotional reactions, and rated the target person and themselves (order counterbalanced) on the same 8 positive traits (*kind, brave, special, generous, honest, compassionate, hardworking, and selfless*). Participants evaluated the target person slightly more favorably than they rated themselves in the direct self-promotion condition ($p = .043$), but the effect was amplified in the intermediary condition ($p < .001$), suggesting that the act of self-promoting reduced the positive impact of the information conveyed.

In Study 3 we examined whether the observed effects persist even when the intermediary is motivated by self-interest by adding two conditions to Study 1. In these conditions participants were informed that the intermediary had a romantic interest or a professional interest (i.e., hoping to get a job at the target person's company) towards the target person, respectively. Participants ($N = 199$) read the post, reported their emotions, and rated the target person on a set of positive traits related to the content of the message (*kind, brave, special, generous, compassionate, and selfless*). Direct self-promotion induced less positive and more negative emotions than the same in-

formation reported through an intermediary ($ps < .001$), irrespective of the intermediary's self-interest. No differences emerged between the three intermediary conditions. The same pattern of results was observed on five of the six positive traits (all $ps < .05$), and marginally on one trait, *special* ($p = .08$).

In Study 4, participants ($N = 300$) read the post corresponding to one of the three intermediary conditions from Study 3 and reported their impressions of either the intermediary or of the target person (negative/positive; favorable/unfavorable; not highly at all/very highly regarded). Impressions of the intermediary were less favorable than impressions of the target person, marginally in the condition of no self-interest ($p = .07$), but significantly so in the two self-interest conditions ($ps < .003$).

In Study 5, participants ($N = 601$) read a scenario in which an intermediary publicly praised either a peer, or someone in a higher status position, or someone in a lower status position. Participants then reported their impressions of either the intermediary or of the target person as in Study 4. Impressions of the intermediary were less favorable than impressions of the target person ($p < .001$). Moreover, whereas impressions of the intermediary were lowest when the person publicly praised had a higher status position compared to the other two conditions ($p < .001$), impressions of the target person did not change across the three conditions ($p = .81$).

These studies show that disclosing the same positive information through an intermediary (vs. by direct self-promotion) elicits more positive and less negative emotions in recipients (Study 1), and increases the perceived superiority of the person being promoted on the traits being disclosed (Study 2), irrespective of the disclosure of self-interest by the intermediary (Study 3). However, intermediaries do not make as good an impression as the targets of their public praises, but, interestingly, more negative impressions of the intermediary are not reflected in more negative impressions of the targets they praise (Studies 4 and 5). In summary, being publicly praised by an intermediary seems to be beneficial for the target person, but it may carry hidden image costs for the intermediary.

How Audience Engagement (in the Form of Likes vs. Comments) on Social Media Posts Influences Subsequent Self-Disclosure

EXTENDED ABSTRACT

Audience engagement is a prominent feature of social media. We examine how different forms of audience engagement, namely likes and comments, influence the degree to which consumers disclose private information about themselves on social media.

Audience engagement with social media posts can formally be categorized into two main forms: single-click engagement (e.g., "likes") and composed content (e.g., "comments"). Prior research suggests that both forms tend to be perceived positively as forms of social approval (Burke & Kraut, 2013; Scissors, Burke, & Wengrovitz, 2016), and hence both might be expected to be positively reinforcing.

However, we propose that likes and comments might have different implications for the construal of intimacy with downstream consequences for self-disclosure. In particular, we posit that comments are likely to be perceived as reflecting a greater degree of intimacy than likes. The reason is that comments, because they must be read rather than automatically perceived, are likely to impose to a greater degree on the attention and consciousness of the recipient. Given that the ability to impose oneself on another is a key element of social closeness (Sharabany 1994), comments can be viewed as the social media equivalent of encroaching on one's personal space.

As a result, when comments are received from socially distant others, an intimacy violation can arise, thereby reducing the propensity to self-disclose.

We first examined our theorizing in a series of experiments. In a first study, participants were randomly assigned to either a "like" or "comment" condition in a study employing a single-factor between-subject design. Participants were asked to imagine that someone had posted a picture of themselves having fun with friends on a social media site such as Facebook or Instagram. Those in the "like" condition were asked to imagine that someone "liked" the photo and those in the "comment" condition were asked to imagine that someone posted a positive comment on the photo indicating that they liked the photo. Participants then evaluated how close the person that liked/commented on the photo was to the poster on a 7 point scale from "not at all" to "very." Participants rated the poster and the person that engaged with the post closer in the comment condition than in the like condition supporting the idea that there is a greater construal of intimacy associated with comments than with likes.

A second experiment assigned participants to either a like or comment condition in a single-factor between-subject design. Participants were asked to imagine that they had posted a picture of themselves having fun with friends on a social media site. Participants in like condition were asked to imagine that someone liked their post and those in the comment condition were asked to imagine that someone they did not know commented on their post, "Love this pic! You look like are having so much fun!" Participants then reported their perceived level of discomfort (which served as an operationalization of an intimacy violation) and, for the dependent variable, rated how cautious they would be in subsequently disclosing personal information. Consistent with the idea that comments received from individuals with which one has weak ties can be perceived as an intimacy violation, individuals reported greater discomfort after the receipt of comments than after the receipt of likes and this mediated the greater caution in disclosing personal information after receiving comments than after receiving likes.

Experiment 3 identified social distance as a moderator of the effect documented in Experiment 2, namely the greater discomfort associated with the receipt of comments (vs. likes) applied to socially distant others but not to socially close others. Experiment 4 provided evidence for our process account, showing that the degree of perceived intimacy violation evoked by comments was related to the degree to which the comment demanded the attention of the recipient. In particular, participants were asked to imagine they posted a picture of themselves having fun with family and that a commenter wrote, depending on condition, either "Looks fun" or "Looks fun! Was it?" The latter was perceived to demand greater attention and was perceived as a greater intimacy violation than the former when comments were received from strangers, but not when received from friends.

We continued our investigation through analysis of 187 million photos posted by almost 1 million users of the social media platform Instagram. We used the decision to disclose one's photo location as a proxy for self-disclosure more broadly. We found that the receipt of likes on a photo was associated with increased subsequent disclosure whereas the receipt of comments on a photo was associated with decreased subsequent disclosure. There was also an interaction effect, such that the effect of both likes and comments was enhanced when the location of the prior photo was disclosed (vs. not). These findings are consistent with the idea that likes are positively reinforcing whereas comments are negatively reinforcing of self-disclosure behavior.

This research thus shows that the implications of user engagement on social media arise not merely from the valence or content of the engagement but through the construal of intimacy implied through the behavior. We discuss practical implications for the design of social media platforms.

REFERENCES

- Diehl, K., Zauberger, G., & Barasch, A. (2016). How taking photos increases enjoyment of experiences.
- Bellezza, S., Gino, F., & Keinan, A. (2014). The red sneakers effect: Inferring status and competence from signals of nonconformity. *Journal of Consumer Research*, 41(1), 35-54.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586-607.
- Carter, T. J., & Gilovich, T. (2012). I am what I do, not what I have: the differential centrality of experiential and material purchases to the self. *Journal of personality and social psychology*, 102(6), 1304.
- Godfrey, D. K., Jones, E. E., & Lord, C. G. (1986). Self-promotion is not ingratiating. *Journal of personality and social psychology*, 50(1), 106.
- Goodman, J. K., Malkoc, S. A., & Stephenson, B. L. (2016). Celebrate or Commemorate? A Material Purchase Advantage When Honoring Special Life Events. *Journal of the Association for Consumer Research*, 1(4), 497-508.
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: status, reputation, and conspicuous conservation. *Journal of personality and social psychology*, 98(3), 392.
- Hamman, J. R., Loewenstein, G., & Weber, R. A. (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review*, 1826-1846.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15-30.
- Inman, M. L., McDonald, N., & Ruch, A. (2004). Boasting and firsthand and secondhand impressions: A new explanation for the positive teller-listener extremity effect. *Basic and Applied Social Psychology*, 26(1), 59-75.
- Jones, E. E., & Harris, V. A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3(1), 1-24.
- Pfeffer, J., Fong, C. T., Cialdini, R. B., & Portnoy, R. R. (2006). Overcoming the self-promotion dilemma: Interpersonal attraction and extra help as a consequence of who sings one's praises. *Personality and Social Psychology Bulletin*, 32(10), 1362-1374.
- Rudman, L. (1998). Self-promotion as a risk factor for women: The costs and benefits of counter-stereotypical impression management. *Journal of Personality and Social Psychology*, 74 (3), 629-645.
- Schlenker, B. R. (1980). *Impression management*. Brooks/Cole Publishing Company.
- Scopelliti, I., Loewenstein, G., & Vosgerau, J. (2015). You Call It "Self-Exuberance"; I Call It "Bragging" Miscalibrated Predictions of Emotional Responses to Self-Promotion. *Psychological Science*, 26(6), 903-914.
- Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of personality and social psychology*, 85(6), 1193.
- Warren, C., & Campbell, M. C. (2014). What makes things cool? How autonomy influences perceived coolness. *Journal of Consumer Research*, 41(2), 543-563.

New Perspectives on Reference Points and Consumer Motivation

Chair: Scott Wallace, Duke University, USA

Paper #1: Goal Specificity and the Dynamics of Consumer Motivation: The Role of Reference Point Focus

Scott Wallace, Duke University, USA

Jordan Etkin, Duke University, USA

Paper #2: Multiple Goals as Reference Points

Evan Weingarten, University of Pennsylvania, USA

Sudeep Bhatia, University of Pennsylvania, USA

Barbara Mellers, University of Pennsylvania, USA

Paper #3: Why Do Goals Cause Cheating? Unpacking the Confounding Effects of Mere Goals, Social Comparisons, and Pay

Matthew Chao, Williams College, USA

Ian Larkin, University of California, Los Angeles, USA

Paper #4: Anchors or Targets? An Examination of Credit Card Statements

Daniel M. Bartels, The University of Chicago, USA

Abigail B. Sussman, The University of Chicago, USA

SESSION OVERVIEW

Goals and motivation have a tremendous influence on consumer behavior. Each dollar spent is linked to consumers' financial goals, each meal consumed is linked to people's health goals, and effort on a given task is likely to be shaped by whichever goals that task serves or competes with.

One way of understanding the influence of goals is through their effect on judgments and decision-making, particularly in the role of reference points (Heath, Larrick, and Wu 1999; Kahneman and Tversky 1979). Goals often serve as reference points, and reference-based judgments about outcomes, progress, and the impact of goal-related actions are central to motivation (Bonezzi, Brendl, and De Angelis 2011; Koo and Fishbach 2008; Soman and Cheema 2004). This perspective has provided valuable insights for consumer behavior and related fields, offering a unified explanation for many key findings in goals research including the goal gradient (Kivetz, Urminsky, and Zheng 2006), the performance benefits of high specific goals (Locke and Latham 1990; Ülkümen and Cheema 2011), and the motivational advantages of breaking long-term goals into smaller subgoals (Amir and Ariely 2008; Fishbach, Dhar, and Zhang 2006). At the same time, many important questions remain regarding the role of reference points in other key goal-related phenomena and the relationships (and distinctions) between goals-as-reference points and associated constructs.

The work presented in this session serves to address two broad questions, thereby expanding and clarifying understanding of how reference points influence motivation. First, what can we learn about consumer motivation and goal pursuit by extending and refining the concept of goals as reference points? Papers 1 and 2 explore the role of reference points in the effects of goal specificity (Wallace and Etkin) and in the simultaneous pursuit of multiple goals (Weingarten, Bhatia, and Mellers). Both papers' findings make valuable contributions to the theory of goals-as-reference points and shed new light on its implications for long-standing questions in goals research. Second, how can we conceptually and empirically disentangle the "reference point" aspect of goals from their other features and from related non-motivational cues? Papers 3 and 4 disentangle the reference-point effects of goals from the often-confounded effects of incentives and social norms (Chao and Larkin) and highlight the im-

portant conceptual distinction between motivational reference points and cognitive anchors in consumer financial decisions (Bartels and Sussman). These papers illustrate key applications of the theory of goals-as-reference points in consumers' lives, and their findings resolve important conceptual questions that arise from such applications.

Our research explores novel implications for pursuing specific versus non-specific goals, identifies how outcomes on multiple goals jointly shape satisfaction, and disentangles the motivational effects of reference points from related motivational factors (incentives, social comparisons) and non-motivational processes (anchoring). Together, this research offers valuable new insight into consumer motivation and goal pursuit. The session should have broad appeal to scholars interested in reference points, goal pursuit and motivation, financial decision-making, and judgment and decision-making.

Goal Specificity and the Dynamics of Consumer Motivation: The Role of Reference Point Focus

EXTENDED ABSTRACT

Consumers often pursue goals that lack specific end-states, such as goals to lose as much weight as possible or to pay off as much debt as possible. Yet despite considerable interest in the consequences of adopting non-specific (vs. specific) goals, how goal specificity impacts motivation during goal pursuit is less well understood. The current research explores the role of reference points in shaping goal specificity's effects. We propose that goal specificity alters what reference point consumers spontaneously adopt during goal pursuit: for specific goals, the end-state tends to be more salient, but for non-specific goals, the initial-state should be more salient.

The value function's features of diminishing sensitivity and loss aversion (Kahneman and Tversky 1979) offer a foundation for two key hypotheses that describe how this difference in focal reference points will impact the relationship between goal progress and motivation. First, we hypothesize that accumulating goal progress will decrease motivation for non-specific goal pursuers because they are moving away from their salient reference point (i.e., the initial-state), whereas it increases motivation for specific goal pursuers as they move toward their salient reference point (i.e., the end-state). Thus, due to diminishing sensitivity, there should be a crossover pattern of motivation depending on goal specificity. Second, we hypothesize that this crossover will be asymmetric because specific goal pursuers are in a loss frame (i.e., below their reference point) during goal pursuit, whereas non-specific goal pursuers are in a gain frame (i.e., above their reference point). Since the value function is steeper for losses, this difference should exaggerate the crossover effect when specific goal pursuers are more motivated (i.e., at high progress) and attenuate it when they are less motivated (i.e., at low progress). Five studies test these predictions.

Study 1 tests our predictions by assigning participants a specific or non-specific goal on an effortful proofreading task and measuring motivation at low, intermediate, and high levels of progress. Participants with a specific goal persisted significantly longer on an unsolvable task (i.e., finding nonexistent errors) as their accumulated goal progress increased, but those with a non-specific goal showed the opposite effect. Comparing across the two goal types, the effect of goal specificity emerged primarily at high progress, where motivation was significantly higher for specific versus non-specific goal pursuers. At

low progress, non-specific goal pursuers were directionally more motivated but the difference was non-significant. These findings support our predictions about the asymmetric crossover interaction between specificity and goal progress in determining motivation, produced by the effects of diminishing sensitivity and loss aversion.

Studies 2 and 3 replicate these findings in the domains of weight loss (Study 2) and debt repayment (Study 3). In both cases, motivation increases (decreases) with progress for specific (non-specific) goal pursuers, with the greatest effect of specificity at high progress and a smaller effect (in the opposite direction) at low progress. Furthermore, these studies measure the subjective impact of the next step of progress (e.g., the next pound of weight loss) for participants in each condition and find that differences in subjective impact mediate the observed effects on motivation. These studies also help to rule out alternative explanations by (1) testing our predictions in the absence of resource depletion, and (2) using specific goal levels that are calibrated from pretest data to be similar to participants' self-set aspirations (Study 2) or substantially lower (Study 3), minimizing any potential differences in goal difficulty.

Studies 4 and 5 provide a deeper test of our proposed mechanism by manipulating which reference point goal pursuers focus on, again in the contexts of weight loss (Study 4) and debt repayment (Study 5). As predicted, results show that specific goal pursuers "look like" their non-specific counterparts when both groups focus on the same reference point (i.e., the initial-state). Specific goal pursuers who focus on the initial-state (vs. end-state) reference point are significantly less motivated at high levels of progress and directionally more motivated at low levels of progress, and they are virtually indistinguishable from participants with a non-specific goal in both cases. Again, we find evidence of mediation by differences in the subjective impact of marginal goal progress. The findings of Studies 4 and 5 support the notion that a difference in reference point focus is central to understanding the dynamic effects of goal specificity on motivation.

This research advances understanding of the relationship between goal specificity, goal progress, and motivation, and in doing so, underscores the critical role that reference points play. Conversely, this work extends understanding of the motivational influence of reference points to the context of non-specific goals, an important but understudied aspect of consumer behavior. Our findings offer practical insight into how consumers can set important financial, health, and other personal goals to enhance their motivation.

Multiple Goals as Reference Points

EXTENDED ABSTRACT

Daily life pushes us up against multiple different goals across different domains: academic, health, finance, and social. While we would enjoy meeting all of these goals, it is not always possible. Sometimes people may hit their goals targets, while in other cases they may struggle and remain distant from reaching any of their goals.

How do people feel about success and failures relative to their goals? A prior literature on goals (target performance, or "mere goals," Heath et al. 1999) as reference points demonstrates that people's happiness compared to their goals follows the prospect theory value function. In one case, Markle et al. (2015) asked marathon runners' to predict their satisfaction with their performance relative to their time goal based on scoring above or below it. The results were consistent with the prospect theory value function's loss aversion (failing to hit the goal time had a greater impact on satisfaction than beating it) and diminishing sensitivity (changes in satisfaction

were larger based on changes close to the reference goal than further away from it) tenets.

We address how people feel about gains and losses with multiple goals. In addition to testing for loss aversion and diminishing sensitivity, we also examine whether additivity across the goal dimensions are met. That is, when making judgments of how they feel about outcomes on multiple goals, do people simply sum up how they feel about each outcome (additivity met), or are there interactions (additivity violated)? Dimensional additivity cannot be assumed given violations elsewhere in the literature (Birnbbaum and Stegner 1979; Einhorn 1970).

Four studies present evidence in favor of loss aversion and diminishing sensitivity, but they find evidence of violations of additivity.

Study 1a presents straightforward evidence of loss aversion. Participants were randomly assigned one set of two goals: 90 in English and 60 in Math, or 60 in English and 90 in Math. Participants then rated how they would feel (-50 = Extremely Unhappy, 50 = Extremely Happy) about three outcomes presented in a random order: achieving both goals, having a small loss (15 points) on one goal and a small gain (15 points) on another, and having a large loss and gain (30 points). Loss aversion predicts that losses should loom larger than gains, which suggests people will feel best about goal achievement and worst about the large loss (despite the equal-magnitude gain). Results supported loss aversion ($F(2, 168) = 89.17, p < .001$): participants were happiest with goal achievement ($M = 25.54$), then small losses ($M = 6.06$), and least happy with large losses ($M = -4.27$).

Study 1b supports a violation of additivity across dimensions. Participants read about a woman named Alice who had scored outcomes of a 60 in English and a 60 in Math. Participants rated how Alice would feel (-50 = Extremely Unhappy, 50 = Extremely Happy) about this outcome under four different pairs of goals: 90 in English and Math (two losses), 30 in English and Math (two gains), 30 in English and 90 in Math (one gain, one loss), and 90 in English and 30 in Math (one gain, one loss). Additivity predicts that the difference in happiness between having two gains and one loss and one gain should be similar to the difference in happiness between having one gain and one loss and two losses. A conjunctive interaction would predict a steeper drop in happiness between one gain and one loss and two losses. A disjunctive interaction would predict a steeper drop in happiness between two gains and one gain and one loss (Einhorn 1970). The results violated additivity and supported a disjunctive interaction: there was a steeper drop between two gains and one gain and one loss compared to the latter and two losses ($M = 11.57$; $F(1, 93) = 17.58, p < .001$). 63% of participants showed this pattern ($\chi^2(1) = 6.13, p = .013$).

Studies 2 and 3 use a larger design with model fitting to simultaneously test for loss aversion, diminishing sensitivity, and additivity. Participants read about Alice, but this time between-subjects we manipulated whether Alice's outcomes were 60 in English, 60 in Math, 70 in English and 50 in Math, or 50 in English and 70 in Math. We had participants make 49 judgments of how Alice would feel about these outcomes relative to a combination of goals built on 7 levels of Math (30, 40, 50, 60, 70, 80, 90) by 7 levels of English (30, 40, 50, 60, 70, 80, 90) that varied across 49 pages within-subject. These judgments enabled group-level and individual-level tests of our predictions through model fits.

Study 2 finds convergent evidence with Study 1a and 1b. Quantitative model fits on the group and individual levels suggest values of loss aversion >1 (consistent with the literature), sensitivity < 1 (consistent with diminishing sensitivity), and violations of additivity consistent with a disjunctive interaction. When there was at least one loss, participants' faced a displeasure approximately the size

of a moderate-sized loss on one goal. Models with parameters for loss aversion, diminishing sensitivity, and interactions fit better than models without them.

Study 3 replicates study 2 using a different context: exercises. Participants read about a character named Charles who had made progress on his goals for Pushups and Lunges at the gym. Just as in Study 2, participants rated Charles' happiness over 49 judgments with varying goals given a constant outcome. Study 3 again found evidence in favor of loss aversion, diminishing sensitivity, and violations of additivity. Specifically, there was again evidence of a disjunctive interaction in which the presence of one loss added an additional displeasure to Charles' rated feelings.

Ultimately, while we find evidence in favor of loss aversion and diminishing sensitivity, we do not find evidence for additivity across goal dimensions. That is, how people felt about their outcomes relative to multiple goals was not the simple sum of how they felt about each goal. We observe a disjunctive interaction: the presence of a loss added an additional displeasure to how people felt.

Why Do Goals Cause Cheating? Unpacking the Confounding Effects of Mere Goals, Social Comparisons, and Pay

EXTENDED ABSTRACT

Goal-based incentives are used by many firms to motivate their employees. A wide range of studies have estimated that specific and difficult goals consistently lead to higher performance than do-your-best alternatives in many tasks across the lab and field (Locke and Latham 1990, 2002).

However, scholars have warned that the use of goals can carry unintended consequences (Ordonez et al. 2009a, 2009b). Two studies claim that goals can increase worker cheating on a task (Schweitzer et al. 2004; Cadsby, Song, and Tapon 2010). These studies used laboratory experiments to show that subjects were more likely to cheat on a simple task when they were incentivized using a goal-based structure versus a do-your-best structure.

Advocates of goal-setting counter that these criticisms falsely ascribe some of the downsides of financial incentives to goals (Locke and Latham 2009). In particular, none of the aforementioned studies equated financial returns to cheating across conditions. The increased cheating in these studies could therefore be simply due to the differences in marginal or absolute pay, or to experimental subjects feeling that they would not be adequately paid if they did not cheat.

Additionally, studies on goals often confounded their results by using peer performance information to justify the assigned goal. Goal commitment is a key modulator for any effect of goals on performance, especially when tasks are difficult (Seijts and Latham 2001). To increase commitment, experimental studies on goals often inform subjects that many of their peers were able to attain the goal (e.g., Schweitzer et al. 2004). Importantly, subjects in non-goal conditions are not given information on peer performance, since there was no goal to justify. Increased cheating in the goal condition may therefore come from unfavorable social comparisons, and not from the use of goals.

In this study, we use a carefully-designed experiment that isolated the causal effects on cheating of the individual elements of goal-based incentive systems: mere goal use, social comparison use, and increased pay. Consistent with previous literature, we asked subjects to complete a word unscrambling task. Subjects were paid based on self-reported performance, although they did not know this when performing the task. To measure the effect of goals per se, we varied whether subjects were assigned a goal – to solve three or

more questions in the allotted time. For peer comparisons, we varied whether subjects were told that “many previous subjects were able to solve three or more questions in the allotted time.” For pay, we varied whether subjects were paid via a fixed rate or according to their performance. For each of these three factors, we measured the impact of changes to a single factor while equalizing the remaining two.

Subjects were not aware of our ability to detect cheating on the task. Subjects were instructed to throw away all of their worksheets after each step of the experiment in order to keep their desk clear for the next set of worksheets; trash bins were placed around the room such that subjects could do so without standing up. However, seat numbers and trash bins were strategically placed so that each trash bin served at most two subjects; for each pair of subjects, one had only blue pens at their desk while the other had only black pens. The pen colors allowed us to connect the contents of each trash bin to a seat number (but not to a subject name), allowing us to match the worksheets to the self-reported score from that seat number. We devised this method in order to avoid experimenter demand effects.

In total we had 8 treatment arms to our study, with each combination of goal use, social comparison framing, and financial incentives. This allowed us to measure the individual effects of all three incentive system elements on cheating, as well as all possible interaction effects.

We find that all cheating in this goal-based incentive system was driven by financial incentives and the use of social comparisons. Goals themselves did not increase cheating. Moreover, adding a goal to social comparison framing or to pay-for-performance still did not increase cheating. Simply put, our results suggest that goals in and of themselves do not impact cheating, although elements often used in conjunction with goals do increase unethical behavior.

Anchors or Targets? An Examination of Credit Card Statements

EXTENDED ABSTRACT

Anchors and targets differ in important ways. Notably, targets have motivational properties, whereas anchors act as neutral starting points for subsequent judgments. Research designs are often unable to disambiguate whether values are anchors or targets, and researchers have frequently been agnostic regarding this distinction. However, these differences may be critical in determining how people respond to them. For example, targets that are too high may backfire and lead people to pay less than they otherwise would, while targets that are too low may be demotivating once people have passed them. We would not anticipate parallel reactions to anchors. One area where this difference is particularly important is in the domain of personal finance and specifically, choices of credit card payment amounts in response to values appearing on credit card statements. Literature on this topic often refers to minimum values as anchors despite the fact that they appear to have many properties of targets (e.g., Stewart, 2009). This distinction may be important for understanding which values can effectively be used to increase chosen payments.

In this paper, we aim to better understand how people rely on cues in their environments. Specifically, we put forth methods for distinguishing anchors from targets based on distributional properties. This methodology is based on the premise that people will be motivated to exert additional effort to meet or exceed a target value when they are close to that target value, leading them to be more likely to end at a point just above the target value than just below it. However, people will have no parallel motivation with regard to an

anchor value. Therefore, they will be equally likely to end at a point just above or just below an anchor value. This leads to “piling up” in a distribution of people’s responses to target values, but a smooth distribution of people’s responses to anchor values. We highlight the importance of this distinction, examining how people use external cues as goals to motivate themselves, and formalize methodology for identifying differences in the distributions. From a practical perspective, we investigate how information provided on credit card statements influences subsequent payments.

After introducing a new methodology for distinguishing between anchors and targets, we validate this analytical approach by applying it to existing datasets with explicit anchors or target values, across a range of domains.

Next, we move to an investigation of how borrowers respond to values on their credit card statements. We begin by examining how participants select payments as a function of suggested values proposed to them on credit card statements, and find that people’s hypothetical payments align with distributions of responses to target values (Study 1). In Studies 2 and 3, we investigate whether suggested values take on other motivational properties consistent with targets as goals, namely loss aversion and diminishing sensitivity. We test for loss aversion by examining whether people feel different amounts of satisfaction if an identical payment is above or below the suggested amount and find that people are happier paying the same amount on a bill with the same overall value when then amount paid is above (vs. below) the suggested amount. We test for diminishing sensitivity by examining whether people have higher motivation to pay when they are close to (vs. far away from) their goal, and find support for this conclusion.

To test for the ecological validity of these findings, we turn to a large data-set of Chase cardholder payments. We examine distributions of payments around values that have been explicitly selected by cardholders as goals, and examine how inclusion of these values alters payments. Here, we find that consumer debt repayment patterns change when suggested values are introduced. Specifically, we observe large discontinuities in payment values around suggested amounts, with people being more likely to pay just above than just below these values. This pattern is again consistent with responses to targets. People are much more likely to pay just above the suggested amount than to pay just below it. Application of our newly introduced methodology to this data provides a similar result. Although this data provides an excellent context for examining whether backfiring occurs, we do not find evidence of backfiring within this self-selected group. Furthermore, rather than finding that low goals are demotivating, we show that a subset of people who select low values themselves are motivated to pay more than that amount, and will pay multiples of the initial value. We describe how our more nuanced understanding of values on credit card statements can be used to encourage debt reduction.

REFERENCES

- Amir, On, and Dan Ariely (2008), “Resting on Laurels: The Effects of Discrete Progress Markers as Subgoals on Task Performance and Preferences,” *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34(5), 1158-71.
- Birnbaum, Michael H. and Steven E. Stegner (1979), “Source credibility in social judgment: Bias, expertise, and the judge’s point of view,” *Journal of Personality and Social Psychology*, 37 (1), 48-74.
- Bonezzi, Andrea, C. Miguel Brendl, and Matteo De Angelis (2011), “Stuck in the Middle: The Psychophysics of Goal Pursuit,” *Psychological Science*, 22(5), 607-12.
- Cadsby, C. B., F. Song, F. Tapon (2010), “Are You Paying Your Employees to Cheat? An Experimental Investigation,” *The B.E. Journal of Economic Analysis & Policy*, 10(1).
- Einhorn, Hillel J. (1970), “The Use of Nonlinear, Noncompensatory Models in Decision Making,” *Psychological Bulletin*, 73 (3), 221-30.
- Fishbach, Ayelet, Ravi Dhar, and Ying Zhang (2006), “Subgoals as Substitutes or Complements: the Role of Goal Accessibility,” *Journal of Personality and Social Psychology*, 91(2), 232-42.
- Heath, Chip, Richard P. Larrick, and George Wu (1999), “Goals as reference points,” *Cognitive Psychology*, 38 (1), 79-109.
- Kahneman, Daniel, and Amos Tversky (1979), “Prospect Theory: An Analysis of Decision under Risk,” *Econometrica: Journal of the Econometric Society*, 263-91.
- Kivetz, Ran, Oleg Urminsky, and Yuhuang Zheng (2006), “The Goal-Gradient Hypothesis Resurrected: Purchase Acceleration, Illusory Goal Progress, and Customer Retention,” *Journal of Marketing Research*, 43(1), 39-58.
- Koo, Minjung, and Ayelet Fishbach (2008), “Dynamics of Self-Regulation: How (Un)accomplished Goal Actions Affect Motivation,” *Journal of Personality and Social Psychology*, 94(2), 183-95.
- Locke, Edwin A., and Gary P. Latham (1990), *A Theory of Goal Setting and Task Performance*. Prentice Hall, Englewood Cliffs, NJ.
- Locke, Edwin A., and Gary P. Latham (2002), “Building a Practically Useful Theory of Goal Setting and Task Motivation,” *American Psychologist*, 57(9), 705-17.
- Locke, Edwin A., and Gary P. Latham (2009), “Has Goal Setting Gone Wild, or Have Its Attackers Abandoned Good Scholarship?” *Academy of Management Perspectives*. 23(1), 17-23.
- Markle, Alex, George Wu, Rebecca White, and Aaron Sackett (2015), “Goals as reference points in marathon running: A novel test of reference-dependence,” *Working paper*.
- Ordóñez, L. D., M. E. Schweitzer, A. D. Galinsky, M. H. Bazerman (2009b), “On Good Scholarship, Goal Setting, and Scholars Gone Wild,” HBS Working Paper 09-122.
- Ordóñez, L., M. E. Schweitzer, A. D. Galinsky, M. H. Bazerman (2009), “Goals Gone Wild: How Goals Systematically Harm Individuals and Organizations,” *Academy of Management Perspectives*, 23(1), 6-16.
- Schweitzer, M. E., L. D. Ordóñez, B. Douma (2004), “Goal Setting as a Motivator of Unethical Behavior,” *Academy of Management Journal*, 47(3), 422-32.
- Seijts, G. H., G. P. Latham (2001), “The Effect of Learning, Outcome, and Proximal Goals on a Moderately Complex Task,” *Journal of Organizational Behavior*, 22, 291-302.
- Soman, Dilip, and Amar Cheema (2004), “When Goals are Counterproductive: the Effects of Violation of a Behavioral Goal on Subsequent Performance,” *Journal of Consumer Research*, 31(1), 52-62.
- Stewart, Neil (2009), “The cost of anchoring on credit-card minimum repayments,” *Psychological Science*, 20(1), 39-41.
- Ülkümen, Güliden, and Amar Cheema (2011), “Framing Goals to Influence Personal Savings: The Role of Specificity and Construal Level,” *Journal of Marketing Research*, 48, 958-69.

New Perspectives on Anthropomorphism: Examining the Role of Anthropomorphism in Financial Decision-Making and Consumer Welfare

Chair: Eric Levy, University of Cambridge, UK

Paper #1: Is Money Worth Saving? Money Anthropomorphism Increases Saving Behavior

Lili Wang, Zhejiang University, China
Sara Kim, University of Hong Kong, Hong Kong
Xinyue Zhou, Zhejiang University, China

Paper #2: Beauty (Value) Is in the Eye of the Beholder: How Anthropomorphism Affects the Pricing of Used Products

Junhee Kim, Drexel University, USA
Marina Puzakova, Lehigh University, USA
Hyokjin Kwak, Drexel University, USA
Haeyoung Jeong, Drexel University, USA

Paper #3: Moral Identity and Brand Anthropomorphism

Eric Levy, University of Cambridge, UK
Sara Kim, University of Hong Kong, Hong Kong
Americus Reed II, University of Pennsylvania, USA

Paper #4: The Influence of Anthropomorphism on Choosing Multiple Products from an Assortment

Rocky Peng Chen, Hong Kong Baptist University, Hong Kong
Echo Wen Wan, University of Hong Kong, Hong Kong

SESSION OVERVIEW

The purpose of this special session is to present research offering fresh theoretical perspectives and novel empirical contexts examining anthropomorphism in consumer behavior. The four papers are well-grounded in theory, and related in their focus on implications for consumer welfare and financial decision-making more specifically—areas that have been largely overlooked in empirical studies of anthropomorphism. We believe that this session would be of interest to researchers studying anthropomorphism, financial decision-making, and consumer welfare more generally. We think that the session will stimulate discussion among researchers in these subjects, and that the four papers will provide new ideas for future research in anthropomorphism and related areas.

The first paper by Wang, Kim, and Zhou finds that when money is anthropomorphized, people will save more money rather than spend it. This research has important implications for consumer financial decision-making and welfare, since it suggests that anthropomorphizing money might be an effective way to get people to save more money. Consumers do not save enough money, particularly in the United States where credit scores and spending continue to rise (Camara 2012).

The second paper by Kim, Puzakova, Kwak, and Jeong finds that brand anthropomorphization increases selling prices and decreases buying prices for used products, due to stronger emotional attachment by sellers, and perceptions of relationship-dissolution-stigma by buyers. Different financial valuations of humanized products by buyers and sellers may lead to a less efficient market for used goods, thereby negatively affecting consumer welfare.

While the first two papers focus on anthropomorphism's effects on saving, buying, and selling behavior, the latter two papers focus more generally on consumers' willingness to spend money on anthropomorphized products, while maintaining a focus on consumer welfare.

The third paper by Levy, Kim, and Reed II examines how a consumer's moral identity affects perceptions of and willingness to

purchase anthropomorphized brands. Drawing on two influential theories of morality—the expanding circle of moral regard (Singer 1981; Reed and Aquino 2003), and morality as mind perception (Gray, Young, and Waytz 2012), this paper finds that higher moral identifiers assign more humanness to anthropomorphized brands, leading them to be more willing to purchase these brands. Morality has strong links to consumer welfare, yet its implications for anthropomorphism have been previously unexplored.

The fourth paper by Chen and Wan investigates the influence of anthropomorphism on choosing multiple products from an assortment. Building on prior studies on anthropomorphism and person perception (Nisbett, Peng, Choi, and Norenzayan 2001), this research demonstrates that consumers are more likely to think in a holistic manner after thinking about products as anthropomorphized. In turn, holistic thinking leads consumers to choose whole sets of products, even when the assortment includes a less-preferred option. This finding is relevant for consumer finances and welfare, since consumers may decide to spend more money on, though experience less enjoyment from, the consumption of products that they prefer less.

In conclusion, these four papers provide novel theoretical viewpoints and empirical contexts for examining the relationship between anthropomorphism, financial decision-making, and consumer welfare.

Is Money Worth Saving? Money Anthropomorphism Increases Saving Behavior

EXTENDED ABSTRACT

Consumers do not save enough (Kotlikoff, Spivak, and Summers 1982), particularly in the United States, where credit scores continue to rise (Camara 2012). It is estimated that over 85% of Americans would be in immediate financial difficulty if they lost their jobs or had to deal with any other crises (Jones 2015). Accordingly, a lot of research has been devoted to developing effective interventions to help consumers to reach their optimal saving levels (Ersner-Hersfield et al. 2011; Soman and Cheema 2011; Soman and Zhao 2011; Ulkumen and Cheema 2011). However, previous research on money saving usually treats money as an object or an instrument. In this research, we focus on a seemingly simple psychological shift in construing money—namely, anthropomorphizing money. Specifically, we examined whether imbuing money with humanlike characteristics can impact the amount of money consumers are willing to save.

The current research suggests that anthropomorphizing money leads people to perceive money as having the capacity to feel and sense (Gray, Gray and Wegner 2007); thus, anthropomorphized money is perceived to be capable of benefiting from good or suffering from evil (Gray, Young and Waytz 2012). Consequently, compared to objectified money, anthropomorphized money is perceived to be more sensitive to harm and thus to be more vulnerable (Dijker 2010; Gray and Wegner 2009), which activates consumers' protective tendency. Therefore, we argue that money anthropomorphism would significantly increase consumers' saving intention, as consumers will attempt to protect anthropomorphized money from potential harm. We tested this prediction with five studies.

A pilot study examined consumers' natural tendency to anthropomorphize money, their general tendency to anthropomorphize non-human entities and their saving intention. Correlation analy-

ses showed that consumers' natural tendency to anthropomorphize money was positively correlated with saving intention, whereas their general anthropomorphism tendency was not. In the main studies, we manipulated money anthropomorphism to test its causal effect on saving intention and behaviors; more importantly, we also sought to understand the psychological process that mediates this causal relationship, as well as some boundary conditions in which this relationship does or does not emerge.

In Study 1a, the money anthropomorphism manipulation followed Aggarwal and McGill (2012), in that participants were instructed to imagine that money had come to life as a person and to describe the sort of person money would be. Study 1A showed that participants were more likely to save a higher percentage of their income when they anthropomorphized it than when they construed it as an object or when they anthropomorphized a financial institution (e.g., a bank). Participants who construed a financial institute as a human were more likely to save their income than participants who construed money as an object.

In Study 1B, we used a different method to manipulate money anthropomorphism, in which participants were instructed to imagine that money had come to life as a person and think about what type of personality money would have. They rated money's personality on five bipolar scales representing the Big Five personality traits (Gosling, Rentfrow and Swann Jr. 2003). To strengthen the manipulation, participants were also asked to describe what type of face money would have based on the personality they had described. Study 1B replicated study 1A's findings with a different population.

In study 2, we used the same money anthropomorphism manipulation as Study 1b, but we used a different measure of saving intention and measured the perception of vulnerability associated with money to test the underlying mechanism for the positive effect of money anthropomorphism on saving intention. A mediation analysis showed that the effect of money anthropomorphism on participants' intention to save money was mediated by increased vulnerability perception of money. That is, money anthropomorphism led people to consider money to be more vulnerable and thus made them more likely to protect it by saving it.

Study 3 examined a boundary condition for the money anthropomorphism effect. We hypothesized that when saving was construed as an unsafe option, saving money would not be an ideal way to protect money, and money anthropomorphism would not increase saving intention. Half of the participants were led to construe money saving as an unsafe option. Specifically, they read a news article that described a retirement account as not safe. The other half read a news article about food safety (i.e., control condition). The results revealed a significant interaction between money anthropomorphism and manipulation of perceived safety of saving money. Specifically, money anthropomorphism increased saving intention in the control condition, replicating the finding in the previous studies, but money anthropomorphism did not increase saving intention when participants construed saving money as an unsafe option.

Study 4 measured participants' real saving plans. Specifically, we contacted students from a list of students who had received a scholarship to business school. Right after participants received the scholarship, they completed a survey in which we implemented money anthropomorphism and measured their saving and spending plans for the scholarship. The results showed that participants indicated a higher saving intention after construing money as a human and allocated a higher percentage of their scholarship to saving compared to participants who construed money as an object. In the last week of the semester, we contacted the students again and asked them to recall their actual spending of their scholarship

money. The results showed that participants actually kept their saving plan and saved more money when they construed money as a human rather than as a mere object.

Beauty (Value) is in the Eye of the Beholder: How Anthropomorphism Affects the Pricing of Used Products

EXTENDED ABSTRACT

Marketers often strategically use anthropomorphism (i.e., imbuing nonhuman objects with humanlike characteristics; Aggarwal and McGill 2007) as a brand positioning strategy for their products and services. Overall, prior work in the area has shown the impact of brand anthropomorphism at different stages of brand relationship development and maintenance—on brand evaluations, consumer-brand interactions, and the relationship duration processes (Chandler and Schwarz 2010; Puzakova, Kwak, and Rocereto 2013). However, what is still missing from this past work is an understanding of the impact of brand anthropomorphism on consumer decisions after the relationships with the brand have dissolved. In this research, we fill this important gap by examining the impact of brand anthropomorphism on the valuation (selling vs. buying prices) of used products, the novel context in which consumer-brand relationships end with a pre-owner's decision to dispose of a used product. Therefore, the present research aims to make a critical contribution to prior work on the endowment effect by showing that buyers and sellers are both influenced by the same factor, namely, brand positioning strategy.

Prior research in anthropomorphism demonstrates that consumers are more likely to develop stronger emotional connections and experiences with humanized (vs. nonhumanized) brands (Chandler and Schwarz 2010). Here, we posit that even after consumers decide to end their brand relationships, they will have stronger self-brand connections to the products when they are humanized (vs. nonhumanized) leading to higher product valuations and, thus, higher product selling prices. Next, we build on research demonstrating that during the relationship dissolution stage, individuals become particularly concerned with extending themselves in time and being connected to their past (Richins 1994). More specifically, we rely on prior work showing that consumers with more positive (vs. less positive) attitudes toward the past develop greater attachments to objects and people present in their past. Thus, we propose that sellers' more positive attitudes toward the past are likely to facilitate their emotional connections to brands when they are anthropomorphized (vs. nonanthropomorphized), thus, resulting in higher selling prices for used products.

Next, in the buyer context, we propose a new social schema—relationship-dissolution-stigma—that buyers are likely to apply toward anthropomorphized brands while setting their prices for used products. In general, stigma is defined as an attribute that makes an individual to be perceived as deviant, less desired, and socially discredited (Goffman 1963). For example, past research delineates that people stigmatize others who ended their relationships (e.g., divorce, separation). Prior research indicates that divorced people tend to suffer from “informal, relational sanctions” and are perceived as less desirable as partners for new relationships (Konstam et al. 2016). Given that consumers also end relationships with their brands (Fournier 1998), we propose that buyers are likely to stigmatize anthropomorphized used products by perceiving them as “rejected” by a pre-owner, potentially unacceptable for other people, and as being responsible for relationship dissolution. Thus, an application of relationship-dissolution-stigma to an anthropomorphized (vs. nonanthropomorphized) used product is likely to decrease a buyer's evalu-

ation of this used product, thus, resulting in lower buying prices. Furthermore, prior research suggests that the activation of stigma can be attenuated by people's way of thinking. In particular, activating a creative mindset disrupts a reliance on stereotypical associations and results in incorporation of novel information into a decision-making process (Sassenberg and Moskowitz 2005). As such, we propose that consumers with more creative mindsets are less likely to apply the relationship-dissolution stigma toward anthropomorphized used products, thus, attenuating the negative effect of brand anthropomorphization on buying prices for used products.

We tested these ideas in three studies. In each study, participants were randomly assigned to either a buying condition or a selling condition. In Study 1 ($n = 120$), in the seller condition, participants viewed an ad for a fictitious brand of toasters (anthropomorphized vs. nonanthropomorphized), were asked to imagine buying and owning the product for a year, and then selling it on eBay. We measured the minimum starting bid price for the product. Similarly, in the buyer condition, participants indicated the maximum price they would bid for the same used product. Study 2 ($n = 124$) examined the impact of anthropomorphism on buying and selling prices for a fictitious brand of juicers in the fixed-price setting (e.g., deals on Craigslist). The results of both studies showed that participants reported higher selling prices (Study 1: $M_{\text{anth}} = \$28.21$, $M_{\text{nonanth}} = \$19.70$; $F(1,57) = 8.07$, $p < .05$; Study 2: $M_{\text{anth}} = \$33.58$, $M_{\text{nonanth}} = \$29.13$; $F(1,59) = 8.09$, $p < .05$) and lower buying prices (Study 1: $M_{\text{anth}} = \$23.37$, $M_{\text{nonanth}} = \$30.03$; $F(1,59) = 11.11$, $p < .05$; Study 2: $M_{\text{anth}} = \$17.06$, $M_{\text{nonanth}} = \$22.97$; $F(1,61) = 8.06$, $p < .05$) for a humanized (vs. nonhumanized) brand.

Next, in Study 3 ($n = 183$), in the seller condition, the results showed a significant main effect of brand anthropomorphization on selling prices ($\beta = 10.75$, $p < .05$) and a significant two-way interaction between brand anthropomorphization and consumers' attitudes toward the past ($\beta = 9.23$, $p < .05$), thus, supporting our prediction that sellers' attitudes toward the past moderates the core effect. In addition, we found that self-brand connection mediates the effect of brand anthropomorphization on selling prices only for respondents with more positive attitudes toward the past (a point estimate for the effect = 4.61; 95% CI = [.50, 12.73]). In the buyer condition, the results of ANOVA showed a significant main effect of brand anthropomorphization on buying prices ($M_{\text{anth}} = \$46.25$, $M_{\text{nonanth}} = \$55.70$; $F(1, 114) = 11.32$, $p < .05$) and a significant interaction between a consumer's mindset and brand anthropomorphization ($F(1, 114) = 4.11$, $p < .05$), with anthropomorphism decreasing buying prices only for consumers with less creative mindsets ($M_{\text{anth}} = \$41.63$, $M_{\text{nonanth}} = \$56.92$; $F(1, 114) = 14.29$, $p < .05$). Finally, relationship-dissolution stigma mediated the effect of brand anthropomorphization on buying prices only for participants with less creative mindsets (a point estimate for the effect = -1.69; 95% CI = [-4.90, -.10]).

Overall, we find consistent evidence that brand anthropomorphization increases (decreases) selling (buying) prices of used products leading to stronger endowment effect. Our research provides novel theoretical insights into the boundary conditions of the core effects, as well as sellers and buyers' differential psychological processes that influence prices of used products.

Moral Identity and Brand Anthropomorphism

EXTENDED ABSTRACT

Marketers frequently use anthropomorphized, or human-like representations of brands in their brand communications (Aggarwal and McGill 2007). For example, marketers can incorporate human-like facial features into their products, have a product "speak" to

consumers in an advertisement, and describe a product using first-person language. Consumer researchers have made good progress over the past decade in uncovering the types of situations in which consumers will have a more positive vs. negative evaluation of anthropomorphized brands.

However, most (if not all) consumer research has considered brands simply as anthropomorphized vs. non-anthropomorphized, without investigating these perceptions more deeply. Prior research has not examined what individual or situational differences might lead consumers to consider an anthropomorphized brand as more (vs. less) human, and downstream consequences of this perception. We redress this oversight by examining the relationship between moral identity, brand humanness perceptions, and preferences for and attitudes toward anthropomorphized brands.

An influential perspective of morality holds that being a moral person involves expanding the circle of moral regard and care to include entities that extend well beyond oneself and one's current situation (Singer 1981; 2009). For example, a highly moral person should give moral care to people in distant lands whom one may never actually meet, as well as to animals, nature, the environment, planet Earth, etc. Building on this perspective, research has shown that people higher in moral identity, defined as "a self-conception organized around a set of moral traits" (Aquino and Reed 2002), extend greater care to outgroups relative to in-groups (Reed and Aquino 2003). That is, people who place a greater importance on moral traits give more of their resources and care to social outgroups. A second major perspective on morality holds that "mind perception" is the essence of morality (Gray, Young, and Waytz 2012). Thus, individual and situational factors may impact whether an entity is perceived to have "mind" in the form of greater perceived humanness

Based on these conceptualizations of morality, we predict that one's moral identity should impact one's attitudes toward and preferences for an anthropomorphized brand. Though anthropomorphized brands are not actually human, by nature they possess human-like cues and characteristics. A critical factor in evaluating whether entities are anthropomorphized is whether relevant agent knowledge is elicited (Epley, Waytz, and Cacioppo 2007); that is, whether knowledge about humans is used and applied in a particular situation. We believe that higher moral identifiers should be more likely to recognize, accept, and prefer these humanized characteristics to a greater extent than would people lower in moral identity. Formally,

Hypothesis 1: Consumers higher in moral identity, relative to consumers lower in moral identity, will exhibit greater preference for an anthropomorphized brand (vs. a non-anthropomorphized brand).

Hypothesis 2: Consumers higher in moral identity, relative to consumers lower in moral identity, will perceive an anthropomorphized (vs. non-anthropomorphized) brand to seem more human, which will mediate the interactive effect of moral identity and anthropomorphism on brand preference.

Studies 1, 2, and 3 tested H1, and studies 2 and 3 tested H2. Each of the three studies used a different form of anthropomorphism, and a different product type, to ensure the generalizability of the findings. Study 1 manipulated anthropomorphism through a 1st vs. 3rd person description of a product- "JK Battery" (manipulation taken from Chen, Wan, and Levy 2017), and measured participants' moral identity using the Aquino and Reed (2002) moral identity scale. Results showed a significant interaction, whereby consumers higher in

moral identity displayed higher purchase intentions for the anthropomorphized (vs. non-anthropomorphized) brand. Interestingly, there was a negative main effect of anthropomorphism, such that people overall preferred the non-anthropomorphized brand. This suggests that brand anthropomorphism may not always be beneficial, but rather that its effects may depend on situational or individual factors such as one's moral identity.

In study 2 anthropomorphism was manipulated by having participants view either an anthropomorphized or non-anthropomorphized image of "Orange Vie" orange juice (manipulation taken from Puzakova, Kwak, and Rocereto 2013). Moral identity was measured. Consistent with the results of study 1, higher moral identity was associated with higher purchase intentions and brand attitudes when the brand was anthropomorphized (vs. not). Supporting the proposed psychological mechanism, a moderated-mediation test (Hayes PROCESS Model 7) showed that this result was due to higher moral identifiers ascribing greater humanness to the anthropomorphized brand.

In study 3, participants viewed either an anthropomorphized picture of the "M&M's characters" or a non-anthropomorphized picture of M&M's candies. In the anthropomorphism condition, participants were asked to think about the M&M's as if they had come to life as a person, while in the non-anthropomorphized condition they were asked to think about the attributes of M&M's candy (manipulation adapted from Aggarwal and McGill 2012). Participants' moral identity was measured. Results again showed an interaction effect, whereby higher moral identity led to higher purchase intentions and brand attitudes when the brand was anthropomorphized (vs. non-anthropomorphized). Moderated-mediation results (Hayes PROCESS Model 7) again showed that the underlying psychological mechanism was higher moral identifiers' ascription of greater humanness to the anthropomorphized brand.

In conclusion, this research is the first to examine how moral identity affects preference for anthropomorphized brands. It is also the first research we know of to examine whether an individual difference variable affects the degree to which an anthropomorphized brand is seen as human. We found that consumers higher in moral identity preferred anthropomorphized (vs. non-anthropomorphized) brands due to greater perceived humanness of the anthropomorphized brand. These results support the proposition that mind perception is an essential aspect of morality, and also provide evidence that higher moral identity is associated with expanding the circle of moral regard to include anthropomorphized brands.

The Influence of Anthropomorphism on Choosing Multiple Products from an Assortment

EXTENDED ABSTRACT

Anthropomorphism, defined as attributing physical features and mental capacities that are unique to human-beings to non-human agents (Epley, Waytz, and Cacioppo 2007), is commonly employed in marketing communication. Consumers often see talking cars (e.g., Ford) and chocolate candies with legs and arms (e.g., M&M's) in commercials. Recent consumer research on anthropomorphism has primarily focused on consumers' response to one specific product, such as consumer evaluation (Landwehr, McGill, and Herrmann 2011) and replacement intention (Chandler and Schwarz 2010) of an anthropomorphized product. But whether anthropomorphism can systematically influence consumers' choice of multiple options from a product assortment remains an intriguing and uninvestigated question. The current research aims to fill this research gap by investigating the effect of anthropomorphism on consumers' choice of multiple product options from the perspective of consumer thinking

style. In the following sections, we first review the research background to derive our predictions and then present three studies that test our hypotheses.

Previous research suggests that the mental processes involved in thinking about human-beings govern cognition about objects when people anthropomorphize objects (Castelli, Happé, Frith, and Frith 2000; Epley et al. 2007). In order to uncover the thinking style that dominates people's perception of anthropomorphized products, it is important to understand how people perceive other persons. Research in impression formation shows that people use both a person's category membership and his/her particular attributes to form general impression (Brewer 1988). But the category-based process, which is more holistic and follows gestalt principles, has priority over the attribute-oriented process, which is piecemeal and elemental (Fiske and Neuberg 1990). Consistently, the person construal system theory (Freeman and Ambady 2011) suggests that people detect physical features of a target person (e.g., body cues), and integrate such cues to form a holistic impression of the target person. These findings suggest that person construal involves the attention to the whole person. Drawing on anthropomorphism and person perception literature, we predict that anthropomorphism would promote holistic thinking style, which distributes attention to the whole (Nisbett, Peng, Choi, and Norenzayan 2001), in contrast to analytic thinking style which focuses more on the parts (Nisbett et al. 2001).

The theory of thought system (Nisbett et al. 2001) suggests that holistic thinkers have a greater tendency to draw relationships between objects. For example, holistic thinkers tend to indicate higher degrees of association between pairs of arbitrary objects, and they are good at connecting objects together (Ji, Peng, and Nisbett 2000). Marketing researchers have documented that holistic thinkers (vs. analytic thinkers) tend to perceive closer relationships between the parent brand and an extension, and also perceive higher brand extension fit (Monga and John 2007). That is, holistic thinkers are more likely to see the parent brand and the extension as an entity. We therefore predicted that holistic thinkers would be more likely to see all the product options as an entity, which in turn promotes the choice of all the product options. To test our predictions, we examined the effect of anthropomorphism on thinking style in experiment 1 and the downstream effect on consumers' choice in experiments 2 and 3.

Experiment 1 tested the effect of anthropomorphism on thinking style. We first manipulated anthropomorphism by asking participants to write down their thoughts of a laptop computer either as a person or an object (Aggarwal and McGill 2012). After that, we measured participants' thinking style by asking participants to complete the locus of attention scale (Choi, Koo, and Choi 2007) which is commonly used to assess holistic (vs. analytic) thinking style. We found that participants in the anthropomorphism (vs. non-anthropomorphism) condition tend to think more holistically.

Experiment 2 tested the effect of anthropomorphism on consumer choice. In particular, we examined consumer choice of products from an assortment. Participants first read a hypothetical scenario in which they shop around and find yogurts with four different apple flavors (i.e., red delicious, golden delicious, yellow transparent, and cripps pink). We followed the same method in experiment 1 to manipulate anthropomorphism. To measure consumer choice, we first asked participants to assume that they tried the sample of each flavor and form different preference scores for the four flavors (i.e., 4 for red delicious and yellow transparent; 6 for grimes golden and cripps pink; 1 = do not like the flavor; 7 = like the flavor very much). Then the participants were informed that retailer offers a promotion package (with special discount) containing four packs of yogurts, and that they can choose any combinations of flavor for the four

packs. For example, they can form the promotion package by choosing one pack of each flavor, or four packs of the same flavor, or two packs of one flavor plus two packs of another flavor. Results of this experiment revealed that participants in the anthropomorphism (vs. non-anthropomorphism) condition were more likely to choose the whole set of yogurts (i.e., putting one pack of each flavor in the promotion package).

Experiment 3 aimed to replicate the results of experiment 2 and to reveal the mechanism by measuring the mediator (i.e., holistic thinking). The procedure was the same as experiment 2 except the following two changes. First, we changed the four yogurt flavors to vanilla, coffee, strawberry, and mango. We asked participants to base their choice on their intrinsic preference for the four familiar flavors, rather than assume preference for the unfamiliar flavors used in experiment 1. Second, we measured participants' holistic thinking of the yogurts to reveal the underlying process. Results of experiment 3 suggested that participants in the anthropomorphism (vs. non-anthropomorphism) condition were more likely to choose the whole set of yogurts by including their less preferred flavors. A mediation analysis confirmed that the effect was mediated by holistic thinking.

The findings contribute to the literature by documenting a novel effect of anthropomorphism and by revealing the psychological process underlying this effect. And it advances the understanding of consumers' choice of multiple options from an assortment.

REFERENCES

- Aquino, Karl, and Americus Reed II (2002), "The Self-Importance of Moral Identity," *Journal of Personality and Social Psychology*, 83(6), 1423-1440.
- Aggarwal, Pankaj and Ann L. McGill (2007), "Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products," *Journal of Consumer Research*, 34 (4), 468-79.
- Aggarwal, Pankaj and Ann L. McGill (2012), "When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism," *Journal of Consumer Research*, 39 (2), 307-23.
- Brewer, Marilynn (1988). A dual process model of impression formation. In Srull and Wyer (Eds.), *A Dual-Process Model of Impression Formation: Advances in Social Cognition* (Vol. 1, pp. 1-36). Hillsdale, NJ: Erlbaum
- Camara, Christina (2012), "Survey Finds Americans out of Touch with How Much They Spend," <http://www.accountingweb.com/topic/cfo/survey-shows-americans-need-spend-less-save-more-set-budget>.
- Castelli, Fulvia, Francesca Happé, Uta Frith, and Chris Frith (2000), "Movement and Mind: A Functional Imaging Study of Perception and Interpretation of Complex Intentional Movement Patterns," *Neuroimage*, 12 (3), 314-25..
- Chandler, Jesse and Norbert Schwarz (2010), "Use Does Not Wear Ragged the Fabric of Friendship: Thinking of Objects as Alive Makes People Less Willing to Replace Them," *Journal of Consumer Psychology*, 20 (2), 138-45.
- Chen, Rocky Peng, Echo Wen Wan, and Eric Levy (2016), "The Effect of Social Exclusion on Consumer Preference for Anthropomorphized Brands," *Journal of Consumer Psychology*, 27(January), 23-34.
- Choi, Incheol, Minkyung Koo, and Jong An Choi (2007), "Individual Differences in Analytic versus Holistic Thinking," *Personality and Social Psychology Bulletin*, 33(5), 691-705.
- Epley, Nicholas, Adam Waytz, and John T. Cacioppo (2007), "On Seeing Human: A Three-Factor Theory of Anthropomorphism," *Psychological Review*, 114(4), 864-86.
- Ersner-Hershfield, Hal, Daniel G. Goldstein, William F. Sharpe, Jesse Fox, Leo Yeykelis, Laura L. Carstensen and Jeremy N. Bailenson (2011), "Increasing Saving Behavior through Age-Progressed Renderings of the Future Self," *Journal of Marketing Research*, 48(1), 23-37.
- Fiske, Susan T., and Steven L. Neuberg (1990), "A Continuum Model of Impression Formation from Category-based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation," *Advances in Experimental Social Psychology*, 23, 1-74.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24, 343-73.
- Freeman, Jonathan B and Nalini Ambady (2011), "A Dynamic Interactive Theory of Person Construal," *Psychological Review*, 118 (2), 247-79.
- Goffman, Erving (1963), *Stigma: Notes on the Management of Spoiled Identity*, New York: Simon and Schuster.
- Gray, Kurt, Liane Young, and Adam Waytz (2012), "Mind Perception is the Essence of Morality," *Psychological Inquiry*, 23(2), 101-124.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Press.
- Ji, Li-Jun, Kaiping Peng, and Richard E. Nisbett (2000), "Culture, Control and Perception of Relationships in the Environment," *Journal of Personality and Social Psychology*, 78 (May), 943-55.
- Jones, Charisse (2015), "Millions of Americans Have Little to No Money Saved," USA Today, Available: <http://www.usatoday.com/story/money/personalfinance/2015/03/31/millions-of-americans-have-no-money-saved/70680904/>.
- Konstam, Varda, Samantha Karwin, Teyana Curran, Meaghan Lyons, and Selda Celen-Demirtas (2016), "Stigma and Divorce: A Relevant Lens for Emerging and Young Adult Women?," *Journal of Divorce & Remarriage*, 57 (3), 173-94.
- Kotlikoff, Laurence, Avia Spivak and Lawrence H. Summers (1982), "The Adequacy of Savings," *The American Economic Review*, 72(5), 1056-1069.
- Landwehr, Jan R., Ann L. McGill, and Andreas Herrmann (2011), "It's Got the Look: The Effect of Friendly and Aggressive 'Facial' Expressions on Product Liking and Sales," *Journal of Marketing*, 75 (3), 132-46
- Monga, Alokparna Basu and Deborah Roedder John (2007), "Cultural Differences in Brand Extension Evaluation: The Influence of Analytic versus Holistic Thinking," *Journal of Consumer Research*, 33 (March), 529-36.
- Nisbett, Richard E., Kaiping Peng, Incheol Choi, and Ara Norenzayan (2001), "Culture and Systems of Thought: Holistic versus Analytic Cognition," *Psychological Review*, 108 (April), 291-310.
- Puzakova, Marina, Hyokjin Kwak, and Joseph F. Rocereto (2013), "When Humanizing Brands Goes Wrong: The Detrimental Effect of Brand Anthropomorphization Amid Product Wrongdoings," *Journal of Marketing*, 77 (3), 81-100.
- Reed II, Americus, and Karl F. Aquino (2003), "Moral identity and the Expanding Circle of Moral Regard Toward Out-Groups," *Journal of Personality and Social Psychology* 84(6), 1270-1286.

- Richins, Marsha L. (1994), "Valuing Things: The Public and Private Meanings of Possessions," *Journal of Consumer Research*, 21 (3), 504-21.
- Sassenberg, Kai and Gordon B Moskowitz (2005), "Don't Stereotype, Think Different! Overcoming Automatic Stereotype Activation by Mindset Priming," *Journal of Experimental Social Psychology*, 41 (5), 506-14.
- Singer, Peter (1981), *The Expanding Circle*, Oxford: Clarendon Press.
- Singer, Peter (2009), *The Life You Can Save: Acting Now to End World Poverty*, Random House.
- Soman, Dilip and Amar Cheema (2011), "Earmarking and Partitioning: Increasing Saving by Low-Income Households," *Journal of Marketing Research*, 48(7), 14-22.
- Soman, Dilip and Min Zhao (2011), "The Fewer the Better: Number of Goals and Savings Behavior," *Journal of Marketing Research*, 48(6), 944-957.
- Ulkumen, Gulden and Amar Cheema (2011), "Framing Goals to Influence Personal Saving: The Role of Specificity and Construal Level," *Journal of Marketing Research*, 48(6), 958-969.

Why Aren't We Intrinsically Motivated Enough? Novel Insights into the Origination and Expression of Intrinsic Motivation

Chairs: Yuechen Wu, University of Maryland, USA
Meng Zhu, Johns Hopkins University, USA

Paper #1: Scarcity and the Intrinsic Motivation to Learn

Yuechen Wu, University of Maryland, USA
Meng Zhu, Johns Hopkins University, USA

Paper #2: The Dual Effect of Subjective Busyness on Consumer Motivation

Keith Wilcox, Columbia University, USA
Juliano Laran, University of Miami, USA

Paper #3: Process versus Outcome: How Envy and Goal Framing Affect Motivation

Anthony Salerno, University of Cincinnati, USA
Juliano Laran, University of Miami, USA
Chris Janiszewski, University of Florida, USA

Paper #4: Underestimating the Importance of Expressing Intrinsic Motivation in Job Interviews

Kaitlin Woolley, University of Chicago, USA
Ayelet Fishbach, University of Chicago, USA

SESSION OVERVIEW

Intrinsic motivation, which involves an individual engaging in a behavior purely because the activity itself is interesting and/or spontaneously satisfying (Deci and Ryan 2000), is a fundamental drive of human behavior, profoundly affecting consumers' persistence, performance and well-being in the process of goal pursuit. As such, over the past decades, intrinsic motivation has received much attention from various disciplines. Researchers have made considerable progress in understanding how the effective functioning of intrinsic motivation is affected by extrinsic motivators, such as threats of punishment (Deci and Cascio 1972), deadlines (Amabile et al. 1976), rewards (Deci 1971) and monitoring measurements (Etkin 2016). Yet, our understanding of the psychological, emotional, and social determinants of intrinsic motivation remains limited.

The proposed session highlights the newest research on how the everyday feelings of scarcity and busyness and our tendencies towards social comparison and impression management might undermine intrinsic motivation. In an attempt to gain a better understanding of why we are not intrinsically motivated enough at times, four papers examine how and when the origination and expression of intrinsic motivation is hindered by resource scarcity (vs. abundance), subjective busyness (vs. non-busyness), malicious (vs. benign) envy, and the interviewee (vs. interviewer) role.

The first three papers examine how the origination of intrinsic motivation is affected by the psychological states of scarcity, busyness and envy, respectively. **Wu and Zhu** show that a general sense of resource scarcity (vs. abundance) hinders the origination of intrinsic motivation to learn by thwarting consumers' psychological freedom. Scarcity's negative effect on intrinsic motivation is mitigated by fulfilling the psychological freedom via choice. **Wilcox and Laran** demonstrates that the subjective feeling of busyness decreases intrinsic motivation because the perception of having many things to do makes consumers uncertain about their ability to accomplish their objectives, an effect that reverses when consumers overcome this uncertainty. Next, **Salerno, Laran and Janiszewski** examine how the social emotion envy impacts people's intrinsic motivation. Whereas malicious envy orients people towards extrinsically-moti-

vated outcomes, benign envy increases people's intrinsic motivation to exert effort. Finally, expanding our understanding of the interplay between social environments and intrinsic motivation, **Woolley and Fishbach** examine the expression of intrinsic motivation in the job interview context. The authors find that job candidates tend to underestimate how much others are impressed by their expressions of intrinsic motivation, and therefore choose suboptimal pitches that fail to express their intrinsic motivation during job interviews.

Taken together, the four papers (all in advanced stages) in this session provide novel insights into when and why consumers might lack, or fail to express, intrinsic motivation, suggesting multiple ways to enhance intrinsic motivation, such as increasing psychological freedom, overcoming feelings of uncertainty, and eliciting benign envy. As the session integrates diverse research to highlight newest theoretical developments in this important yet understudied area, it is expected to appeal to a broad audience, including researchers interested in goals and motivation, scarcity and resource constraints, emotion, social interactions, and consumer judgment and decision making.

Scarcity and the Intrinsic Motivation to Learn

EXTENDED ABSTRACT

While resource abundance has emerged as the norm in modern, industrialized societies, consumers are frequently exposed to contextual cues that may remind them of resource scarcity (Laran and Salerno 2013; Mehta and Zhu 2016; Zhu and Ratner 2015). In this paper, we examine how a scarcity (vs. abundance) mindset impacts consumers' intrinsic motivation to learn (i.e., doing a behavior because of one's internal volition rather than external contingencies; Black and Deci 2000; Deci and Ryan 2000, 2008; Vansteenkiste et al. 2004). For example, will individuals with a scarcity (vs. abundance) mindset exert more or less effort to learn in the absence of financial incentives? Will consumers people under scarcity (vs. abundance) enjoy learning more or less, or be more or less interested in intrinsically-rewarding learning materials?

Building on prior research suggesting a possible connection between scarcity and low psychological freedom (Haushofer and Fehr 2014; Mittal and Griskevicius 2014; Mehta and Zhu 2016), and a well-established linkage between the satisfaction of psychological needs to act freely and the origination of intrinsic motivation (e.g., Black and Deci 2000), we propose that a scarcity (vs. abundance) mindset lowers individuals' psychological freedom, which consequently hinders the intrinsic motivation to learn. We test our hypotheses in four experiments.

Experiment 1 examined the main thesis that a scarcity (vs. abundance) mindset undermines the intrinsic motivation to learn. Participants were first asked to recall incidents where they either felt they did not have enough resources ("scarcity" condition) or had plenty of resources ("abundance" condition; Fischhoff et al. 2003; Mehta and Zhu 2016; Roux et al. 2015). Next, all participants were given a learning task where they could read and learn about forty festivals in different countries. Participants read one festival description at a time (each festival was presented on the screen for a fixed duration), and they could stop the task whenever they wanted to. The number of the festival descriptions read served as the measure of intrinsic mo-

tivation. Supporting our hypothesis, participants in the scarcity (vs. abundance) mindset condition read a significantly smaller number of festivals, and spent significantly less time on the task.

Experiment 2 tested the proposed mediating role of psychological freedom in the relationship between scarcity mindset and the intrinsic motivation to learn. Participants first read a fictitious news article that was either about the scarce supply of natural resources (“scarcity mindset” condition) or the growing abundance of natural resources (“abundance mindset” condition). Next, participants responded to the measures examining the satisfaction of psychological freedom (Chen et al. 2015). Finally, all participants completed a joke-learning task in which they read and rated ten jokes (each of which was presented on the screen for a fixed duration; Woolley and Fishbach 2015). As a measure of the decreases of intrinsic motivation to learn, we assessed the extent to which participants perceived the joke-learning task as an obligation to work (Laran and Janiszewski 2011). As predicted, participants in the scarcity (vs. abundance) mindset condition were more likely to perceive the learning task as an obligation to work, which was mediated by the lower psychological freedom associated with a scarcity (vs. abundance) mindset.

The last two studies provided further evidence for the proposed mechanism of psychological freedom. If scarcity impacts the intrinsic motivation to learn through psychological freedom, we should be able to moderate this effect by experimentally threatening (experiment 3) or fulfilling participants’ psychological freedom (experiment 4). Experiment 3 manipulated both scarcity (vs. abundance) mindset and the presence of psychological freedom threat. Specifically, participants first completed the scarcity mindset manipulation as used in experiment 2. Next, participants in the “freedom threat” condition were asked to recall three situations where they felt forced to do things they would not otherwise choose to do, whereas those assigned to the “control” condition were asked to list three activities they did in the past week. Finally, all participants read ten festival descriptions that were randomly chosen from a festival book. The maximum amount of money that participants were willing to pay for this book (\$0-\$100) served as a proxy of the intrinsic motivation to learn. As predicted, in the “control” condition where the psychological freedom was not threatened, participants’ willingness-to-pay for the book in the scarcity (vs. abundance) mindset condition was significantly lower; this difference disappeared when psychological freedom was experimentally threatened. In addition, consistent with our theorizing, participants in “abundance mindset” conditions were willing to pay less for the book when their psychological freedom was threatened versus not threatened.

The last experiment manipulated the fulfillment of psychological freedom in addition to a scarcity (vs. abundance) mindset to further test the mechanism. Specifically, participants first completed the scarcity mindset manipulation as used in experiments 2-3. Next, participants were asked to read a sample of a magazine that introduced products launched in the market. In the “freedom-fulfillment” condition, participants could choose a magazine issue they would like to read amongst four options. In the “control” condition, the computer randomly chose one of the four magazine issues for the participants to read. All participants then read the same ten product descriptions. Enjoyment of the learning task and participants’ interests in signing up for a free subscription of the magazine were used to assess the intrinsic motivation to learn. As predicted, in the “control” condition where the psychological freedom was not fulfilled, participants’ enjoyment and interests in signing up for the magazine in the scarcity (vs. abundance) condition were significantly less; this difference disappeared when psychological freedom was experimentally fulfilled. In addition, participants in “scarcity mindset” conditions enjoyed the

learning task more and were more interested in signing up for the magazine when their psychological freedom was fulfilled versus not fulfilled.

Collectively, we demonstrate that a scarcity (vs. abundance) mindset lowers psychological freedom, which in turn undermines the intrinsic motivation to learn. These effects are moderated when consumers’ psychological freedom is experimentally threatened or fulfilled.

The Dual Effect of Subjective Busyness on Consumer Motivation

EXTENDED ABSTRACT

Consumers are increasingly living busy and active lives. Busyness has become an endemic aspect of modern society as the past several decades have seen a significant increase in self-reported busyness (Sullivan 2008). Previous research examining the relationship between busyness and task-related outcomes finds that being busy often has a negative impact on people’s ability to successfully achieve tasks. In this research, we offer another perspective on how busyness can impact task outcomes by examining how the psychological state of feeling busy influences consumers’ willingness to adopt and complete tasks (i.e., task motivation).

We conceptualize busyness as a subjective state that results from individuals’ assessment of their current and expected level of activity (Wilcox et al. 2016). Although this assessment is influenced by the amount of time people are engaged in activity, it is primarily determined by the perceived density of activity, such as the frequency and variety of tasks, relative to expectations (Gershuny 2005). Consequently, people feel busier when they recognize that they have many (vs. few) tasks to complete. We propose that the difficulty associated with completing many (vs. fewer) tasks underlies the influence of feeling busy on task motivation.

Specifically, we contend that subjective busyness can make consumers both less and more willing to perform certain activities. Subjective busyness can decrease task motivation because the difficulty associated with having many things to do makes consumers uncertain about their ability to accomplish their objectives. However, busyness can increase task motivation when consumers overcome this uncertainty. In these cases, those who feel busy demonstrate higher willingness to perform tasks compared to those who feel less busy. This effect is driven by busy people finding it more intrinsically motivating to perform effortful tasks.

The objective of study 1 was to demonstrate that subjective busyness makes individuals more uncertain about their ability to accomplish a focal task. We induced individuals to feel busy (vs. not) by showing them advertisements that prime feelings of busyness prior to measuring how uncertain they were about their ability to complete a task. We employed two measures of confidence. The first asked participants to set a self-imposed deadline for completing the task. The payment was structured in such a way that they would receive a lower payment for setting a longer deadline. The second was a direct measure of how confident they were that they would complete the task. As predicted, busy participants were less confident in their ability to complete the task compared to those who were not busy. Specifically, busier participants set longer deadlines (at a lower payment) and self-reported feeling less confident that they would meet the deadline.

The purpose of study 2a was to show that subjective busyness reduces task motivation as a result of people’s uncertainty about their ability to accomplish tasks. We manipulated busyness by having participants list ten vs. three tasks on their “to do” list. We then

asked participants about their willingness to engage in a common task: shopping. Specifically, we assessed their motivation to go to the store to take advantage of a sale on new appliances. As busyness should make participants more uncertain about their ability to get to the store, we expected that participants in the busy condition would be less motivated to participate than those in the not busy condition. As expected, busy participants indicated that they were less motivated to go shopping, an effect mediated by task confidence. Study 2b replicated the findings using the same advertising manipulation from study 2a. As a measure of motivation, we assessed their willingness to pay for a gift card that could only be redeemed in store.

The primary purpose of study 3 was to demonstrate that when task uncertainty is attenuated, consumers who feel busy become more motivated to perform a task than those who feel less busy. Our theory suggests that people reduce their task motivation when they feel uncertain about achieving an outcome because failure is a threat that is emotionally painful. Thus, in study 3 participants were primed (vs. not primed) to cope with their uncertainty by detaching themselves from the situation (Greco and Roger 2001). Consistent with previous studies, when participants were not instructed to detach themselves from the situation, busyness lowered motivation, an effect mediated by task uncertainty. However, when people were instructed to detach themselves from the situation they displayed greater motivation.

In study 4, we sought to demonstrate that the reversal of the effect of busyness on task motivation when participants overcome their uncertainty is driven by an increase in how intrinsically motivating they find performing the task to be. To accomplish this, we manipulated task uncertainty by giving people false feedback that they were either good or not good at getting tasks accomplished. When participants were told that they were not good at getting tasks accomplished, busyness reduced motivation. However, when participants were told that they were good at getting tasks accomplished, which made them more certain about their ability to accomplish tasks, busyness increased motivation. This effect was driven by participants finding it intrinsically satisfying to complete the focal task.

By advancing our understanding of busyness as a subjective state this research makes several contributions. First, previous studies on busyness have primarily relied on measures and manipulations of objective workload (i.e., number of tasks actually performed; e.g., Parkes 1995), which makes it impossible to isolate the effects of feeling busy from those that emerge from actually executing many activities. We show that subjective busyness can influence task motivation independently of objective workload by holding the actual level of activity constant. Second, we demonstrate that busyness does not always have a negative effect on task-related outcomes and that how people think about busyness determines its effect on task motivation. Finally, understanding how subjective busyness affects behavior has an array of implications, as companies may be able to use marketing communication to influence consumer purchasing behavior via their perceptions of busyness.

Process versus Outcome: How Envy and Goal Framing Affect Motivation

EXTENDED ABSTRACT

Envy occurs from a negative social comparison with another individual who holds a superior advantage on some desired quality, achievement, or possession (Parrott and Smith 1993). Envy is a self-conscious emotion that is cognitively complex and multifaceted in its experience (Crusius and Mussweiler 2012). Benign envy is said to happen when a person is envious towards another but perceives that the superior advantage of the envied individual is deserved, whereas

malicious envy arises when the envious individual believes that the superior advantage of the envied individual is undeserved (Crusius and Lange 2014; Van de Ven, Zeelenberg, and Pieters 2011a).

Prior investigations into people's motivational responses to envy have led to the consensus that benign envy motivates goal pursuit whereas malicious envy does not (Lange and Crusius 2015; Van de Ven, Zeelenberg, and Pieters 2011b). The current research challenges this conclusion by considering how each type of envy might affect goal pursuit differently, depending on how the goal under consideration is interpreted. We find that both envy facets potentially motivate goal pursuit. However, for this to occur, the goal must be framed in a way that matches the underlying motivational orientation of each envy type. Specifically, when benign envy is experienced, people are more motivated to pursue goals that are framed to emphasize the process (i.e., what you need to do to pursue the goal) of goal pursuit. This preference occurs because benign envy orients people towards intrinsically-motivated behaviors (i.e., exerting effort), and a goal highlighting the process of goal pursuit fits with that orientation. By contrast, malicious envy leads people to become more motivated to pursue goals that are framed to emphasize the outcome (i.e., what results you derive from goal attainment) of goal pursuit. This preference occurs because malicious envy orients people towards extrinsically-motivated behaviors (i.e., obtaining rewards), and a goal highlighting the outcome of goal pursuit fits with that orientation. We tested these predictions in four studies.

Study 1 examined the pursuit of a health goal, using a 3 (emotion: control, benign envy, malicious envy) x 2 (goal frame: process, outcome) between-subjects design. Participants in the benign (malicious) envy condition wrote about a time they were envious of another individual for something that was deserved (undeserved). In an unrelated consumer preference task, participants then indicated their interest in a new multivitamin that was described as either "helping people do the work necessary to reach their health goals" (process condition) or "helping people achieve their health goals" (outcome condition). Results showed a significant interaction between the emotion and goal frame factors ($F(2, 178) = 6.67, p < .01$). Participants in the benign (malicious) envy condition were significantly more interested in the multivitamin when framed in terms of the process (outcome) of one's health goal.

Study 2 found that the emotional experience of envy is necessary for the differences in deservingness between benign and malicious envy to exert an influence on goal pursuit as a function of goal framing. We examined this issue based on research showing that people's trust in their emotions shapes their emotional experience (Avnet, Pham, and Stephen 2012), using a 2 (emotion: benign envy, malicious envy) x 2 (trust in emotions: high, low) x 2 (goal frame: process, outcome) between-subjects design. Participants in the benign (malicious) envy condition were made to feel envy based on the job offer of a fellow student that was deserved (undeserved). Next, participants were manipulated to either trust their emotions (high trust) or not (low trust). Participants then completed the consumer preference task in study 1. Results revealed a significant interaction among the emotion, trust in emotions, and goal frame factors ($F(2, 178) = 6.67, p < .01$). The high trust in emotions condition replicated the results of study 1. In the low trust in emotions condition, participants in the benign (malicious) envy condition were no longer more interested in the multivitamin regardless of whether it was framed in terms of the process (outcome) of one's health goal.

Study 3 provided evidence for the hypotheses that benign (malicious) envy is driven by an underlying intrinsic (extrinsic) motivation to exert effort (obtain rewards). We examined these hypotheses during the pursuit of an academic goal, using a 2 (emotion: benign envy,

malicious envy) \times 2 (luck opportunity: absent, present) between-subjects design. After the envy manipulation, participants read a product review for a smartphone app purportedly geared towards the pursuit of one's academic goals. The app was either described to help people based on how many exercises they completed (luck absent) or that people may improve academically independent of how many exercises they completed (luck present). We then monitored goal pursuit via the number of anagrams attempted (supposedly an example exercise from the app). Results revealed a significant interaction between the emotion and luck opportunity factors on the number of anagrams attempted ($F(1, 198) = 8.28, p < .01$). Participants in the benign (malicious) envy condition attempted a significantly greater number of anagrams in the luck absent (present) condition. Moderated mediation analyses revealed that the beneficial effect of benign (malicious) envy on anagrams attempted as a function of luck opportunity was mediated by a focus on effort (focus on rewards).

Study 4 provided further process evidence by examining the influence of benign (malicious) envy on the pursuit of a fitness goal (i.e., real amount bid on a pair of Nike shoes) as a function of people's implicit theory of motivation (Murphy and Dweck 2015). A regression analysis revealed a significant interaction between emotion (benign envy, malicious envy; manipulated) and implicit theory (incremental, entity; measured) on the amount bid ($\beta = -11.46, p < .01$). Specifically, benign (malicious) envy led participants to provide a greater bidding amount when they held an incremental (entity) implicit theory.

Collectively, this research contributes to the literatures on envy, self-conscious emotions, and motivation. The findings illustrate how envy has a more nuanced influence on motivation than previously thought. Finally, this research also highlights the importance for considering how goal pursuit may vary based on the framing of the goal.

Underestimating the Importance of Expressing Intrinsic Motivation in Job Interviews

EXTENDED ABSTRACT

To successfully sell yourself in a job interview, what qualities should you highlight to impress the recruiter and secure a job offer? You clearly want to make a good impression, but knowing what others find impressive is not straightforward, especially in recruitment situations where attentional resources for perspective taking are limited (Apperly et al. 2006; Vorauer et al. 2009). Obviously, you should state your skills, ambitions and long-term goals – your extrinsic motivation. But to what extent should you also emphasize your intrinsic motivation—that you value interesting, fun work?

Intrinsic motivation refers to pursuing an activity because the process is rewarding, and is contrasted with extrinsic motivation where people work to achieve an outcome for which their work is instrumental (Etkin 2016; Fishbach and Choi 2012; Laran and Janiszewski 2011). Importantly, these motivations are not mutually exclusive, and most jobs offer a combination of both intrinsic and extrinsic rewards (e.g., extrinsic: opportunity for career advancement; intrinsic: some level of interest and self-expression).

We propose that when predicting what another person finds impressive, people get intrinsic motivation wrong. That is, people lack awareness that others value intrinsic rewards in the first place (DeVoe and Iyengar 2004; Heath 1999), leading them to underestimate how much others are impressed by their expressions of intrinsic motivation. As a result, people underemphasize their intrinsic motivation in recruiting.

Four experiments test our predictions. Experiment 1 assigned participants the role of job candidate or recruiter. Participants viewed

a list of personal motivations that candidates could use in describing themselves during an interview. Candidates predicted how these motivations influenced recruiters' hiring decisions, whereas recruiters indicated the likelihood of hiring someone who expressed each motivation. Traits mapping onto intrinsic motivation portrayed a person motivated by what she achieves while working (e.g., "I love doing my work."). Traits mapping onto extrinsic motivation portrayed a person motivated by what she achieves as a result of working (e.g., "I value advancing my career."). As predicted, candidates' expressions of intrinsic motivation had a greater influence on recruiters' decisions than candidates anticipated, $F(1, 206) = 6.56, p = .011$. However, candidates accurately predicted recruiters' valuation of extrinsic motivation, $F(1, 206) = .01, p = .905$.

Our theory assumes mispredictions—predictors fail to appreciate the extent to which their intrinsic motivation matters for others—yet, our theory does not imply that only job candidates mispredict. Recruiters will also underestimate the extent to which admitted candidates value a work place that emphasizes intrinsic motivation when deciding to accept a job offer. Experiment 2 tests both sides simultaneously.

Experiment 2 manipulated both role (candidate vs. recruiter) and perspective (predictor vs. evaluator). Replicating Experiment 1, candidates expected that their expressions of intrinsic motivation mattered less to recruiters than they did, $F(1, 77) = 5.28, p = .024$, with no effect for extrinsic motivation, $F(1, 77) = 1.15, p = .286$. We further examined whether recruiters persuading a job candidate to join their company mispredict how much candidates care about expressions of intrinsic, but not extrinsic motivation. We find this is indeed the case. Recruiters predicting what job candidates care for underestimated candidates' valuation of intrinsic motivation, $F(1, 77) = 6.03, p = .016$, with no effect for extrinsic motivation, $F(1, 77) = .40, p = .527$. Overall, evaluators cared more about intrinsic motivation than predictors anticipated, whereas predictors accurately assessed valuations of extrinsic motivation.

Do people mispredict how much others value expressions of intrinsic motivation because they fail to realize that others find intrinsic rewards at work important? To examine this underlying process, participants in Experiment 3 assumed the role of job candidate or recruiter. To measure recruiters' rewards from work, candidates estimated what recruiters care about at work, whereas recruiters provided their true valuations of intrinsic rewards (e.g., "Doing work that you are interested in") and extrinsic rewards (e.g., "Having job security at your work"; modified after Heath 1999). To measure the weight recruiters give to motivation in hiring, participants answered the same list of intrinsic and extrinsic motivations (traits) from Experiment 1 that candidates could express to recruiters during an interview.

As predicted, recruiters valued receiving intrinsic rewards at work more than candidates expected, $F(1, 206) = 14.91, p < .001$, with no effect for extrinsic rewards, $F(1, 206) = 1.87, p = .173$. Replicating Experiments 1-2, recruiters valued candidates' expressions of intrinsic motivation more than candidates anticipated, $F(1, 206) = 6.95, p = .009$, with no effect of extrinsic motivation, $F(1, 206) = .16, p = .693$. Mediation analyses revealed that candidates underestimate how much recruiters value their expressions of intrinsic motivation because they underestimate how much recruiters value receiving intrinsic rewards at work ($\beta_{\text{indirect}} = .23, SE = .06; 95\% \text{ CI } [.12, .36]$).

In Experiment 4, participants assigned the role of job candidate or recruiter both read two job pitches, an "Intrinsic Pitch" and an "Extrinsic Pitch." Recruiters selected the pitch for the candidate they preferred to hire, whereas job candidates were incentivized (lottery for \$100) to select the pitch they believed recruiters preferred to hear.

The Intrinsic Pitch highlighted the presence of intrinsic motivation as a strength and the absence of extrinsic motivation as a weakness; the opposite was true for the Extrinsic Pitch. As predicted, a majority (69.5%) of recruiters selected the Intrinsic Pitch, with only 43% of candidates selecting this pitch despite being incentivized to predict recruiters' preference, $\chi^2(1, N = 168) = 11.95, p < .001$.

Across four experiments, we find people underestimate how impressed others are by their expressions of intrinsic motivation, although they accurately predict how much others value their extrinsic motivation. This was true both for job candidates interviewing for an open position and companies trying to market their organization to new hires. As a result, people fail to emphasize their intrinsic motivation, leading them to be less persuasive to others.

REFERENCE

- Amabile, Teresa M., William DeJong, and Mark R. Lepper (1976), "Effects of External Imposed Deadlines on Subsequent Intrinsic Motivation," *Journal of Personality and Social Psychology*, 34 (1), 92.
- Apperly, Ian A., Kevin J. Riggs, Andrew Simpson, Claudia Chiavarino, and Dana Samson (2006), "Is Belief Reasoning Automatic?" *Psychological Science*, 17 (10), 841-44.
- Avnet, Tamar, Michel T. Pham, and Andrew T. Stephen (2012), "Consumers' Trust in Feelings as Information," *Journal of Consumer Research*, 39 (December), 720-35.
- Black, Aaron E. and Edward L. Deci (2000), "The Effects of Instructors' Autonomy Support and Students' Intrinsic Motivation on Learning Organic Chemistry: A Self-Determination Theory Perspective," *Science Education*, 84 (6), 740-756.
- Chakravarthy, Manu V. and Frank W. Booth (2004), "Eating, Exercise, and "Thrifty" Genotypes: Connecting the Dots toward an Evolutionary Understanding of Modern Chronic Diseases," *Journal of Applied Physiology*, 96 (1), 3-10.
- Chen, Beiwen, Maarten Vansteenkiste, Wim Beyers, Liesbet Boone, Edward L. Deci, Jolene Van der Kaap-Deeder, Bart Duriez, Willy Lens, Lennia Matos, Athanasios Mouratidis, Richard M. Ryan, Kennon M. Sheldon, Bart Soenens, Stijn Van Petegem, and Joke Verstuyf (2015), "Basic Psychological Need Satisfaction, Need Frustration, and Need Strength Across Four Cultures," *Motivation And Emotion*, 39(2), 216-36.
- Crusius, Jan and Thomas Mussweiler (2012), "When People Want What Others Have: The Impulsive Side of Envious Desire," *Emotion*, 12 (February), 142-53.
- Deci, Edward L. (1971), "Effects of Externally Mediated Rewards on Intrinsic Motivation," *Journal of Personality and Social Psychology*, 18, 105-115.
- Deci, Edward L. and Wayne F. Cascio (1972), *Changes in Intrinsic Motivation as a Function of Negative Feedback and Threats*, Paper presented at the 43rd annual meeting of the Eastern Psychological Association, Boston.
- Deci, Edward L. and Richard M. Ryan (2000), "The "What" and "Why" of Goal Pursuits: Human Needs and The Self-Determination of Behavior," *Psychological Inquiry*, 11, 227-268.
- (2008), "Facilitating Optimal Motivation and Psychological Well-Being Across Life's Domains," *Canadian Psychology*, 49(1), 14.
- DeVoe, Sanford E. and Sheena S. Iyengar (2004), "Managers' Theories of Subordinates: A Cross-cultural Examination of Manager Perceptions of Motivation and Appraisal of Performance," *Organizational Behavior and Human Decision Processes*, 93 (1), 47-61.
- Etkin, Jordan (2016), "The Hidden Cost of Personal Quantification," *Journal of Consumer Research*, 42 (6) 967-84.
- Fischhoff, Baruch, Roxana M. Gonzalez, Deborah A. Small, and Jennifer S. Lerner (2003), "Judged Terror Risk and Proximity to the World Trade Center," *Journal of Risk and Uncertainty*, 26 (2/3), 137-51.
- Fishbach, Ayelet and Jinhee Choi (2012), "When Thinking about Goals Undermines Goal Pursuit," *Organizational Behavior and Human Decision Processes*, 118 (2), 99-107.
- Haushofer, Johannes and Ernst Fehr (2014), "On the Psychology of Poverty," *Science*, 344 (6186), 862-867.
- Gershuny, J. (2005), "Busyness as The Badge of Honor For The New Superordinate Working Class," *Social Research*, 72(2), 287-314.
- Greco, Veronica and Derek Roger (2001), "Coping with Uncertainty: The Construction and Validation of a New Measure," *Personality and Individual Differences*, 31 (4), 519-34.
- Griskevicius, Vladas, Joshua M. Ackerman, Stephanie M. Cantu, Andrew W. Delton, Theresa E. Robertson, Jeffrey A. Simpson, Melissa Emery Thompson, and Joshua M. Tybur (2013), "When the Economy Falts, Do People Spend or Save? Responses to Resource Scarcity Depend on Childhood Environments," *Psychological Science*, 24 (2), 197-205.
- Heath, Chip (1999), "On the Social Psychology of Agency Relationships: Lay Theories of Motivation Overemphasize Extrinsic Incentives," *Organizational Behavior and Human Decision Processes*, 78 (1), 25-62.
- Lange, Jens and Jan Crusius (2015), "Dispositional Envy Revisited: Unraveling the Motivational Dynamics of Benign and Malicious Envy," *Personality and Social Psychology Bulletin*, 41 (December), 284-94.
- Laran, Juliano, and Chris Janiszewski (2011), "Work or Fun? How Task Construal and Completion Influence Regulatory Behavior," *Journal of Consumer Research*, 37 (6), 967-83.
- Laran, Juliano and Anthony Salerno (2013), "Life-History Strategy, Food Choice, and Caloric Consumption," *Psychological Science*, 24 (2), 167-73.
- Mehta, Ravi and Zhu, Meng (2016), "Creating When You Have Less: The Impact of Resource Scarcity on Product Use Creativity," *Journal of Consumer Research*, 42, 767-782.
- Mittal, Chiraag and Vladas Griskevicius (2014), "Sense of Control Under Uncertainty Depends on People's Childhood Environment: A Life History Theory Approach," *Journal of Personality and Social Psychology*, 107 (4), 621.
- Murphy, Mary C. and Carol S. Dweck (2015), "Mindsets Shape Consumer Behavior," *Journal of Consumer Psychology*, 26 (January), 127-36.
- Parrott, W. Gerrod and Richard H. Smith (1993), "Distinguishing the Experiences of Envy and Jealousy," *Journal of Personality and Social Psychology*, 64 (June), 906-20.
- Restegary, H. and Landy, F. (1993), The Interaction Among Time Urgency, Uncertainty, And Time Pressure. In O. Svenson and A. J. Maule (Eds.), *Time Pressure and Stress in Human Judgment And Decision Making*, New York: Plenum Press.

- Roux, Caroline, Kelly Goldsmith, and Andrea Bonezzi, "On the Psychology of Scarcity: When Reminders of Resource Scarcity Promote Selfish (and Generous) Behavior," *Journal of Consumer Research*, 42, 615–631.
- Seki, Yukiko (2008), "Working Condition Factors Associated with Time Pressure of Nurses in Japanese Hospitals," *Journal of Occupational Health*, 50 (2), 181-190.
- Sullivan, Oriel (2008), "Busyness, Status Distinction and Consumption Strategies of the Income Rich, Time Poor," *Time & Society*, 17 (1), 5-26.
- Van de Ven, Niels, Marcel Zeelenberg, and Rik Pieters (2011a), "The Envy Premium in Product Evaluation," *Journal of Consumer Research*, 37 (6, April), 984–95.
- (2011b), "Why Envy Outperforms Admiration," *Personality and Social Psychology Bulletin*, 37 (June), 784–95.
- Vansteenkiste, Maarten, Joke Simons, Willy Lens, Kennon M. Sheldon and Edward L. Deci (2004), "Motivating Learning, Performance, and Persistence: The Synergistic Effects of Intrinsic Goal Contents and Autonomy-Supportive Contexts," *Journal of Personality and Social Psychology*, 87 (2), 246.
- Vorauer, Jacquie D., Verena Martens, and Stacey J. Sasaki (2009), "When Trying to Understand Detracts from Trying to Behave: Effects of Perspective Taking in Intergroup Interaction," *Journal of Personality and Social Psychology*, 96 (4), 811-27.
- Wilcox, Keith, Juliano Laran, Andrew Stephen, and Peter Zubeck (2016), "How Being Busy Can Increase Motivation and Reduce Task Completion Time," *Journal of Personality and Social Psychology*, 110 (March), 371-84.
- Woolley, Kaitlin and Ayelet Fishbach (2015), "The Experience Matters More Than You Think: People Value Intrinsic Incentives More Inside Than Outside an Activity," *Journal of Personality and Social Psychology*, 109 (6), 968.
- Zhu, Meng and Rebecca Ratner (2015), "Scarcity Polarizes Preferences: The Impact on Choice among Multiple Items in a Product Class," *Journal of Marketing Research*, 52 (1), 13–26.

Come and Have Fun with Us: Social Influences and Social Perception in Leisure Activities

Chairs: Yuechen Wu, University of Maryland, USA
Rebecca K. Ratner, University of Maryland, USA

Paper #1: The Decision to Share: From the Joy of Self-Possession to the Joy of Shared Consumption

Adelle X. Yang, National University of Singapore, Singapore
Ann McGill, University of Chicago, USA

Paper #2: Getting the Most from Shared Experiences: The Undervalued Impact of Clear Objectives

Yuechen Wu, University of Maryland, USA
Nicole Y. Kim, University of Maryland, USA
Rebecca K. Ratner, University of Maryland, USA
Rebecca W. Hamilton, Georgetown University, USA

Paper #3: Celebrations and Social Support

Danielle J. Brick, University of New Hampshire, USA
Kelley Gullo, Duke University, USA
James R. Bettman, Duke University, USA
Tanya L. Chartrand, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA

Paper #4: Wasting Time and Money? How Consumers Evaluate Others' Resource (Mis)Management

Jenny G. Olson, Indiana University, USA
Brent McFerran, Simon Fraser University, Canada
Andrea C. Morales, Arizona State University, USA
Darren W. Dahl, University of British Columbia, Canada

SESSION OVERVIEW

Leisure is time that people spend with freedom of choice, intrinsic motivation and enjoyment (Shaw and Dawson 2001). We spend leisure time attending baseball game with friends, celebrating accomplishments with family, or volunteering in the neighborhood. As these examples suggest, many of the ways people spend leisure time involve social contexts and the presence of other people. As such, examining how the presence of others affects leisure choices and experiences is both theoretically important and substantively relevant. What activities do consumers prefer sharing with others, and when do consumers derive more utility from shared leisure experiences? How do consumers in the social contexts perceive another person's leisure choices?

Our session sheds light on these questions. The first three papers examine how the presence of others influences the anticipated and actual leisure experiences. **Yang and McGill** begin by discussing how the anticipation of activity partner's affective experience influences consumers' choice of sharing. Consumers are more willing to share affect-rich (e.g., desserts) than affect-poor resources (e.g., vegetables), because they expect more positive affective reactions from activity partners, which will in turn increase their own enjoyment. Such tendency is further amplified if consumers have an experiential (vs. material) goal.

Moving from the anticipation of shared experiences, **Wu et al.** examine how clarity about a partner's objectives influences the consumer's actual experience. When consumers are sharing experiences with others (e.g., visiting an art gallery), they may be unclear about the degree to which her friend prioritizes absorbing the artwork or socializing with her. A lack of clarity limits the consumer's ability to absorb consumption content and socialize, which can have downstream effects including reduced enjoyment. However, Many consumers do not spontaneously take simple steps to increase clarity.

Next, **Brick et al.** focus on a specific type of leisure activity—celebration, and examine the emotional and social benefits provided by cel-

ebrations. The authors find celebrations provide greater social support compared to other shared leisure activities because of the presence of more close others. Further, being the focal celebrant and/or organizing celebrations for others can further increase perceptions of social support.

Finally, **Olson et al.** examine how people in social contexts perceive another consumer's ethical choices, including spending leisure time on volunteering, based on income sources (welfare recipients vs. income earners). The authors show welfare recipients (vs. income earners) are perceived less moral when they spend much time on volunteering (e.g., in a museum) or make donations of material-possessions due to the stronger perception of wastefulness.

Together, this session investigates both social influences on people's sharing choices and actual leisure experiences, as well as the effects of leisure choices on others' impressions of them. These papers also suggest multiple ways to help consumers derive more utility from shared leisure experiences, including increasing objective clarity and the presence of close others. We expect this session to appeal to a broad audience, including researchers interested in social influence, social cognition, experiential consumption, moral judgment and consumer decision making.

The Decision to Share: From the Joy of Self-Possession to the Joy of Shared Consumption

EXTENDED ABSTRACT

Why do people share desserts, which feel good, but not vegetables, which are good? Little research has examined the decision to share in which resource re-allocation is targeted at, and immediately followed by consumption of the resources. In the present research, we investigate how people make such sharing decisions, and distinguish them from the conventionally studied giving decisions where resources are re-allocated without considering subsequent consumption outcomes (e.g., when allocating monetary tokens).

Such decisions to share arise before (or during) one's consumption of resources and involves the transfer of resources. As such, decision-makers face the tradeoff between two goals: to maximize one's possession, and to maximize one's experience from consumption. What maximizes one's possession is not necessarily the same as what maximizes one's experience. In particular, based on a distinction made between the affective value and the monetary value as two independent sources of value (Hsee and Rottenstreich 2004), we theorize that the monetary value of resources is crucial for evaluating one's possession, whereas the affective value of resources is more crucial for evaluating one's consumption experience, because it is during consumption that the affective value can be realized. Moreover, the involvement of others during consumption can augment one's own consumption experience (Boothby, Clark and Bargh 2014; Ramanathan and McGill 2007; Steinmetz, Fishbach and Zhang 2016). Thus, while people will be less willing to share resources of great monetary value, they may be more willing to share resources of great affective value, due to the spontaneous consideration of how enjoyable the consumption experience will be.

Therefore, we hypothesize that when making a sharing decision, people are more willing to share affect-rich resources with others when holding the monetary value constant. Further, although the anticipated personal enjoyment from consumption may be enhanced by either the mental simulation of others' involvement, or the pros-

pect of actual joint consumption, we predict the prospect of actual joint consumption may further amplify one's willingness to share affect-rich resources, because synchronized joint consumption has been shown to enhance enjoyment in multiple facets (Boothby et al. 2014; Ramanathan and McGill 2007; Steinmetz et al. 2016). We present four studies to examine the decision to share.

In study 1, we recruited 186 mturk participants ($M_{\text{age}} = 35$, 52% Male) to an allocation task between themselves and another mturker modeled after the Dictator Game. Participants were randomly assigned to two conditions that differed in the nominal resource for allocation (token vs. joke). The value of each token was equated with a joke. Participants either allocated tokens that they would use to redeem jokes, or allocated jokes directly. We found participants allocating jokes were more generous than those allocating tokens (giving 5.5 vs. 4.1 out of 11 to the other, $t(184) = -3.57$, $p < .001$). Subsequent measures suggest that participants allocating jokes considered each other's enjoyment from consumption (i.e., of listening to the jokes) more than those allocating tokens, whereas they similarly considered each other's satisfaction with possession (i.e., with the allocation decision). In sum, the consideration of the subsequent consumption experience may underlie the willingness to share affect-rich resources with others. A replication study with real consequences in a lab is in progress where preliminary evidence of the same pattern has been observed ($N = 45$ (target $N = 200$), Median = 6.0 vs. 4.5, non-parametric t-test $p = .07$).

In study 2, we further examine how subsequent consumption affects the sharing decision. We randomly assigned online participants ($N = 320$, $M_{\text{age}} = 35$, 56% Male) to a 2 (resource: affect-poor vs. affect-rich) \times 2 (subsequent consumption: separate vs. joint) between-subjects design. We asked participants to imagine that they had been kept hungry for a food-tasting study and were given seven mini trays of cracker chips. The experimenter ran short on chips for the next participant, so participants were asked how much they would like to share their chips, from one to six trays. The cracker chips were either described as plain or flavorful, paired with doctored images that highlighted the difference in flavors. A pretest ($N = 60$) validated that the flavored chips were rated more likely to induce positive affective reactions than the plain cracker chips, and both were rated to have a similar market price. Further, participants either read that the other participant would retrieve the allotted cracker chips and taste them in a separate room, or that they would taste the cracker chips sitting next to each other. Overall, participants were more willing to share when the cracker chips were considered affect-rich than affect-poor (2.9 vs. 2.3, non-parametric $p = .002$). Moreover, subsequent joint consumption amplified this effect ($F(1,318) = 3.3$, $p = .044$). Participants were more willing to share when the allocation decision was followed by joint consumption (3.2 vs. 2.2, $p < .001$).

In study 3, we examined a theoretical moderator, that people will be more willing to share if they considered experiential gain to be more crucial to their happiness, and less so if they considered material gain to be more crucial to their happiness. We recruited participants ($N = 194$, $M_{\text{age}} = 35$, 49% Male) online and asked them either to recall three material possessions or three experiential consumption experiences that made them happy in order to prime material or experiential goals. Manipulation checks confirmed that participants considered material possession or experiential consumption to be more crucial for their happiness depending on the condition ($p < .05$). We then asked participants to imagine that they were having a good time catching up with a specified neighbor/friend, and wanted to have a drink together. The participants were asked to choose between a generic bottle vs. a premium bottle of wine. Results revealed that the experiential goal prime increased participants' willingness to share the affect-rich premium wine (45% vs. 24%, $\chi^2 = 6.4$, $p = .012$).

Last, we explored how affective value influences the decision to share in common food consumption scenarios ($N = 266$). We found the willingness to share a food item with a friend was predicted by the anticipated affective experiences ($s = .44$, $p < .001$), but not the overall substantial benefits (e.g., nutritional or material) brought by the food item ($\beta = .02$, $p > .25$).

Getting the Most from Shared Experiences: The Undervalued Impact of Goal Clarity on Shared Consumption

EXTENDED ABSTRACT

Consumers often engage in leisure activities with others, such as visiting an art gallery or attending a baseball game. When these activities support multiple objectives, such as absorbing the consumption content and socializing with the partner, it may be unclear to consumers the degree to which an activity partner wants to absorb the consumption content versus simply to enjoy the experience and socialize. The primary goal of this research is to examine how the degree of clarity about the partner's objectives impacts a consumer's ability to balance focusing on the consumption content and socializing with the partner during shared leisure activities.

Building on previous research on teamwork suggesting that clarity about objectives facilitates coordination and reduces concerns about the partner's experience (e.g., Bang et al. 2010; Fitzsimons, Finkel and vanDellen 2015), we posit that lacking (vs. having) clarity about the partner's objectives (i.e., whether the partner prioritizes absorbing the consumption content or socializing) hinders consumers' ability to coordinate during the experience. The poorer coordination associated with low (vs. high) clarity about the partner's objective not only undermines consumers' ability to absorb the consumption content, but also their ability to socialize with the partner. This poorer coordination can also lead to downstream consequences such as lower enjoyment and higher regret about engaging in the experience accompanied. However, given people tend to underestimate the necessity of remedying a mildly harmful (vs. critical and intense) situation (Gilbert et al. 2004), we predict that in mundane leisure contexts consumers underestimate the importance of clarity and do not take simple steps to increase clarity. Five experiments tested these hypotheses.

In experiment 1, participants were asked to explore an art gallery in their campus student union either alone or with another person. We measured accompanied participants' clarity about the partner's objectives. As predicted, the higher the clarity accompanied participants had about their partner's objectives, the better they remembered information about the artwork, and the more they felt they learned ($ps < .05$). Solo consumers learned more and better than accompanied consumers with low but not high clarity. Further, enjoyment of the shared experience increased with higher clarity ($p = .03$).

Experiment 2 examined the effects of clarity when partners had incongruent (vs. congruent) objectives. We also tested the mediating role of coordination. Specifically, participants in the high-clarity condition recalled an accompanied leisure activity where they were clear that their partner had the same (congruence condition) or different (incongruence condition) objectives. Participants in the low-clarity condition recalled an experience where they were not sure whether their activity partner had the same (vs. different) objectives. Whereas objective (in)congruence had no significant effects, participants with low (vs. high) clarity were less able to focus on the consumption content ($p = .005$) and socialize with the partner ($p = .038$), effects that were mediated by the ease of coordination. Results also

revealed that low (vs. high) clarity led to lower enjoyment and higher regret about engaging in the activity accompanied ($ps < .01$).

We conducted experiment 3 in the art gallery of a hotel/conference center to further examine the effects of clarity in real consumption environments and whether consumers would take steps to increase clarity. We manipulated clarity by instructing one-third of the pairs to discuss about their objectives before entering the gallery (“high-clarity”), instructing one-third to go directly into the gallery (“low-clarity”), and allowing one-third to choose whether to discuss their objectives before entering the gallery. Additional participants were sent into the gallery solo. Consistent with results of studies 1 and 2, low-clarity participants felt less able to read brochures and absorb art, and had poorer memories of the artwork than participants in high-clarity or solo conditions ($ps < .01$). Low (vs. high) clarity participants were also less able to socialize with the partner ($p = .019$). Again, the ease of coordination mediated these effects. Despite the benefits of clarity, 24 out of 26 pairs in the choosers condition chose not to discuss about their objectives, providing evidence that consumers underestimate the benefits of having high (vs. low) clarity.

Most dyads in experiments 1-3 were friends/family. Experiment 4 manipulated the relationship (friends vs. strangers) between partners in addition to clarity to test whether the positive effects of clarity can be generalized to strangers. Participants were asked to explore five movies with another person in the lab. Whereas dyads in the “strangers” condition went directly to the movies, dyads in the “friends” condition had a Relationship-Closeness-Induction-Task (Sedikides et al. 1999) first. We manipulated clarity by having pairs disclose (vs. not disclose) their objectives to each other before starting the activity. Results showed that dyads under low (vs. high) clarity learned less about the movies ($p = .005$), enjoyed the experience less ($p = .046$), and were less interested in visiting the movie festival ($p = .058$). In a separate study, we described the procedures of this study and asked participants to predict the effects of clarity on enjoyment and learning. Only about half of the participants correctly predicted the positive effects of clarity, suggesting that people tend to underestimate the benefits of clarity.

To provide further support for the proposed mechanism of coordination, experiment 5 manipulated the level of coordination required during an activity. Clarity about the partner’s objective was measured. Specifically, participants were asked to explore photos from National-Geographic Instagram with another participant in the lab, and they were either shown the photos and the blurbs automatically (“low-need-for-coordination” condition) or they needed to navigate through the activity together (“high-need-for-coordination” condition). Results showed significant interaction effects of clarity and need-for-coordination on the ability to focus on the consumption content and enjoyment ($ps < .04$): when the activity required high coordination to navigate through, lower clarity about the partner’s objective decreased consumers’ ability to focus on the consumption content and enjoyment; however, when the activity required minimal coordination, clarity did not impact consumers’ ability to focus on the consumption content or enjoyment.

Together, our results show that clarity about the partner’s objective plays an important role in shared consumption. However, consumers don’t predict the strong effects of clarity nor do they take simple steps to increase clarity.

Celebrations and Social Support

EXTENDED ABSTRACT

Extensive research has focused on social support during times of adversity (e.g., Bolger, Zuckerman, and Kessler 2000; Cohen

1988; Kasser and Sheldon 2000; Lakey and Cohen 2008); yet, almost no empirical work has examined social support during positive life events (see Gable et al. 2004; Reis et al. 2010 for exceptions). Recently, Feeney and Collins (2014) called attention to the lack of research on social support during times of non-adversity and emphasized the importance of this type of supportive function in helping people thrive. In particular, they note that “very little theoretical or empirical work has focused on the factors that promote or hinder effective social support processes in close relationships” (Feeney and Collins, p. 18). The current research examines this understudied area and investigates how celebrations can be a relevant context for understanding the process by which individuals garner social support during positive life events.

In our first study, we explored individuals’ innate definitions of celebrations and the benefits they receive from celebrations. 204 participants from Amazon’s Mechanical Turk completed the study in exchange for financial compensation. Participants answered a series of open-ended questions and prompts designed to explore celebrations and social support (e.g., “What does a ‘celebration’ mean to you?” “Please recall and describe a recent celebration you had or participated in that was not related to a holiday” “What did you get out of the celebration?”) We then had two undergraduate RAs code the responses. Coders were highly reliable and any disagreements were resolved by a third coder. Supporting our own conceptualization, participants viewed celebrations as joint consumption highlighting at least one member’s separate, positive event. Celebrations were also viewed as largely providing social and emotional benefits. Furthermore, we found that individuals who are the focal celebrant and have a celebration organized for them report greater support than do individuals who have to organize their own celebration.

In our next set of studies, we expand upon our initial findings using experimental designs to better understand how celebrations may contribute to perceptions of social support. In Study 2, we examined whether individuals report greater perceptions of social support after recalling a celebration, experience (i.e., positive consumption) than a coping experience (i.e., negative consumption) as previous research has largely focused on social support in response to negative life events. In addition, Study 2 examines the process through which celebrations may increase perceptions of social support, namely by increasing the number of close others in one’s social network. 214 participants from Amazon’s Mturk successfully completed this study. Participants received financial compensation in exchange for participation. Participants were randomized to recall a time when something positive [negative] happened and they celebrated [coped with] this positive [negative] event by engaging in a consumption activity with others. Participants then indicated, “about how many close friends and close relatives do you have (people you feel at ease with and can talk to about what is on your mind)?” Finally, they completed the measure of perceived social support (MDSPSS, Zimet et al. 1988). An ANOVA revealed a significant difference between the conditions in terms of perceived social support ($p < .05$) with individuals in the celebration condition reporting greater social support ($M = 5.7$) than the coping condition ($M = 5.4$). Moderated mediation analyses revealed that the number of close others mediated the link between consumption experience and perceived social support.

Study 3 used a 3-cell design (celebration vs. coping vs. positive control) to further explore celebrations and social support. After indicating consent, participants were randomized to recall one of the following: a time when something positive happened and they engaged in a consumption activity with others (celebration), a time when something negative happened and they engaged in a consumption activity with others (coping), or a time when something positive

happened (positive control). Participants then completed the same measure of number of close others as in the previous study and the MDSPSS (Zimet et al. 1988). An ANOVA revealed a significant difference between the groups in terms of number of close others ($p < .05$) and planned comparisons indicated that individuals in the celebration condition reported significantly more close others than did those in the coping ($p < .02$) or the control ($p < .05$) conditions. Number of close others significantly predicted perceived social support, and moderated mediation analyses revealed that the number of close others mediated the link between consumption experience and perceived social support.

Finally, Study 4 experimentally manipulated the focal celebrant and the organizer to replicate the findings from Study 1 and to explore whether the role of the individual at a celebration may differentially contribute to perceptions of social support. Study 4 used a 2 (focal celebrant: self vs. other) \times 2 (organizer: self vs. other) design. 406 participants from Mturk completed the study in exchange for financial compensation. After consenting, participants were randomized to recall and describe a recent celebration that was for them [not for them] and that they helped [did not help] organize. They then completed a series of measures, including the measure of perceived social support (MDSPSS, Zimet et al. 1988). In line with the findings from the previous study, an ANOVA with focal celebrant condition, organizer condition, and their interaction as predictor variables revealed a significant interaction on perceived social support ($p < .02$). Planned comparisons indicated that individuals who organized a celebration for someone else reported greater perceptions of social support than did individuals who organized a celebration for themselves ($p < .05$). Conversely, individuals who did not organize a celebration reported greater perceived social support when the event was for them than when it was for someone else ($p < .05$).

Across four studies, we find evidence that celebrations as joint consumption increase perceptions of social support. Furthermore, we suggest some of the ways in which this process occurs, e.g., increasing the number of close others, and how different roles, e.g., whether one is the focal celebrant and/or organizer, in celebrations can influence perceptions of social support. The theoretical and practical implications are discussed.

Wasting Time and Money? How Consumers Evaluate Others' Resource (Mis)Management

EXTENDED ABSTRACT

Recent research demonstrates that low-income consumers receiving government assistance are seen as undeserving of ethical consumption choices (Olson et al. 2016). This group, relative to those who earn modest to high incomes, are perceived as less moral when buying organic food, renting a Prius, or making monetary donations, presumably because such options cost additional money. We build upon this research by examining decisions beyond financial expenditures. Specifically, we propose that divergence in moral attributions extends to decisions about *all* resources, including time and material goods.

This prediction is not obvious based on past research. Previous work on consumer altruism suggests that resources are not perfectly fungible. The act of giving time versus money (holding dollar value constant) is seen as more caring, moral, and heartfelt (Reed, Aquino, and Levy 2007). While favorable perceptions of altruism exist for the *act* itself, they may not extend to the *people* doing the act, especially when those people are at the lower end of the socioeconomic (SES) ladder. We propose that identical resource expenditures by low-income consumers receiving government assistance are

subject to greater scrutiny due to opportunity costs (i.e., “considering alternative uses for one’s resources when deciding whether to spend resources on a focal option”; Spiller 2011, 595). Simply put, low-income consumers receiving government assistance “should” be devoting resources toward gaining economic independence (Henry, Reyna, and Weiner 2004). From this perspective, volunteering without pay is a wasteful use of one’s time. Similarly, donating material possessions is perceived as wasteful because it implies that the giver has so many possessions that s/he can afford to give some away, making him/her appear less needy and therefore more wasteful of government assistance. Consumers have a strong aversion to waste, especially when waste is tangible (Bolton and Alba 2012). Accepting government assistance without contributing back to the economic system through hard work may be a “tangible” reminder of “their” (participants’) taxpayer dollars being misallocated. We examine these predictions in a series of experiments.

Experiment 1 examined moral judgments toward three types of equivalent resource expenditures. Participants read about a target described as either receiving \$12,000 a year in welfare benefits or earning \$12,000 a year. Participants also learned that the person had donated \$250 to a local charity, donated \$250 worth of material possessions, or volunteered for 35 hours at a local charity. These amounts were calibrated based upon the federal minimum wage of \$7.25 per hour (U.S. Department of Labor 2016), which would be a probable wage for someone earning \$12,000 a year. Thus, working 35 hours for minimum wage would be valued at approximately \$250. The key dependent variable was a morality index (used in all experiments), which was created by averaging responses from four items: unethical/ethical, cruel/kindhearted, immoral/moral, and uncaring/caring. The results revealed that across all three resource expenditures, the welfare recipient was perceived as less virtuous than the low-income earner.

Experiment 2 was designed such that the ethical choice directly benefited the target (vs. donations to others in experiment 1). Specifically, participants read about a target who has a dessert craving and decides to either buy or make an organic apple pie. The experiment followed a 3 (Income: \$12,000 in welfare benefits vs. \$12,000 earned vs. \$85,000 earned) \times 2 (Resource: Money vs. Time) between-subjects design. The results revealed that \$12,000 welfare recipients were perceived as more moral when they made an organic apple pie at home versus buying the same pie at the store. Targets earning \$12,000 or \$85,000 a year were evaluated similarly whether they chose to spend time or money.

Although welfare recipients received a boost for spending a small amount of time versus money in experiment 2, they did not receive moral credit on par with earners. Given the importance of opportunity costs (Spiller 2011), time spent baking is time *not spent* seeking paid employment. Thus, spending time that comes at the cost of gaining employment may be seen as wasteful and ultimately immoral. We tested this prediction in experiment 3 using a 3 (Income: \$12,000 in welfare benefits vs. \$12,000 earned vs. \$85,000 earned) \times 2 (Employment: Yes vs. No) between-subjects design. Participants read a scenario about an individual who was volunteering each week at a museum without pay; the position was described as either being likely or unlikely to lead to future employment. Mediation results revealed that volunteering at a position that is unlikely (vs. likely) to lead to employment is deemed wasteful for low-income consumers receiving government assistance, and being wasteful is seen as immoral. This judgment sequence did not extend to low- or higher-income earners.

Our next three experiments focused on moderators of these moral attributions. We find that spending money to purchase organic

food for children (experiment 4A) or spending time to help a child with her volunteer efforts (experiment 4B) are considered moral endeavors for everyone, regardless of income. We also find that low-income consumers receiving government assistance are judged *less* harshly than wealthier consumers when lying about the price of an organic purchase to save money (experiment 5).

Our final experiment demonstrates that these divergent moral reactions also have behavioral implications. Specifically, we manipulated the income of a volunteer (\$12,000 in welfare benefits vs. \$85,000 earned) seeking monetary donations for his organization. The results revealed that low-income consumers receiving government assistance were perceived as more wasteful of their time than relatively wealthier volunteers (i.e., “he should be working, not volunteering”), which resulted in lower donor support from participants. Donating money to his cause, however commendable it may be, may be perceived as facilitating waste and condoning his reliance on taxpayer dollars.

In conclusion, results from seven experiments demonstrate that moral attributions extend to non-financial expenditures, showing that those lowest in SES are under the greatest moral scrutiny.

REFERENCES

- Bang, Henning, Synne L. Fuglesang, Mariann R. Ovesen and Dag Erik Eilertsen (2010), “Effectiveness in Top Management Group Meetings: The role of Goal Clarity, Focused Communication, and Learning Behavior,” *Scandinavian Journal of Psychology*, 51 (3), 253-261.
- Bolger, Niall, Adam Zuckerman and Ronald C Kessler (2000), “Invisible Support and Adjustment to Stress,” *Journal of Personality and Social Psychology*, 79 (6), 953.
- Bolton, Lisa E. and Joseph W. Alba (2012), “When Less is More: Consumer Aversion to Unused Utility,” *Journal of Consumer Psychology*, 22 (July), 369-83.
- Boothby, Erica J., Margaret S. Clark, and John A. Bargh (2014), “Shared Experiences Are Amplified,” *Psychological Science*, 25 (12), 2209-2216.
- Cohen, Sheldon (1988), “Psychosocial Models of the Role of Social Support in the Etiology of Physical Disease,” *Health Psychology*, 7 (3), 269.
- Fitzsimons, Gráinne M., Eli J. Finkel and Michelle R. Vandellen (2015), “Transactive Goal Dynamics,” *Psychological Review*, 122 (4), 648.
- Gable, Shelly L, Harry T Reis, Emily A Impett and Evan R Asher (2004), “What Do You Do When Things Go Right? The Intrapersonal and Interpersonal Benefits of Sharing Positive Events,” *Journal of Personality and Social Psychology*, 87 (2), 228.
- Gilbert, Daniel T., Matthew D. Lieberman, Carey K. Morewedge and Timothy D. Wilson (2004), “The Peculiar Longevity of Things not so Bad,” *Psychological Science*, 15 (1), 14-19.
- Henry, P. J., Christine Reyna and Bernard Weiner (2004), “Hate Welfare but Help the Poor: How the Attributional Content of Stereotypes Explains the Paradox of Reactions to the Destitute in America,” *Journal of Applied Social Psychology*, 34 (January), 34-58.
- Hsee, Christopher K. and Yuval Rottenstreich (2004), “Music, Pandas, And Muggers: On The Affective Psychology of Value,” *Journal of Experimental Psychology: General*, 133 (1), 23.
- Feeney, Brooke C and Nancy L Collins (2014), “A Theoretical Perspective on the Importance of Social Connections for Thriving,” *Personality and Social Psychology Review*.
- Kasser, Tim and Kennon M Sheldon (2000), “Of Wealth and Death: Materialism, Mortality Salience, and Consumption Behavior,” *Psychological Science*, 11 (4), 348-51.
- Lakey, Brian and Arika Cronin (2008), “Low Social Support and Major Depression: Research, Theory and Methodological Issues,” *Risk Factors for Depression*, 385-408.
- Olson, Jenny G., Brent McFerran, Andrea C. Morales, and Darren W. Dahl (2016), “Wealth and Welfare: Divergent Moral Reactions to Ethical Consumer Choices,” *Journal of Consumer Research*, 42 (April), 879-96.
- Ramanathan, Suresh and Ann L. McGill (2007), “Consuming with Others: Social Influences on Moment-To-Moment and Retrospective Evaluations of an Experience,” *Journal of Consumer Research*, 34 (4), 506-524.
- Reed, Americus, Karl Aquino and Eric Levy (2007), “Moral Identity and Judgments of Charitable Behaviors,” *Journal of Marketing*, 71 (January), 178-93.
- Reis, Harry T, Shannon M Smith, Cheryl L Carmichael, Peter A Caprariello, Fen-Fang Tsai, Amy Rodrigues and Michael R. Maniaci (2010), “Are You Happy for Me? How Sharing Positive Events with Others Provides Personal and Interpersonal Benefits,” *Journal of Personality and Social Psychology*, 99 (2), 311.
- Sedikides, Constantine, W. Keith Campbell, Glenn D. Reader and Andrew J. Elliot (1999), “The Relationship Closeness Induction Task,” *Representative Research in Social Psychology*, 23, 1-4.
- Shaw, Susan M. and Don Dawson (2001), “Purposive Leisure: Examining Parental Discourses on Family Activities,” *Leisure Sciences*, 23 (4), 217-231.
- Spiller, Stephen A. (2011), “Opportunity Cost Consideration,” *Journal of Consumer Research*, 38 (December), 595-610.
- Steinmetz, Janina, Qian Xu, Ayelet Fishbach, and Ying Zhang (2016), “Being Observed Magnifies Action.”
- Stetler, Katarina Lund and Mats Magnusson (2015), “Exploring the Tension Between Clarity and Ambiguity in Goal Setting for Innovation,” *Creativity and Innovation Management*, 24 (2), 231-246.
- United States Department of Labor (2016), “Minimum Wage.” Retrieved from <https://www.dol.gov/general/topic/wages/minimumwage>
- Zimet, Gregory D., Nancy W. Dahlem, Sara G. Zimet and Gordon K. Farley (1988), “The Multidimensional Scale of Perceived Social Support,” *Journal of Personality assessment*, 52(1), 30-41.

Age-related Changes in Decision Preferences: From Mechanisms to Interventions

Chair: Vinod Venkatraman, Temple University, USA

Paper #1: Affective Forecasting Improves Across the Life Span

Lisa Zaval, Columbia University, USA
Ye Li, University of California, Riverside, USA
Eric J. Johnson, Columbia University, USA

Paper #2: Loss Framing Attenuates Delay Discounting in Older Adults

William Hampton, Temple University, USA
Vinod Venkatraman, Temple University, USA

Paper #3: Taking the Best and Worst First: Age Differences in Preferences for Monetary and Hedonic Sequences

JoNell Strough, West Virginia University, USA
Wändi Bruine de Bruin, University of Leeds, UK and Carnegie Mellon University, USA
Andrew M. Parker, RAND Corporation, USA

Paper #4: Individual Differences in Skewed Financial Risk Taking Across the Adult Life Span

Kendra Seaman, Yale University, USA
Josiah K. Leong, Stanford University, USA
Charlene C. Wu, Stanford University, USA
Brian Knutson, Stanford University, USA
Greg Samanez-Larkin, Yale University, USA

SESSION OVERVIEW

By 2030, the proportion of US adults over 65 is projected to swell by 53% and top 71.5 million. A better understanding of how consumer decision making changes across the life span is therefore increasingly more relevant for the well being of the society as a whole. Yet, research on aging and consumer decision making has been relatively limited, and has yielded mixed findings. In this session, we focus on a set of studies that seek to characterize the nature of decision biases in older adults, and elucidate their underlying mechanisms. The papers, which involve tasks from different decision-making domains and use different methodologies, address two core questions: 1) How and why do older adults behave differently than younger adults, and 2) what are the implications of these differences for real-world consumer decisions involving older adults?

The first two papers examine temporal discounting in older adult population. Zaval and colleagues use an inter-temporal choice task, and focus on age-related differences in affective forecasting. Across four studies, they indicate that future anhedonia is a skill that improves across the life span. They further show that improvements in future anhedonia may underlie older adults' lower temporal discounting. Hampton and colleagues show that the degree of discounting is modulated by how the decision options are "framed". They demonstrate that younger adults discount future rewards more steeply and project collecting Social Security later, relative to older adults. Both groups discounted future rewards less in the loss-frame condition. However, older adults exhibited greater susceptibility to loss framing, providing valuable insights for the development social security claim interventions.

Strough and colleagues focused on the effects of age on preference for temporal sequences. Using hypothetical scenarios describing positive and negative hedonic and monetary contexts of enjoyable, painful, rewarding or costly activities, they show that older adults prefer taking either the best or worst event sooner when part of a sequence. In other words, older adults preferred scheduling events with 'larger' impact sooner in the sequence.

Lastly, Seaman and colleagues examined age-related differences for decisions under risk, focusing on skewness. They found that older adults were more likely to accept positively-skewed gambles, and to reject negatively-skewed gambles. These differences were also borne out in the brain: individuals who were more biased towards positively-skewed gambles showed increased activity in a network of regions, including the nucleus accumbens. These findings imply that age-related preference for skewed risks assessed in laboratory might provide an index of fraud susceptibility in everyday life, which could bolster prevention efforts before fraud occurs.

Overall, this session will appeal to researchers interested in decision making across the life span. This session brings together papers that draw on a wealth of methodologies, including laboratory experiments, large-scale field surveys, with the common goal of seeking to better understand decision biases in older adults. As such, these findings have important implications for designing choice architecture and for public policy. They additionally speak to issues regarding the welfare of individual consumers, particularly in the realm of consumer financial decision making.

Affective Forecasting Improves Across the Life Span

EXTENDED ABSTRACT

Background

Although the literature on affective forecasting is broad and wide-ranging, it has largely neglected to examine whether affective forecasting errors improve or worsen with age. The present research addresses this gap by investigating age differences in one type of affective forecasting error, and exploring what underlying processes may contribute to age-related improvements. Understanding age differences in affective forecasting ability is essential, as aging is associated with a range of critical decisions about the future in areas from retirement planning to health care. Research on age differences in time perception, affective processing, and accumulated experience suggest that older adults should exhibit greater accuracy in affective forecasting, specifically the recognition that an outcome will produce similar affective responses regardless of whether it occurs now or in the future—i.e., *future anhedonia* (FA; Kassam et al, 2008) will reduce with age. We present four studies that investigate this hypothesis.

Methods

In Studies 1 (N=645) and 2 (N=618), we tested the relationship between age and future anhedonia in domains such as financial rewards, financial losses, receipt of a utilitarian and hedonic product, free-time rewards, as well as measuring FA using a second dependent variable—willingness to pay. Participants from across the life span were surveyed online and estimated their present reaction to a present event, and their future reaction to a future event (at the time of its occurrence). Study 2 also ruled out a number of cognitive explanations of this age effect and tested the relationship between age-related differences in FA and age-related increases in crystallized intelligence, reductions in fluid intelligence, and reductions in temporal discounting. In Study 3 (N=750), we investigated several psychological factors that may account for age differences in affective forecasting, and also examined the implications of this age effect on evaluative consumer judgments, such as purchase regret. Because

prior research indicates that future self-continuity is an important determinant of inter-temporal decisions, we tested whether differences in future self-continuity underlie age differences in FA. Study 4 (N=600) extended these results by experimentally manipulating future self-continuity.

Results and Discussion

Across studies, we show that older adults are less likely than younger adults to wrongly predict that their affective response to an event will be less intense if the event occurs later in time—a reduction in FA. These findings suggest that with age comes the awareness that events will likely feel the same, regardless of whether they occur in the immediate present or at some delay in the future. This age difference occurs regardless of outcome valence and product types, highlighting the generalizability of the effect. Further, age differences in FA remained robust controlling for age differences in crystallized and fluid intelligence (Study 2). Our results also offer a new potential explanation of the trend of increasing patience in intertemporal choices over the life span, as we find that increased patience in older adults is related to age-related improvements in FA (Study 2).

We also demonstrate that this age-related improvement may occur because older adults feel a stronger sense of connection with their future selves: Among the covariates measured in the present study (including fluid and crystallized intelligence, domain-specific experience, and current affective state), future self-continuity alone explained age-related differences in affective forecasting accuracy. Older adults' enhanced connection to their future identity mediates the association between age and diminished FA (Studies 3 and 4). This work joins an emerging literature that emphasizes the importance of the mental representation of future events in understanding temporal discounting.

Discussion

These findings make theoretical contribution on several fronts. First, given age-related cognitive decline, it is critical to investigate whether other abilities may help to compensate for and mitigate declines in decision making. Taken together, the present results add to the literature on age differences in decision-making by suggesting that future anhedonia is a skill that improves across the life span. Second, our findings contribute to the growing literature demonstrating that people tend to devalue future outcomes and have a fundamental inability to project their feelings into the future. We find that increased patience in older adults is related to age-related improvements in affective forecasting for future events. Moreover, we demonstrate that age is related to diminished future anhedonia and that this may occur because older adults feel more connected with their future selves. These findings suggest that the manner in which people feel connected to their future selves influences the strength of errors in affective prediction. Investigating age-related changes in consumer decision-making is a vital, but understudied area of consumer research. With the aging consumer segment growing in purchasing power and economic significance, researchers and managers cannot afford to ignore whether other skills, such as affective forecasting, may help mitigate the impact of cognitive decline on older consumers' decision-making. Increased focus on how different consumers make these types of pervasive affective judgments may be particularly important for developing an improved understanding of ways to maintain consumer satisfaction and high decision quality across the life span.

Loss Framing Attenuates Delay Discounting in Older Adults

EXTENDED ABSTRACT

Background

By 2035, the proportion of US adults over 65 is projected to swell by 65% and top 79 million (Social Security Fact Sheet). These older adults (OA) face a myriad of life-changing decisions, such as when to begin collecting social security and how to manage their long-term health. OA, like most people, exhibit *delay discounting*, in which they devalue future rewards according to how long they must wait (Johnson et al. 2002). Despite the ubiquity of discounting behaviors, there is substantial variability in the extent to which future rewards are discounted. Discounting rates tend to decrease with age (Steinberg et al. 2009), yet OA are also more variable in their discounting behavior (Webb et al. 2014), and exhibit sharp discounting in many critical real-world situations.

Aside from being biased toward immediate smaller rewards, people are also biased in many other ways; most individuals, including OA, are also influenced by how options are framed, even if the choices are logically equivalent. Specifically, people dislike losses more than they like matched gains (e.g. losing \$100 is more painful than the joy of gaining \$100). This bias leads people to avoid choices framed as losses, i.e. they exhibit *loss aversion* (Tversky and Kahneman, 1991). Loss aversion and delay discounting have been studied at length in isolation, yet their interaction is understudied. Here we collected samples of YA and OA who (1) completed gain- and loss-framed behavioral delay discounting tasks, (2) responded to questions relating to social security collection.

Methods

We recruited 50 younger (aged 18 to 25) and 50 older (aged 60 to 75) through Temple Psychology Research Participation System, and Osher Lifelong Learning Institute, respectively. We measured financial impulsivity via two delay discounting tasks. These tasks find an individual's *indifference point*, the dollar amount at which they are indifferent between a present and future reward. This procedure is then repeated for different points in the future. Participants completed two versions the discounting task: 1) a traditional delay discounting task with choices displayed as gains, and 2) a task with logically equivalent choices, that were been modified to display choice outcomes to included both loss and gain information.

The discount rate (k) is an index of the degree to which an individual devalues delayed rewards as a function of the length of delay to receipt of the delayed reward. We used a standard equation used to compute this value is $V = A/(1 + kD)$, where V is the subjective value of the delayed reward (indifference point), A is the actual value of the delayed reward (in this case, always \$1000), D is the time delay interval, and k is the discount rate (Odum 2011). Higher discount rates indicate increased devaluation of delayed rewards in favor of immediate rewards. We also calculated a "framing susceptibility" score by subtracting each participant's loss-framed k value from his or her gain-framed k value. We then analyzed group differences between younger and older adults across our measures.

Results

Consistent with prior research, we found that both older and younger adults hyperbolically discounted delayed rewards. Younger adults discounted future rewards more steeply than OA. Younger adults also predicted they would begin collecting Social Security later than OA either predicted or actually did. When the immediate

rewards were framed as a loss, both young and older adults discounted future rewards less, i.e. both groups were susceptible to loss framing effects. However, OA had significantly higher loss- versus gain-framed discounting rates. In other words, OA were more susceptible to loss framing effects than were younger adults. Interestingly, participant's loss-framed k value, but not their gain-framed value predicted planned or actual age of collection of Social Security.

Discussion

Over a fifth of married Social Security recipients and nearly half of single recipients over the age of 65 depend on Social Security for 90% or more of their income (Social Security Fact Sheet). The decision of when to begin collecting Social Security closely mirrors a delay discounting task: OA must choose between a smaller-sooner monthly payment and a larger delayed monthly payment. In 2013, more than a third of OA claimed Social Security benefits as soon as they became eligible, at age 62 (Munnell et al. 2015). For some, this proves a serious mistake: many OA find themselves without the necessary funds to maintain their quality of life in the last years of their lives (Bohn et al. 1996). Indeed, delaying Social Security collection until age 70, results in 76% higher monthly benefit (Social Security Fact Sheet).

Delay discounting has also been connected with addictive behaviors. For instance, cigarette smoking, which is increasingly dangerous with age, involves the rapid loss of subjective value for delayed outcomes (LaCroix et al. 1993). Similarly, gambling is associated with steep discounting and is increasingly a form of recreation and entertainment for OA (McNeilly et al. 1998). Further, when gambling and substance use co-occur, the effects on discounting can be additive, and trap OA in a feedback loop (Andrade et al. 2013).

Our findings therefore have important implications for policy relating to OA decision-making. Given that OA are more susceptible to loss framing effects, this information could be applied to Social Security communication. Specifically, on Social Security documents, the choices of when to collect could be framed in terms of losses, in order to encourage older adults to wait until an older age to collect. Similar framings might be applied in other domains such as when giving older adults options regarding health management, or in consumer scenarios.

Taking the Best and Worst First: Age Differences in Preferences for Monetary and Hedonic Sequences

EXTENDED ABSTRACT

Background

People commonly face choices about scheduling free time and medical procedures, as well as about paying and receiving money. Choices about sequences of hedonic and monetary events often show a preference for 'saving the best for last' (Chapman, 2000; Loewenstein & Prelec, 1993). An example would be a preference to receive a fixed amount of salary in increasing increments instead of receiving larger amounts sooner than smaller amounts. For salaries, this preference toward improving sequences conflicts with the normative economic principle of maximizing the present value of funds (Loewenstein & Sicherman, 1991).

Few studies consider age differences in sequence preferences. Those that do show mixed results as to whether older people 'save the best for last' or 'take the best first' (e.g., Drolet et al., 2010; Loeckenhoff et al., 2012). Mixed results could reflect a dependence of age differences on the decision context (Strough et al., 2011). Positive and negative hedonic and monetary features of the decision context

could cue age-related individual differences in using emotion, experience, and reasoning skills to make decisions (Strough et al., 2015).

Emotion regulation improves with age and emotional processes have been linked to age-related improvement in decisions (e.g., Bruine de Bruin et al., 2014). Life experience increases with age (Baltes et al., 2006), and could facilitate a better appreciation for the present value of money. Self-reports of using reason to make decisions have been linked to better performance on judgment and decision making tasks (Bruine de Bruin et al., 2007) and older age is associated with a deliberate and self-controlled approach to decision making (Delaney et al., 2015). Future time perspective also may be important for understanding age differences about sequences of events over time. With age, future time perspective is shorter due to increased awareness of life's finitude (Strough et al., 2016).

Here, we first investigated age differences in sequence preferences in monetary and hedonic contexts with a positive or negative valence. Second, we considered the roles of emotion, experience, reason and future time perspective in accounting for age differences in sequence preferences.

Methods

Participants were from RAND's American Life Panel, an internet-based panel study of adults age 18 and older from across the U.S. (see <https://mmicdata.rand.org/alp/>). The sample ($n = 1296$) ranged in age from 20-91 years (Mean age=53.06, $SD=16.33$).

In two surveys, participants were shown four hypothetical decision scenarios that together formed a 2 (valence: positive, negative) X 2 (context: money, hedonic) within-subjects design. One survey contained two positively-valenced scenarios depicting decisions in monetary (receiving an unexpected inheritance) and hedonic contexts (spending weekends enjoyably). A second survey completed two weeks later contained two negatively-valenced decision scenarios that depicted a decision in monetary (paying bills) and hedonic contexts (painful dental procedures). Survey order was counterbalanced and randomly assigned.

After each scenario, participants indicated their sequence preferences on a scale that ranged from 1 to 6. For example, for the monetary scenarios, 1 was labeled "Start with larger amounts first, end with the smaller" and 6 was labeled "Start with smaller amounts first, end with the larger." For all scenarios, lower scores indicated a preference for the most impactful event sooner over later (i.e., receiving most of the money up front, paying most of the money at the beginning, starting off with the most pleasant weekend, starting off with the most painful procedure).

Each survey ended with individual-differences measures. The positively-framed survey included items from the inferential and affective subscales of the Types of Intuition (TIntS) scale (Pretz et al., 2014) and the rational subscale of Scott and Bruce's (1995) decision styles inventory to measure use of experience, emotion, and reason when making decisions, respectively. The negatively-framed survey included a twelve-item version of Carstensen and Lang's (1996) future time perspective scale. For each scale, higher scores indicated greater endorsement of the items on the scale.

Results

The significant association between age and sequence preferences indicated that older age was associated with being less likely to delay 'larger' events ($r=-.22, p<.001$). The age by valence interaction indicated that this age difference in preference was more pronounced for positive events ($r=-.21, p<.001$) than negative events ($r=-.09, p=.002$). The significant three-way interaction between age, valence and context indicated that the association between older age

and being less likely to prefer to delay the ‘largest’ event was significantly stronger for choices about receiving money ($r = -.21$, $p < .001$) compared to the other three choices: enjoyable weekends ($r = -.11$, $p < .001$), dental procedures ($r = -.07$, $p < .008$), and paying money ($r = -.06$, $p < .05$).

Correlations indicated that older age was significantly associated with greater reported use of reason and experience to make decisions, lesser reported use of emotion, and shorter future time perspective. Mediation analyses (Hayes, 2013) indicated: (1) older adults’ lesser reported use of emotion to make decisions partly explained their preferences to receive larger amounts of money sooner than smaller amounts; (2) older adults’ greater reliance on reason partly accounted for their preferences to pay larger amounts of money sooner than smaller amounts; and (3) older adults’ greater reliance on experience partly explained their preferences to get more painful procedures over with sooner than less painful procedures. Future time perspective did not account for age-related variance in sequence preferences.

Discussion

Our findings add to the emerging literature on age differences in choices about sequences of events. Understanding sequence preferences is important because the choices people make about when to receive versus pay money and when to schedule aversive health appointments and positive experiences likely have implications for their wealth, health, and psychological well-being. Older age was associated with present-oriented preferences of taking both the best and worst first, as shown in scheduling events with a ‘larger’ impact sooner in the sequence. This association characterized all the sequences we examined and was strongest for positive sequences of receiving money. Individual differences in using experience, emotion, and reason to make decisions offer a starting point for understanding why older age was associated with taking the best and worst first.

Individual Differences in Skewed Financial Risk Taking Across the Adult Life Span

EXTENDED ABSTRACT

People frequently confront risky choices, ranging from whom to interact with to what to invest in. Given an uncertain future, nearly all long-term financial choices involve some degree of risk. Although research on financial risk taking has explored the effects of expected value (mean) and risk (variance) on financial choice (e.g., Knutson & Huettel, 2015), less research has focused on how extreme or skewed outcomes influence choice. Although older adults are often targeted by fraudulent investment schemes which promise positively-skewed returns (in the form of large but unlikely financial gains; MetLife Mature Market Institute, 2011), no research has specifically focused on age differences in preferences for skewed risks.

This study thus examined adult age differences in choice and neural activity before individuals chose to accept or reject symmetric (50% chance of modest win or loss), positively-skewed (25% chance of large gain), or negatively-skewed (25% chance of large loss) gambles as they underwent fMRI scanning. Thirty-two healthy adults (Age: $M = 47.9$, Range = 18-85) completed a 72-trial variant of the skewed gambling task used by Wu, Bossaerts, & Knutson (2011). Prior to the task, participants were endowed with \$10 cash. On each trial, if the gamble was chosen, the gamble was played out and the results were added to the cumulative total. The cumulative total at the end of the experiment was added to or subtracted from this endowment plus the hourly rate of compensation.

Overall, participants were more likely to accept positively-skewed gambles but more likely to reject negatively-skewed gambles. However, this trend was more pronounced in older adults compared to younger adults. To ensure that these age effects were not driven by outliers, we compared the difference between the proportion of positively-skewed and negatively-skewed gambles chosen by each participant. This individual difference measure – skew bias – varied from 1 to -1. While young participants varied widely on this measure, with similar numbers of young individuals showing negative and positive skew biases, almost all of the older participants displayed a positive skew bias.

Whole-brain analyses comparing positively- (vs. negatively-) skewed trials revealed that relative to young, older adults showed increased anticipatory activity for negatively-skewed gambles but reduced activity for positively-skewed gambles in lateral prefrontal regions, including a large cluster in the inferior frontal gyrus and anterior insula. Individuals who were more biased towards positively-skewed gambles showed increased activity in a network of regions including the nucleus accumbens. Within older adults, individuals showed increased activity in the right inferior frontal gyrus on trials where they were more likely to accept the gamble. This association was not present in younger adults.

This study investigated individual and adult age differences in choice and neural activity during skewed financial risk taking. Controlling for age, participants showed greater acceptance of positively-skewed gambles relative to negatively-skewed gambles. Although positively- and negatively-skewed gambles were equivalent in *expected* value, many participants revealed either an increased preference for positively-skewed gambles, or a decreased preference for negatively-skewed gambles, or both. This suggests that many participants placed relatively greater *subjective* value on positively-skewed than on negatively-skewed gambles. These differences in behavioral preferences for positively- over negatively-skewed gambles increased with age and follow-up analyses confirmed that these trends were not driven by outliers or an artifact of averaging. These findings might begin to clarify some inconsistencies reported in previous studies of the effects of age on risk preferences, since prior studies have not accounted for the skewness of risky choices.

The predicted but novel age-related increase in a bias towards positively-skewed gambles is consistent with the age-related positivity effect (Mather & Carstensen, 2005). The findings suggest that an increased focus on positive incentives may bias choice and could increase susceptibility to fraudulent investments and lotteries in real life. Older adults also were less likely to accept negatively-skewed gambles. Although this result was unpredicted, it is consistent with another theory of adult development, the selection, optimization and compensation model (SOC; Baltes & Baltes, 1990) which posits that as people age, they become less focused on acquiring new resources and more focused on maintaining and avoiding the loss of current resources (Baltes & Baltes, 1990). An age-related increase in loss-avoidance could have important real-life consequences. For example, older adults may be more likely to allocate financial resources to insurance to protect against potential losses.

Many studies of aging show that older adults recruit broader neural networks in cognitive tasks (Cabeza & Dennis, 2012; Reuter-Lorenz & Park, 2014). While the left IFG was recruited by both age groups when considering skewed gambles, only older adults also engaged the right IFG. “Hyperactivation” has been interpreted as compensatory, such that older adults recruit more neural resources to counteract age-related declines in other neural circuits. Future research will need to clarify how and whether these systems interact to influence skewed risk taking differentially across adulthood.

Although little research has focused on skewed risk preferences, many major financial choices in everyday life necessarily invoke skewed risks. While some evidence suggests that older adults might not necessarily be more susceptible to fraud (Ross, Grossmann, & Schryer, 2014), the consequences of being financially defrauded in older age are much more severe, since older individuals have more to lose but limited time and marketable labor resources to recover from a major financial loss (MetLife Mature Market Institute, 2011). Both researchers and policymakers are interested in identifying and reducing susceptibility to victimization by financial fraud. These findings imply that age-related preference for skewed risks assessed in the laboratory might provide some index of fraud susceptibility in everyday life, which could bolster prevention efforts before fraud occur (Scheibe et al., 2014) and older consumers are disproportionately targeted. We conducted a field experiment to test whether forewarning could protect people who were victimized in the past. A telemarketer pitched a mock scam 2 or 4 weeks after participants were warned about the same scam or an entirely different scam. Both warnings reduced unequivocal acceptance of the mock scam although outright refusals (as opposed to expressions of skepticism).

REFERENCES

- Andrade, L. F., Alessi, S. M., & Petry, N. M. (2013). The effects of alcohol problems and smoking on delay discounting in individuals with gambling problems. *Journal of psychoactive drugs*, 45(3), 241-248.
- Baltes, P., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). Cambridge: Cambridge Univ Pr. <http://doi.org/10.1007/s13398-014-0173-7.2>
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (2006). Life-span theory in developmental psychology. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (6th ed., Vol. 1, pp. 569-664). Hoboken, NJ: John Wiley & Sons.
- Bohn, H. (1999, June). Will social security and medicare remain viable as the US population is aging?. In *Carnegie-Rochester Conference Series on Public Policy* (Vol. 50, pp. 1-53). North-Holland.
- Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in Adult Decision-Making Competence. *Journal of Personality and Social Psychology*, 92, 938-956.
- Bruine de Bruin, W., Strough, J., & Parker, A. M. (2014). Getting older isn't all that bad: Better decisions and coping when facing "sunk costs". *Psychology and Aging*, 29, 642-649.
- Cabeza, R., & Dennis, N. A. (2012). Frontal lobes and aging: Deterioration and compensation. *Principles of Frontal Lobe Function*, 628–652. <http://doi.org/10.1093/acprof:oso/9780195134971.001.0001>
- Carstensen, L. L., & Lang, F. R. (1996). *Future Orientation Scale*. Unpublished manuscript, Stanford University.
- Chapman, G. B. (2000). Preferences for improving and declining sequences of health outcomes. *Journal of Behavioral Decision Making*, 13(2), 203-218.
- Delaney, R., Strough, J., Parker, A., & Bruine de Bruin, W. (2015). Variations in decision-making profiles by age and gender: A cluster-analytic approach. *Personality and Individual Differences*, 85, 19-24. [doi:10.1016/j.paid.2015.04.034](http://doi.org/10.1016/j.paid.2015.04.034)
- Drolet, A., Lau-Gesk, L., & Scott, C. (2011). The influence of aging on preferences for sequences of mixed affective events. *Journal of Behavioral Decision Making*, 24(3), 293-314. [doi:10.1002/bdm.695](http://doi.org/10.1002/bdm.695)
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY, US: Guilford Press.
- Johnson, M. W., & Bickel, W. K. (2002). Within-subject comparison of real and hypothetical money rewards in delay discounting. *Journal of the experimental analysis of behavior*, 77(2), 129-146.
- Knutson, B., & Huettel, S. A. (2015). The risk matrix. *Current Opinion in Behavioral Sciences*, 5, 141–146. <http://doi.org/10.1016/j.cobeha.2015.10.012>
- LaCroix, A. Z., Guralnik, J. M., Berkman, L. F., Wallace, R. B., & Satterfield, S. (1993). Maintaining mobility in late life. II. Smoking, alcohol consumption, physical activity, and body mass index. *American Journal of Epidemiology*, 137(8), 858-869.
- Loewenstein, G. & Prelec, D. (1993). Preferences over outcome sequences. *Psychological Review*, 100, 91-108.
- Loewenstein, G., & Sicherman, N. (1991). Do workers prefer increasing wage profiles? *Journal of Labor Economics*, 9(1), 67-84.
- Löckenhoff, C. E., Reed, A. E., & Maresca, S. N. (2012). Who saves the best for last? Age differences in preferences for affective sequences. *Psychology and Aging*, 27(4), 840-848. [doi:10.1037/a0028747](http://doi.org/10.1037/a0028747)
- Mather, M., & Carstensen, L. L. (2005). Aging and motivated cognition: The positivity effect in attention and memory. *Trends in Cognitive Science*, 9, 496–502. <http://doi.org/10.1016/j.tics.2005.08.005>
- McNeilly, D. P., & Burke, W. J. (2000). Late life gambling: The attitudes and behaviors of older adults. *Journal of Gambling Studies*, 16(4), 393-415
- MetLife Mature Market Institute. (2011). *The MetLife Study of Elder Financial Abuse: Crimes of Occasion, Desperation, and Predation Against America's Elders*.
- Munnell, A. H., Chen, A., Nicholas, L. H., Kopcke, R. W., Li, Z., Webb, A., ... & Toder, E. (2015). Trends in Social Security Claiming. Women, 40, 60.
- Odum, A. L. (2011). Delay discounting: I'm ak, you're ak. *Journal of the experimental analysis of behavior*, 96(3), 427-439.
- Pretz, J. E., Brookings, J. B., Carlson, L. A., Humbert, T. K., Roy, M., Jones, M., & Memmert, D. (2014). Development and validation of a new measure of intuition: The Types of Intuition Scale. *Journal of Behavioral Decision Making*, 27(5), 454-467. [doi:10.1002/bdm.1820](http://doi.org/10.1002/bdm.1820)
- Reuter-Lorenz, P. A., & Park, D. C. (2014). How Does it STAC Up? Revisiting the Scaffolding Theory of Aging and Cognition. *Neuropsychology Review*, 24(3), 355–370. <http://doi.org/10.1007/s11065-014-9270-9>
- Ross, M., Grossmann, I., & Schryer, E. (2014). Contrary to psychological and popular opinion, there is no compelling evidence that older adults are disproportionately victimized by consumer fraud. *Perspectives on Psychological Science*, 9, 427–442. <http://doi.org/10.1177/1745691614535935>

- Scheibe, S., Notthoff, N., Menkin, J., Ross, L., Shadel, D., Deevy, M., & Carstensen, L. L. (2014). Forewarning Reduces Fraud Susceptibility in Vulnerable Consumers. *Basic and Applied Social Psychology*, *36*, 272–279. <http://doi.org/10.1080/01973533.2014.903844>
- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, *55*(5), 818-831. doi: 10.1177/0013164495055005017
- Strough, J., Bruine de Bruin, W., & Parker, A. M., Lemaster, P., Pichayayothin, N., & Delaney, R. (2016). Hourglass half-full or half-empty? Future time perspective and preoccupation with negative events across the life span. *Psychology & Aging*, *31*(6), 558-573. doi: 10.1037/pag0000097
- Social Security Basic Facts. <https://www.ssa.gov/news/press/factsheets/basicfact-alt.pdf>.
- Steinberg, L., Graham, S., O'Brien, L., Woolard, J., Cauffman, E., & Banich, M. (2009). Age differences in future orientation and delay discounting. *Child development*, *80*(1), 28-44.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. *The quarterly journal of economics*, *106*(4), 1039-1061.
- Webb, A., Munnell, A., & Hou, W. (2014). NRRI Update Shows Half Still Falling Short.
- Wu, C. C., Bossaerts, P., & Knutson, B. (2011). The affective impact of financial skewness on neural activity and choice. *PloS One*, *6*, e16838. <http://doi.org/10.1371/journal.pone.0016838>

It's Not What You Say, It's How You Say It: New Effects of Choice Elicitation Modes on Decision Outcomes

Chair: Gia Nardini, University of Denver, USA

Paper #1: Choosing vs. Ranking: Elicitation Modes and Their Impact on Consumers' Subjective Experience of Difficulty

Yonat Zwebner, University of Pennsylvania, USA
Rom Y. Schrift, University of Pennsylvania, USA

Paper #2: When Simplified Choices Backfire: The Role of a Maximizing Mindset

Gia Nardini, University of Denver, USA
Aner Sela, University of Florida, USA

Paper #3: The Effect of Stated Preference on Subsequent Revealed Preference

Coby Morvinski, IDC Herzliya, USA
Silvia Saccardo, Carnegie Mellon University, USA
On Amir, University of California San Diego, USA

Paper #4: Drivers of Sequential Shortlist Decisions

Wendy Liu, University of California San Diego, USA
Itamar Simonson, Stanford University, USA

SESSION OVERVIEW

A key conclusion from four decades of research on choice and preference construction is that preferences are highly susceptible to the manner in which they are elicited (Hsee and Leclerc 1998; Nowlis and Simonson 1997; Park, Jun, and Macinnis 2000; Simonson and Tversky 1992; Tversky, Sattath, and Slovic 1988). The current session provides novel insights into the consequences of several important preference elicitation methods, such as ranking, step-by-step choices, and shortlist creation. How do these different elicitation modes influence experienced and anticipated decision difficulty, and what are some surprising consequences of difficulty in such cases? What is the role accuracy, maximizing, and consistency motivations under different preference elicitation modes? Four papers address these and related questions as they deepen our understanding of how elicitation modes affect preferences and decision outcomes.

The first two papers investigate the effects of elicitation modes on subjective experiences of difficulty. Contrary to expectations, **Zwebner and Schrift** demonstrate that ranking options leads to lower subjective experiences of difficulty than does choosing, despite choosing being embedded within the ranking process. This happens because choice is associated with a sense of loss whereas ranking is not. The paper by **Nardini and Sela** reexamines the relationship between decision difficulty and choice deferral. It suggests that although simplifying multi-attribute decisions increases decision ease, which is associated with lower deferral, it also simultaneously activates a maximizing mindset, which decreases satisfaction with the available options and, surprisingly, increases deferral.

The next two papers focus on elicitation effects beyond difficulty. **Morvinski, Saccardo, and Amir** demonstrate that seemingly equivalent methods for eliciting willingness-to-accept have markedly different effects on preferences. Consumers who indicate their desired level of earnings up front make more money than consumers who take compensation spontaneously, without initially indicating their desired earnings. The paper by **Liu and Simonson** investigates how the anticipation of difficulty shapes consideration-set formation in the context of one particular decision method (shortlist). It shows that as the shortlist grows larger, decision-makers become increasingly concerned about future deliberation costs.

Taken together, the four papers in this session provide novel insights into the mechanisms through which different elicitation methods influence decision experiences and outcomes, including difficulty (paper 1), choice deferral (paper 2), willingness-to-accept (paper 3), and shortlist formation (paper 4). This session will appeal to a broad range of researchers, including those interested in consumer decision making and choice, elicitation methods, context effects, and choice deferral.

Choosing vs. Ranking: Elicitation Modes and Their Impact on Consumers' Subjective Experience of Difficulty

EXTENDED ABSTRACT

The degree to which consumers experience decision difficulty is an important and fundamental aspect of the decision making process. For example, previous research demonstrated that experienced difficulty may elicit negative emotional states (e.g., Luce, Payne and Bettman 1999), cause consumers to end up choosing nothing (e.g., Iyengar and Lepper 2000), delay their choice (Dhar 1997, Tversky and Shafir 1992), increase the need to justify the decision (Shafir, Simonson, and Tversky 1993), and increase the likelihood to compromise (e.g., Novemsky et al. 2007). Additionally, the subjective experience of decision difficulty has been shown to also impact consumers' tendency to engage in simplifying and complicating behaviors (e.g., Schrift, Netzer and Kivetz 2011, Schrift, Kivetz, Netzer 2016) and could even play an important role when observing others making decisions (Schrift and Amar 2015).

Indeed, as the subjective experience of difficulty impacts variety of different behaviors, understanding what factors increase or decrease it, is important from both theoretical and applied perspectives. The current work focuses on how the preference elicitation mode impacts consumers' subjective experience of difficulty. In particular, we focus on two prominent modes, namely, choice and rank-ordering.

When comparing a choice task to a ranking task, it is quite intuitive to expect that a ranking task will elicit greater experience of difficulty. That is, while choosing includes the selection of one option that offers the greatest utility, rank-ordering includes the same selection (i.e. ranked first), as well as the ordering of all the other inferior options. Thus, the operations required to make a choice are embedded in those required to complete the ranking procedure. However, in the current research we repeatedly find that consumers' subjective experience of difficulty is actually higher when asked to choose as opposed to rank-order the options. That is, even though the outcome of the ranking procedure is identical to that of the choice (i.e., consumers are fully aware that the option they rank first is the one they will eventually receive), framing the process as ranking as opposed to choosing decreases the difficulty that consumers experience. Consistent with research on option attachment (Carmon, Wertenbroch, and Zeelenberg, 2003) we find that the mere framing of the selection process as ranking as opposed

to choosing (although the outcomes are kept constant) reduces the sense of loss that consumers experience towards the forgone alternatives. This, eventually reduces consumers' subjective experience of decision difficulty. Below, due to space constraints we briefly describe a subset of 4 studies out of the 8 that were ran.

In Study 1 participants viewed five products and either chose their most preferred product, or rank-ordered the products according to their preferences. Across both conditions we informed participants that their most preferred product (chosen or top-ranked) is the one they will receive should they win a lottery that was conducted. After choosing or rank-ordering, participants rated the difficulty they experienced using five items (Cronbach $\alpha=.88$). Results confirmed that consumers experienced greater difficulty in the choice compared to ranking condition ($t(215)=4.59$; $p<.001$). Interestingly, this difference was despite the fact that participants spent more time ranking the options ($p<.001$).

In Study 2 participants received only two options and were asked to either choose or rank-order the two options (between-subjects). Because the set consisted of only 2 options, the actual task in both conditions, is virtually identical. Results confirmed that even when only two options were available, participants still felt greater degree of difficult in the choice compared to the rank condition ($t(197)=2.35$; $p=.022$). Thus, these finding suggest that the effect is driven by how people construe the task and not by the actual cognitive operations required to performing it.

If the effect is driven by the elevated sense of loss toward the forgone options in the choice condition, then the effect should persist only when participants feel that their chosen/top-ranked option is the one they will receive. However, if the same operations are meant to identify the least desirable option, that is, the option that participants prefer to avoid, then the effect should attenuate. That is, choosing which option one likes to avoid should not trigger any sense of loss toward the non-selected options. Accordingly, Study 3 employed a 2x2 between subject design in which we also manipulated the target selection goal (receive vs. avoid). In particular, in the receive condition participants were told that their chosen/top-ranked option will be the one that they will receive. However, in the avoid condition, participants were told that their chosen/bottom-ranked option is the one that they will surely not receive. Results revealed the expected interaction ($p=.007$). For those in the receive condition, again, choice was significantly more difficult than ranking ($p=.003$). However, for those assigned to the avoid condition, there was no difference in perceived difficulty between the choice and rank conditions.

Study 4 tested the mediation role of option attachment by following Carmon, Wertenbroch and Zeelenberg, 2003 and using the item they employed to measure sense of loss for the forgone options. Participants viewed two products and were asked to either choose their most preferred product or rank-order the products such that their most preferred is ranked first (in a between subject design). Participants then indicated how they felt about not choosing (rank-ordering first) the non-chosen (ranked second) option on a 1 to 10 scale (1=I feel good to 10= I feel bad). In addition to replicating the effect observed in Studies 1-3, a mediation analysis (using the macro PROCESS, model 4, Hayes, 2013) confirmed that the sense of loss mediated the effect of elicitation mode (choice vs. rank) on participants' subjective experience of difficulty ($B=.25$; $CI95\% = .007$ to $.51$).

To summarize, we find that merely framing the selection process as ranking reduces the subjective experience of difficulty. Consumers find choice to be more difficult than ranking, even though the latter typically took them longer. The results suggest that choice highlights the sense of loss related to the non-selected options and therefore, framing the selection process as a ranking process could benefit consumers as well as marketers.

When Simplified Choices Backfire: The Role of a Maximizing Mindset

EXTENDED ABSTRACT

People commonly experience difficulty when making choices among multi-attribute options, which can result in frustration (Sela and Berger 2012), weaker preferences (Chernev 2003), and choice deferral (Dhar and Nowlis 1999). One common solution is to simplify the decision in some way. For example, choices can be broken down into a series of smaller sequential steps (Tversky and Sattath 1979). Step-by-step decision formats are ubiquitous (Haskell 2004), and often reduce choice difficulty and increase satisfaction with the decision process (Dhar 1996; Valenzuela, Dhar, and Zettelmeyer 2009).

However, contrary to the notion that easier choices generally benefit decision-makers and decrease deferral (Novemsky et al. 2007; Valenzuela et al. 2009), we propose that simplified choices impact deferral through two simultaneous processes which operate in opposite directions. Although simplifying multi-attribute decisions indeed increases decision ease, which by itself decreases deferral, it also simultaneously activates a maximizing mindset (Ma and Roesch 2014), which decreases satisfaction with the available options (Betman, Luce, and Payne 1998; Levav, Reinholdt, and Lin 2012) and consequently increases deferral. Thus, simplified decision formats may sometimes paradoxically increase deferral due to the activation of a maximizing mindset. We find that the net effect of decision simplification on decision deferral, through ease (positive) and maximizing (negative), depends on consumers' chronic maximizing tendencies

Study 1 demonstrates the dual effect of decision simplification on choice deferral. Participants chose among eighteen grill options varying on three attributes (i.e. fuel type, grilling space, and maximum heat capacity). In the complex choice format condition, all eighteen options were presented simultaneously and participants chose their preferred option. In the simple choice format condition, participants saw one attribute at a time and chose whether to stay at the base level for that attribute (e.g., charcoal) or pick a different level (e.g., propane for an additional \$30). We used a standard measure of decision deferral (Novemsky et al. 2007) and also measured decision ease and maximizing tendencies (see Levav et al. 2012). We measured option visualization (i.e., how easy it was for participants to visualize the options) to rule out a possible alternative account. Consistent with our hypotheses, decision deferral was lower in the complex condition than in simplified condition. Further, both decision ease and maximizing were lower in the complex condition than in the simplified condition. No significant differences in option visualization emerged, suggesting that the effect of format on choice deferral is not due to differences in the ability to visualize the available options. Mediation analysis suggests that the effect of condition on deferral was simultaneously mediated by maximizing, which increased deferral, and by decision ease, which decreased deferral. Thus, decision simplification may affect deferral through two independent and opposing processes, ease and maximizing.

Study 2 uses two different step-by-step designs for generalizability. Participants chose among twenty-four laptop options, varying on memory, weight, and speed. They were randomly assigned to one of three conditions. In the complex condition, all twenty-four options were presented simultaneously and participants chose their preferred option. In the sequential simplified condition, participants chose their desired level of each attribute one step at a time, where each attribute decision was displayed on a separate page. In the simultaneous simplified condition, participants chose attribute levels

one at a time, but these three simple decisions were presented on the same page instead of sequentially. We used the same measures of decision deferral, decision ease, and maximizing from Study 1. Consistent with our hypotheses, decision deferral was lower in the complex condition than in each of the two simplified conditions, which were not different from each other. Further, both decision ease and maximizing were lower in the complex condition than in the two simplified conditions, which were not different from each other. Mediation analysis suggests that the effect of condition on deferral was simultaneously mediated by maximizing, which increased deferral, and by decision ease, which decreased deferral. Thus, it is not the sequential nature of the simplified decision process that is driving the effect, but rather simplification itself – breaking down the decision into a series of easier decisions – increases maximizing and decreases purchase likelihood.

In Study 3, we measured participants' chronic maximizing tendencies, which we predicted would moderate our effect. Specifically, we predicted that decision simplification would activate maximizing among people not already prone to maximizing at baseline (i.e., satisficers), but would have an attenuated effect among people who already maximize at baseline (i.e., maximizers). We also examined whether the maximizing mindset evoked in the focal decision task would carry over to an unrelated subsequent decision. Participants chose among 30 cameras varying on megapixels, optical zoom, and waterproofing in a complex or simplified sequential decision format as in Study 1. We again measured decision deferral, ease, and maximizing. Results revealed the predicted decision \times chronic maximizing tendency interaction. Whereas chronic maximizers showed high levels of deferral regardless of decision condition, chronic satisficers showed high deferral in the simplified decision condition but not in the complex condition. Decision process ease and state maximizing mediated the effect of choice format on purchase likelihood for chronic satisficers, but not chronic maximizers. Finally, the maximizing mindset appeared to have carried over to a subsequent choice task: participants in the simplified camera decision condition were later more likely to defer an apartment purchase decision in an unrelated choice task, compared with participants in the complex camera decision condition.

Three experiments, utilizing different product categories support our theoretical perspective. Our findings suggest that easier decisions do not necessarily decrease deferral, and that the net effect of simplification depends on the relative weights of two opposing mechanisms: decision ease and maximizing mindset. We extend recent findings suggesting that maximizing, in addition to being an individual disposition, can also be triggered by the decision context (Ma and Roese 2014). Our results also contribute to the ongoing attempt to understand when and why simplified decision procedures increase versus decrease deferral, purchase likelihood, and consumer satisfaction (Chernev et al. 2015; Schrift, Kivetz, and Netzer 2011; Valenzuela et al. 2009).

The Effect of Stated Preference on Subsequent Revealed Preference

EXTENDED ABSTRACT

Measuring individual's preferences is central to consumer research, although measurement instability remains a challenge for researchers and practitioners. We focus on situations characterized by full information (post-experience evaluation), and investigate the relation between an individual's stated WTA after exerting effort on a task, and the subsequent behavior that reveals said individual's preference. In four experiments involving consequential decisions, indi-

viduals are given the choice to collect their own wage for a task they had performed from a bowl of money. As expected, subjects do not behave in accordance with standard economic theories and only take a fraction of the money from the bowl. Most importantly, we find that under some conditions, the mere act of stating one's preference may significantly influence subsequent behavior and the preference that behavior reveals.

On the one hand, money has been shown to evoke greed and cause coldhearted behavior (Vohs, Mead, and Goode 2006), which predicts those who go directly to take the money without stating their preference first, to be less mindful of their decision, and take a higher compensation than those who first stated their WTA. On the other hand, hypothetical bias (preference overstatement; Murphy et al. 2005) together with consistency theory (Cialdini 1987) predict that people may rely too heavily on preference overstatement and consequently take a higher compensation after stating their preference. Our main findings suggest that consistency with previous judgments, and not greed, plays a central role in biasing observed preference. Individuals who stated their desired compensation for a task they had just performed, take a much higher compensation than those who had not done so.

Participants in Experiment 1 ($N = 82$) listened to a noisy sound for one minute, and received \$.25. This task was followed by a similar 5-minute task. Upon completing the second task, participants could take any amount of money they believed they deserved for completing the longer task from a bowl containing \$10 in quarters. Taking money from the bowl was done in private. In a between-subject design, half of the participants stated how much they believed they should be paid before moving to the experiment room to collect their payment (Write condition), while the other half did not (Baseline condition). On average, participants in the Write condition took twice the money than those who did not initially state their deserved payment ($M_{write} = \$2.59$, $M_{baseline} = \$1.28$). Additionally, participants stated they deserve a lower amount than what they eventually took ($Med_{write} = \$1.75$, $Med_{take} = \$1.25$, $p < .001$).

Experiment 2 ($N = 245$) explores the proposed mechanism that people are consistent with previous actions and therefore taking more money in the Write condition is a result of consistent behavior with a previously overstated wage. We speculate that writing an expected wage lacks realism, attenuating the psychological cost of writing a higher wage. Hence, once a (higher) wage is stated, it becomes a reference, which justifies taking a higher wage. Research suggests that visual aids help reduce stated preference biases (Bateman et al. 2009). In addition to the original conditions, Experiment 2 included a third condition (visual realization-VR) in which participants indicated their deserve wage by selecting quarters on the screen, one by one, until reaching the desired amount. We measured a list of emotions before participants completed the listening tasks as well as immediately after they collected the money. Experiment 2 replicated the previous results ($M_{write} = \$2.29$, $M_{baseline} = \$1.43$, $p < .001$). Importantly, those in the VR condition indicated they deserved less than those in the Write condition ($M_{VR} = \$1.75$, $M_{write} = \$2.20$, $p < .01$) and consequentially took less money ($M_{VR} = \$1.92$, $M_{write} = \$2.29$, $p < .01$) such that no effect was observed in the VR condition. Lastly, taking more money increased negative emotions in general, though there was no difference in emotions between conditions suggesting that once the reference wage is set (e.g. by writing), it is less costly to adhere to.

In Experiment 3 ($N = 293$) we adjusted the previous design by utilizing a slider task (Gill and Prowse 2011) and introducing four additional conditions. The main effect remains robust ($Med_{write} = \$3.00$, $Med_{baseline} = \$1.00$, $p = .028$). Experiment 3 also explored

boundary conditions and alternative accounts. The effect remains even when participants stated their deserved amount from a bounded list of numbers (up to \$10) suggesting the nature of an open-ended stated preference task (contrary to the restricted amount of money in the bowl) cannot explain the effect. However, we did not observe an effect when participants were asked to think about, but not report their WTA, suggesting cognitive construction of individuals' (unreported) preferences might not be strong enough to affect consequent behavior. Finally, manipulating temporal proximity between task performance and payment did not explain the effect and using other medium (e.g. Dollar bills) offered inconclusive results.

Finally, we explore whether people anticipate the observed behavior. Participants in Experiment 4 ($N = 90$) completed similar listening tasks but instead of earning money, they read descriptions of the two conditions (Write and Baseline, counterbalanced), and indicated the situation they would rather be in and why. Only 44 participants chose the Write situation, suggesting that subjects do not anticipate writing their deserved wage to have any differential effect. The majority rationalized their decision to be in the Write condition by saying that it would help them to be moral, honest, ethical, fair, less greedy and less tempted to take more money. Experiment 4 demonstrates that peoples' intuition is not aligned with the highest payoff condition. Further, those who prefer to state their deserved wage, do so for reasons other than merely payoff-maximization.

Given the critical role that preference estimation plays in many domains of behavioral science, our findings help consumer researchers to better understand the effect of the selected elicitation procedures on the estimation outcome, and stress that individual's preference estimation should be interpreted in the context in which it was elicited. These findings also have direct implications for theory, markets, and policy making.

Drivers of Sequential Shortlist Decisions

EXTENDED ABSTRACT

Consider a consumer shopping on Amazon for a fleece jacket. There are 200 options left after filtering for price and size. The person now needs to look at each option and decide whether to put the option into a shortlist she is keeping. Importantly, the person is not waiting until she has evaluated all 200 options to then simultaneously decide which of them go into a shortlist; instead, like in most real life shopping situations, the shortlist is kept on a running basis, where options are added (or not) sequentially as they are looked at. When looking at a particular option, how does the person decide whether or not it will go into the shortlist?

This research investigates this decision. In their seminal paper on sequential consideration set formation, Hauser and Wernerfelt (1990) proposed a theoretical model positing that when facing a particular option in the sequence and deciding whether to add it to the shortlist, the decision is driven by a cost-benefit consideration. This research tests the psychological processes proposed by H&W, and their prediction of a latecomer disadvantage.

On the benefit side, the person examines whether adding the option to the existing shortlist will increase the expected utility at final choice. This translates to a comparison between the current option and options already in the shortlist, and whether the current option offers incremental benefit to the final choice. Given this process, the serial position of the option influences this decision in two ways: first, in a manner that is not unique to shortlist decisions, serial position may influence the perceived attractiveness of the option (per a large body of previous literature on serial position effects on option ratings and choice). Second, and importantly, position may also af-

fect the shortlist decision in a way unique to sequential shortlist assembly, namely through the comparison with options already in the shortlist. Specifically, because a new option is added to the shortlist only when it can offer non-zero incremental expected benefit over existing shortlist options, then it follows that each time an option is added, the bar for incremental expected benefit raises. Consequently, the later in the sequence, the higher the bar for incremental benefit, thereby creating a disadvantage for latecomers. However, an alternative behavioral possibility is that, when deciding whether to add a particular option to the shortlist, the person only compares the option's attractiveness to some independent attractiveness threshold, but show disregard for what is already in the shortlist. We test whether the attractiveness of what are already in the shortlist is a factor driving a current decision (H1).

On the cost consideration side, H&W proposed that for each option added to the shortlist, the person recognizes that a deliberation cost will be added to the final decision. This deliberation cost consideration must be true, because if not, there will be zero cost to expanding the shortlist, and the person can maximize utility by simply choosing from the ultimate large shortlist, namely, the whole choice set. Thus for the person to engage in shortlisting behavior to begin with, this means the person perceives a cost to choosing from a larger choice set, and therefore prefers to have a shortlist that balances benefit (product utility) against deliberation cost at final choice. However, in the H&W model, the perceived incremental deliberation cost of adding the current option is constant to the option, and not influenced by the serial position of the option. However, we argue that behaviorally, it is possible that the perceived incremental deliberation cost to adding an option to the shortlist may not be constant to the option, but instead, may depend on the existing shortlist size. Specifically, people become increasingly (rather than constantly) concerned about deliberation cost as the shortlist grows larger (H2; that is, people are not too concerned about deliberation cost when adding a 3rd member to a shortlist of 2, but feel very concerned adding a 6th after there are already 5). This would be an amendment to the H&W model.

Study 1 ($N = 244$) allowed participants to keep a running shortlist when going through 20 DVD's sequentially towards the goal of selecting one DVD as a bonus prize for the study. The serial order of the DVD's was randomly generated for each participant. When we ran a logistic regression on each decision of whether to add the current option with existing shortlist size as the predictor (and other relevant covariates; and different models for robustness), we found a significant negative effect of existing shortlist size ($p < .001$). This evidence is consistent with H1 and H2 in that the existing shortlist does matter; however, it does not separate benefit vs. cost considerations. We also found a significant latecomer disadvantage, consistent with H1 and H2 and H&W.

Study 2 ($N = 295$) asked participants to rate the attractiveness of each DVD on each product screen. Thus we are able to dissociate the perceived attractiveness of sequentially presented options, the incremental benefit in attractiveness of adding an option, and the perceived incremental cost. Results showed that all three factors contributed to the shortlist decision (p 's $< .001$), and contributed to a latecomer disadvantage, supporting H1 and H2.

Study 3 ($N = 489$) directly manipulated the goal to have a small shortlist by telling participants that "most people had a shortlist of 2 [10] DVD's". We found that larger existing shortlist was even more punishing to the current option when people held a goal of a very small shortlist (interaction $p < .001$). Correspondingly, latecomer disadvantage was even greater under stringent versus relaxed shortlist size goal ($p = .01$). This study shows that indeed the perceived

incremental cost of adding is not constant to the option, but rather is a function of how “full” the shortlist already is, supporting H2.

Our research provides the first empirical evidence of the psychological processes underlying sequential shortlist decisions, and validates and modifies the H&W model.

REFERENCES

- Bateman, I. J., Day, B. H., Jones, A. P., & Jude, S. (2009). Reducing gain–loss asymmetry: a virtual reality choice experiment valuing land use change. *Journal of Environmental Economics and Management*, 58(1), 106-118.
- Bettman, J.R., Luce, M.F., & Payne, J.W. (1998). Constructive Consumer Choice Processes. *Journal of Consumer Research*, 25 (3), 182-217.
- Broniarczyk, S. M., & Griffin, J. G. (2014). Decision Difficulty in the Age of Consumer Empowerment. *Journal of Consumer Psychology*, 24(4), 608-625.
- Carmon, Z., Wertenbroch, K., & Zeelenberg, M. (2003). Option attachment: When deliberating makes choosing feel like losing. *Journal of Consumer research*, 30(1), 15-29.
- Chernev, A. (2003). Product assortment and individual decision processes. *Journal of personality and social psychology*, 85(1), 151.
- Chernev, A., Böckenholt, U., & Goodman, J. (2015). Choice Overload: A Conceptual Review and Meta-Analysis. *Journal of Consumer Psychology*, 25 (2), 333-358.
- Cialdini, R. B. (1987). *Influence* (Vol. 3). A. Michel.
- Dhar, R. (1996). The Effect of Decision Strategy on Deciding to Defer Choice. *Journal of Behavioral Decision Making*, 9 (4), 265-281.
- Dhar, R. (1997). Consumer preference for a no-choice option. *Journal of Consumer Research*, 24(2), 215-231.
- Dhar, R., & Nowlis, S. M. (1999). The effect of time pressure on consumer choice deferral. *Journal of Consumer Research*, 25(4), 369-384.
- Gill, D., & Prowse, V. (2011). A novel computerized real effort task based on sliders. Available at SSRN 1732324.
- Haskell, K. (2004). Do-It-Yourself Design: Just Point and Click. *The New York Times* October 24.
- Hauser, J.R. & Wernerfelt, B. (1990). An Evaluation Cost Model of Consideration Sets. *Journal of Consumer Research*, 16(4), 393-408.
- Hsee, C. K., & Leclerc, F. (1998). Will products look more attractive when presented separately or together?. *Journal of Consumer Research*, 25(2), 175-186.
- Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing?. *Journal of personality and social psychology*, 79(6), 995.
- Luce, M. F., Payne, J. W., & Bettman, J. R. (1999). Emotional trade-off difficulty and choice. *Journal of Marketing Research*, 143-159.
- Levav, J., Reinholtz, N., & Lin, C. (2012). The Effect of Ordering Decisions by Choice-Set Size on Consumer Search. *Journal of Consumer Research*, 39 (3), 585-599.
- Ma, J. & Roese, N. (2014). The Maximizing Mind-Set. *Journal of Consumer Research*, 41 (1), 71-92.
- Murphy, J.J., Allen, P.G., Stevens, T.H., & Weatherhead, D. (2005). A meta-analysis of hypothetical bias in stated preference valuation. *Environmental and Resource Economics*, 30(3), 313-325.
- Nowlis, S. M., & Simonson, I. (1997). Attribute-task compatibility as a determinant of consumer preference reversals. *Journal of Marketing Research*, 205-218.
- Novemsky, N., Dhar, R., Schwarz, N., & Simonson, I. (2007). Preference fluency in choice. *Journal of Marketing Research*, 44(3), 347-356.
- Park, C. W., Jun, S. Y., & MacInnis, D. J. (2000). Choosing what I want versus rejecting what I do not want: An application of decision framing to product option choice decisions. *Journal of Marketing Research*, 37(2), 187-202.
- Sela, A., & Berger, J. (2012). Decision quicksand: how trivial choices suck us in. *Journal of Consumer Research*, 39(2), 360-370.
- Schrift, R.Y., Netzer, O., & Kivetz, R. (2011). Complicating choice. *Journal of Marketing Research*, 48(2), 308-326.
- Schrift, R.Y., & Amar, M. (2015). Pain and Preferences: Observed Decisional Conflict and the Convergence of Preferences. *Journal of Consumer Research*, 42, 515-534.
- Schrift, R.Y., Kivetz, R., & Netzer, O. (2016). Complicating decisions: The work ethic heuristic and the construction of effortful decisions. *Journal of Experimental Psychology: General*, 145(7), 807.
- Simonson, I., & Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *Journal of Marketing Research*, 29(3), 281.
- Tversky, A., & Sattath, S. (1979). Preference trees. *Psychological Review*, 86(6), 542.
- Tversky, A., Sattath, S., & Slovic, P. (1988). Contingent weighting in judgment and choice. *Psychological Review*, 95(3), 371.
- Tversky, A., & Shafir, E. (1992). Choice under conflict: The dynamics of deferred decision. *Psychological Science*, 3(6), 358-361.
- Valenzuela, A., Dhar, R., & Zettelmeyer, F. (2009). Contingent Response to Self-Customization Procedures: Implications for Decision Satisfaction and Choice. *Journal of Marketing Research*, 46 (6), 754-763.
- Vohs, K. D., Mead, N.L., and Goode, M.R. (2006). The psychological consequences of money. *Science*, 1154-1156.

Competitive Papers—Full

Tailoring Elderly Patients' Identities through Healthcare Service Relationships: Toward a Guardian Conception of Vulnerable Publics' Identities

Abdelmajid Amine, Université Paris-Est, France

Audrey Bonnemaizon, Université Paris-Est, France

Margaret Josion-Portail, Université Paris-Est, France

INTRODUCTION

Population aging has become an unprecedented global phenomenon, impacting most countries across the globe; in France, seniors aged 65 and over will become the largest age group in 2050, accounting for nearly 30% of the total population (Cetelem Observatory 2016). This trend has a tremendous impact on the management of public hospitals, which are facing new challenges with the admission of elderly patients.

Patients' medical and social care can be viewed through the prism of the healthcare service relationship. It refers to the mutual implication of patients and healthcare providers, as well as to the potential mobilization of their respective resources to nurture and develop the care relationship; however, in the case of vulnerable groups, such as elderly patients, the service relationship tends to develop in an asymmetrical manner: healthcare providers can claim a legitimacy in the provision of care derived from their competences and status. As hospitalized elderly patients can be considered fragile subjects facing an alteration of their physical and/or cognitive resources, healthcare providers have a natural tendency to make decisions on their behalf and tailor their identities. The healthcare service relationship in hospitals can thus be analyzed through the prism of care providers' representations of old-patient figures, as well as through the identities they project on the elderly, which are impacting their healthcare practices.

Identity configuration does not only depend on one's personal resources but also develops through social interactions. It can be read in others' eyes and enacted in their actions (Tesser, Millar and Moore 1988). The role played by social interactions in identity configuration is even greater when an individual is old and vulnerable. To define their identities, the elderly will use their remaining personal (cognitive, physical and emotional) resources, the social resources provided by the group of people assisting them in their everyday activities, and the social and cultural imaginary at work in the representations of the elderly.

The theoretical framework of the *elderly consumption ensemble (ECE)*, defined by Barnhart and Peñaloza (2013), identifies family and paid caregivers as central members of a nuclear network within which the elderly's identities are negotiated in relation with consumption activities. In line with Drolet-Rossi, Kelleher and Peñaloza (2015), we propose to broaden the perspective to health service consumption contexts, and explore the role of healthcare providers' practices in the preservation, restoration or alteration of the elderly's identities. This paper introduces a *guardian conception* of elderly patients' identities, viewed as a process through which healthcare providers substitute them in making decisions on their behalf, and thus tailor their identities.

ELDERLY PATIENTS' VULNERABILITY AND IDENTITY CONSTRUCTION

Elderly patients are confronted with vulnerability (Baker, Gentry and Rittenburg 2005), as they experience chronic illness, pluripathology, functional decline, loss of autonomy and decline in their

social role. These combined disabilities increase the tendency to perceive them as impaired people, which potentially affects their feelings of dignity and integrity (Monod and Sautebin 2009). Perception of the elderly as vulnerable may influence healthcare providers' mental representations of senior patients. These representations will be embedded in their care practices as representations perform reality. Vulnerability can be considered as the result of several internal and external factors affecting elderly patients, health decline being a central catalyst (Mason and Pavia 2006; Pavia and Mason 2012).

Perception of their altered body and representations conveyed by others are central in elderly patients' identity construction. Physical, psychological and/or emotional vulnerability favor the alteration of their identities. Furthermore, the context in which interactions with others take place plays an important role in the definition of seniors' identities: uncomfortable situations, perceived negatively, and negative attitudes or criticism from others can alter self-esteem and even lead to a negative *self* (Banister and Hogg 2001). The inability to perform everyday tasks without help and interactions with others placing the elderly in a state of discomfort are perceived as stigmatizing as they remind them of their physical and/or cognitive impairments. These experiences exacerbate the negative perception of the *self*, and may even generate a kind of dissolution of *self* constituents (Mason and Pavia 2014).

Though social interactions can project stigmatized identities on seniors, they are neither prepared nor ready to accept them (Barnhart and Peñaloza 2013; Pavia and Mason 2012). When they have the resources to do so, they tend to deploy strategies to preserve or reconfigure their identities to counter the institutionalization of negative stereotypes, in particular when central elements of their identities are at risk. They engage in an attempt to build a resilient identity (Mason and Pavia 2014) that allows them to focus on the restoration of the positive and rewarding aspects of their *self*.

ELDERLY PATIENTS' VULNERABILITY AND THE GUARDIAN CONCEPTION OF THEIR IDENTITIES

Recent research (Mason and Pavia 2014; Pavia and Mason 2012; Stone, Brownlie and Hewer 2011) has focused on the study of the processes in action during the transformation of seniors' self, without providing a complete understanding of the mechanisms leading to the reconfiguration of their identities however. Indeed, these studies reveal the role played by seniors' personal resources in this process but do not analyze how resources deployed by members of their network (family, friends and paid caregivers) (Barnhart and Peñaloza 2013) may play a role in this identity preservation process. To the nuclear network of actors already identified in the literature, it is possible to add healthcare givers working in medical institutions as they have frequent interactions with hospitalized elderly patients and can be included in what we call the *extended elderly network*. Depending on the role they play, the legitimacy that they give themselves and the contexts in which social interactions with elderly patients take place, we propose that these actors elaborate

representations that also contribute to the identity (re)configuration of the elderly.

This research contributes to the field of service relationships with vulnerable publics. We focus on the role of healthcare givers with authority in the provision of health services, in building, preserving or altering elderly patients' identities. We reveal the existence of a *guardian conception of elderly patients' identities*, embedded and enacted in healthcare practices. This conception relates to two different visions: deficient elderly patients, dependent on others, requiring an adaptation of professional norms to their specificities; and elderly patients as individuals with remaining resources, actors of their healthcare path and needing to be preserved to respect the ideal type of autonomous patients.

METHOD

This exploratory qualitative research¹ was conducted in the geriatric ward of a French hospital group admitting elderly patients aged 75 and over in the suburbs of Paris (France). Data was collected from June to October 2016. Eighteen healthcare providers (doctors, nurses, nursing assistants, a nutritionist and a physiotherapist) were interviewed at their workplace. Informants were contacted by hospital executives and volunteered for the research. Semi-structured interviews lasted one hour on average. Interviews were registered, transcribed entirely and content-analyzed through a process consisting in going back and forth between data and existing literature (Miles and Huberman 1994). The authors double coded the data to increase the reliability of their findings. Categories emerged from the coding process – they consist of representations and figures of elderly patients' identities, perceived, elaborated and enacted by healthcare providers during service relationships.

Bricolage and Ruse as Levers to Preserve, Restore or Alter Elderly Patients' Identities

Our findings show that healthcare providers use *bricolage* and *ruse* as strategies to deliver healthcare and that these practices may shape elderly patients' identities. This tendency to (re)configure senior patients' identity is a way for hospital staff to legitimate their role in their treatment. On the one hand, it can help elderly patients recognize their own capabilities and be active in their care, and can thus contribute to rebuild or rehabilitate their desired positive *self*. On the other hand, it may convey to the elderly the image of a dependent person and thus contribute to build or confirm their negative, undesired *self*.

As a result, healthcare practices can be viewed as coping strategies developed by care providers confronted with elderly patients' various situations. These strategies reveal a *guardian conception of patients' identities*, which is two-fold; it can take the form of fragile and dependent figures to which hospital staff needs to adapt even if it requires derogating from professional norms (when the aged patient is perceived as limited in his/her resources) or take the form of enabling, resilient and autonomous figures, which favor the expression of patients' power to act (when the senior patient is seen to have relevant personal capabilities).

Bricolage as a Way to Adapt to Elderly Patients Perceived as Limited in Their Capabilities

Daily healthcare provision and the variety of interaction contexts in which they take place create interstices to which standardized processes cannot fully be applied. This creates possibilities to imagine and tinker other methods that impact elderly patients' iden-

ties directly. Hospital staff creates hybrid and modified practices; they tap into their own history and cultural values to find the resources needed to accomplish their care mission. This hybridization of practices can be viewed as "*a contribution to sociology of the in-between, sociology from the interstices. This involves merging endogenous/exogenous understandings of culture*" (Pieterse 1995, 64). Healthcare providers thus have to arbitrate between the obligation to respect patients' power to act and the perception of their physical and cognitive deficiencies. The progressive alteration of senior patients' abilities, which can occur when hospitalized or during their stay in the medical institution, leads to practical questions on the possibility to involve them in the care relationship. It raises questions about the best way to do so, by trying to articulate goals that are not always compatible: "respect the patients' will" without actually putting them in danger and "making them comfortable" without undermining their autonomy.

Bricolage practices show that elderly patients' guardian conception of identity is expressed through deficient and weak figures such as the dependent patient, patient with dementia, child patient, soiled patient, patient from the past and deviant patient (*cf.* Table 1).

Ruse as a Way to Protect or Rehabilitate the Autonomy of Senior Patients Perceived as Having Residual Resources

Besides *bricolage*, we identify *ruse* as a coping strategy deployed by caregivers confronted with patients' potential refusal of care. We borrow *ruse* from Hennion and Vidal-Naquet's (2012) ethnographic research of home care relationships. Drawing on Goffman's theoretical frameworks (in particular his usage of fiction, 1973) and those of Paul Ricoeur on narrative (1983), the authors consider home care as bearing a *fictional paradox*: "*it is precisely to preserve an autonomy whose very meaning is eroding, and to provide protection that individuals may no longer see as an opportunity, that, depending on the practical issues to be resolved, one has to encroach on autonomy, or accept some risk-taking to "save" what is essential, for instance to maintain a possible form of autonomy and protection given the situation*" (Hennion and Vidal-Naquet 2012, 329). Authors call *ruse* this risk-taking contributing to the recognition and self-worth development of individuals - *ruse* "*viewed not as a deception but as an art of making do*" (326), or even "do with". This is what we mean here: a series of tricks embedded in healthcare micro-practices allowing for the preservation of the ideal-type of autonomous patients and as such, getting them to do and cooperate.

Ruse practices allow the guardian conception of elderly patients' identities to be expressed through the projection of positive images of the self, embedded in the healthcare providers' attitudes and practices, as shown by the following figures: the person patient, wise patient, active patient and equipped patient (*cf.* Table 1).

DISCUSSION AND CONCLUDING REMARKS

A first contribution of this research consists in proposing a *guardian conception of elderly patients' identities*, which enriches the notion of senior subject positioning (Barnhart and Peñaloza 2013). Our findings suggest that, as a vulnerable public, elderly patients experience an alteration of their physical and/or cognitive resources, allowing actors belonging to their resource network to substitute for them, making decisions on their behalf and configuring their identity. This *guardian conception of identity* thus goes beyond a representation or a projection that the elderly would receive from others and try to articulate with their own vision of their self. We uncover two types of guardian identities elaborated by healthcare

¹ This research received funding from the French National Center for Scientific Research (CNRS) and the authors' university.

Table 1: Guardian conceptions of elderly patients, healthcare practices and types of related identity configurations

Guardian conception of elderly patients	Description	Bricolage practices	Types of related identity configurations
Dependent patient	Elderly patients are perceived as dependent subjects. Healthcare professionals wonder whether the dependency is real and caused by their polypathology or exaggerated by them to get more attention from hospital personnel.	Slow down the pace of care.	Elderly patients' identity alteration – portrayed as ill and dependent.
		“One day, a doctor said to me: “You see, you take two hours to round up patients”. I told him: “OK, now you come with me and you tell me where I’m being slow (...) Because taking a pill, putting it there and telling the patient: “take this” and then go away, I can do that... and it’ll save time. But at the end of the day, I don’t know whether the pill was taken.” (nurse B.L.)	
Patient with dementia	Elderly patients' dementia is frequently evoked by informants. It crystallizes individuals' own projections into old age. In its soft version, it relates to anxiety and confusion exacerbated by the hospital's sanitized environment.	Take time to reassure.	Elderly patients' identity alteration – portrayed as psychologically fragile.
		“They wander. Sometimes it creates problems but then, well, you have to go with them ...and tell them what to do and why. Always reassure them. It's a little bit like a psychological support.” (nurse E.L.)	
“Child” patient	Elderly patients are frequently compared to children with no critical judgment capacities, sometimes unable to verbalize their pain, and who are under the supervision of their parents.	Take the time to explain and reformulate.	Elderly patients' identity alteration - portrayed as not capable of thinking critically.
		“The old patient, sometimes, he does not understand you see. We explain again, we reformulate, and try to adjust.” (nurse B.L.).	
Soiled patient	Elderly patients' bodies are marked by decline, degeneration, uncontrolled soiling whose tracks must be covered by healthcare givers.	Delegate healthcare to third parties.	Elderly patients' identity alteration – portrayed as not capable of controlling their bodies.
		“Her daughter finally took over and said: “Well, I’m going to clean her. I will go with her.” It happened like this but we had to take her clothes because they were completely soaked [<i>with urine</i>]. We were running after clothes afterwards.” (nurse S.F.)	
Patient from the past	Elderly patients are locked in the past and use words and expressions and cultural references that are old-fashioned.	Avoid certain types of care to adjust to patients' old habits.	Elderly patients' identity alteration – portrayed as belonging to a bygone era.
		“There are certain types of care that...well you know, (they say)”I don’t want now...I’m tired...”. It’s not a problem. We go on. Finally, we come back. (...) there are people who do not want to wash every day. You know...they were born... before the war... and...you have to take this into account.” (nursing assistant J.M.)	
Deviant patient	Elderly patients refuse care and/or treatments, or even engage in deviant behaviors; informants evoke numerous <i>translation</i> conflicts. This figure differs from the representation of the vulnerable patient.	Physically coerce the patient to protect him / oneself.	Elderly patients' identity alteration through usage of physical coercion.
		“Well...for example, if there are violent patients (...) we constrain their lower and upper extremities, but it’s on prescription. This means that doctors decide if it needs to be done. (...) It looks... It looks a bit barbaric but...sometimes you have no choice.” (nursing assistant C.B.)	
Guardian conception of elderly patients	Description	Ruse and trick practices	Types of related identity configurations
Person patient	Elderly patients are primarily seen as persons, individuals with whom it is possible to develop a relationship of equals, to discuss, exchange and laugh.	Create a common language to establish a symmetrical relationship.	Elderly patients' identity preservation through the recognition of their identity.
		“As she did not speak French, I looked at her. I put myself at her level. I looked at her and I told her: “Don’t worry. We’re not here to harm you”. I told her this, with my words. I tried to convey this through my eyes...to try to calm down.” (nurse C.B.).	
Wise patient	Elderly patients are wise elders who share their knowledge and life experiences, which are of value to the current generation.	Use past cultural references to establish communication	Elderly patients' identity preservation through the recognition of their valuable past experience.
		“You know, sometimes, there are old, elderly people who are very interesting, they tell you their old stories and it is enriching: I would say about war, about their private life when they were young:” I was doing that. At that time (...) it was good » (nursing assistant G.M.).	
Active patient	Elderly patients are individuals with their own rights, having residual resources that they can mobilize to express their self.	Sensitize elderly patients about their rights to decide, to get them to exercise their power to act.	Elderly patients' identity restoration through the recognition of their rights.
		“It’s...the patient has the right not to know; it means that if he doesn’t want to know what disease he has, we need to respect that. We need to try to understand why he does not want to know [...]. It’s really the patient who...who is the owner...of his disease.” (doctor SK).	
Equipped patient	Elderly patients are not vulnerable, a “normal” relationship with them is possible provided that we use objects that extend their bodies or substitute for deficient physical functionalities.	Use (patients) objects as levers enabling the activation of their capabilities.	Autonomous elderly patients' identity restoration through the recognition of material resources enabling them to exercise their power to act.
		“If, for example, your patient needs glasses to read, I need to know that I will find them in the room, because if he does not have his glasses, it means that he will not be able, of course, to read the documents I will give him.” (nurse S.F.).	

providers: the first relating to a dependent and stigmatized vision of the elderly and the second, contrary to the first, conveying the image of an old patient capable of doing and resilient, and favoring the expression of the patient's power to act. In the first case, the identity projected on the patient could be destructive and act as a factor of identity dissolution (Mason and Pavia 2014), contributing to the creation or exacerbation of a negative identity. In the second case, the projected identity is rewarding and could help to create, restore or preserve a positive, desired self.

This *guardian conception of identity* has an impact that goes beyond the context of elderly patients and can apply to vulnerable populations (e.g. precarious consumers or individuals with physical or mental disabilities) more generally. It seems that when individuals experience a temporary or durable deficit of their internal abilities and become vulnerable, resource persons give themselves the right to confiscate the decision-making on their behalf and the definition of their identity. This situation can lead to the preservation or valuation of vulnerable publics' identities, or on the contrary, result in its deterioration or dissolution. This *guardian conception of identity* is based on resources mobilized by a third party having or claiming to have supervisory authority over senior, fragile or vulnerable individuals who are permeable to representations conveyed in others' discourses and practices. This *by proxy* intervention of a third party in someone else's identity configuration represents a significant theoretical contribution to the area of *self*-concept (Sirgy 1982; Belk 1988). Indeed, it challenges the view that individuals are themselves the repositories of the arrangement of internal and external resources constituent of their identity.

The second contribution of this research is to enrich the concept of the *elderly consumption ensemble* (Barnhart and Peñaloza 2013) through the proposal of the *extended elderly consumption ensemble*. We show that the network of resource persons committed to the elderly is changing depending on places and contexts where consumption or service activities take place. We thus identify the existence of an extended network in the hospital, consisting of healthcare providers whose representations of old age challenge elderly patients' own identities. In this perspective, we propose a dynamic view of the elderly network, viewed as a field of power relationships between healthcare providers and patients.

This research draws only on healthcare providers' discourses, ignoring old patients' perceptions of their own *selves* to capture the whole picture of the latter's identity reconfiguration. Moreover, the role of other members of the elderly network (family members, relatives, etc.) is also neglected whereas they may intervene in tailoring the elderly patients' *selves*. So, interesting directions for future research would be to study patients' own views about how hospitalization impacts their selves and projects for the future, as well as to explore the impact of tensions between members of the *extended ensemble* on the elderly's identity configuration. These resource members (such as family and healthcare providers) may develop different tutelary figures of the elderly and compete to tailor elderly patients' identities. Such conflicts create the risk of generating and projecting a tense and fragmented identity on the elderly.

REFERENCES

- Baker, Stacey M., Gentry James W. and Rittenburg Terri L. (2005), "Building understanding in the domain of consumer vulnerability", *Journal of Macromarketing*, 25 (2), 128-139.
- Banister, Emma N. and Hogg Margaret K. (2001), "Mapping the Negative Self: From 'so Not Me'...To 'Just Not Me'", in *Advances in Consumer Research*, Vol.28, ed. Gilly Mary C. and Meyers-Levy Joan, GA: Association for Consumer Research, 242-248.
- Barnhart, Michelle and Peñaloza Lisa (2013), "Who Are You Calling Old? Negotiating Old Age Identity in the Elderly Consumption Ensemble", *Journal of Consumer Research*, 39 (April), 1133-1153.
- Belk, Russel W. (1988), "Possessions and the Extended Self", *Journal of Consumer Research*, 15, (2), 139-168.
- Drolet Rossi, Aimée, Kelleher, C. and Peñaloza Lisa (2015), "Advancing Connections Between Consumption and the Elderly: Consumer Research Issues, Opportunities and Challenges", in *Advances in Consumer Research*, Vol.43, ed. Diehl K. and Yoon C., MN: Association for Consumer Research, 765-765.
- Hennion, Antoine and Vidal-Naquet Pierre (Dir.) (2012), « Une ethnographie de la relation d'aide : de la ruse à la fiction ou comment concilier protection et autonomie » [An ethnography of care relationship: from ruse to fiction or how to reconcile protection and autonomy], Paris/Lyon: CSI/Cerpe, Mire.
- Mason, Marlys and Pavia Teresa (2006), "When the Family System Includes Disability: Adaptation in the Marketplace, Roles and Identity", *Journal of Marketing Management*, 22 (9-10), 1009-1030.
- Mason, Marlys and Pavia Teresa (2014), "Health Challenges and Consumer Vulnerability: Identity Dissolution and Resiliency Behaviors", in *Advances in Consumer Research*, Vol. 42, MI: Association for Consumer Research, 9-11.
- Miles, Matthew B. and Huberman A. Michael (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed. Thousand Oaks, Sage.
- Monod, Stéphanie and Sautebin Annelore (2009), « Vieillir et devenir vulnérable [Ageing and Becoming Vulnerable] », *Revue Médicale Suisse*, 5 (November), 2353-2357.
- Pavia, Teresa and Mason Marlys (2012), "Inclusion, Exclusion and Identity in the Consumption of Families Living with Childhood Disability", *Consumption, Markets and Culture*, 15 (1), 87-115.
- Pieterse, Jan Nederveen (1995), "Globalization as hybridization", in *Global modernities*, ed. Featherstone M., Lash S. and Robertson R., London: Sage, 45-68.
- Sirgy, M. Joseph (1982), "Self-Concept in Consumer Behavior: A Critical Review", *Journal of Consumer Research*, 9 (3), 287-300.
- Stone, Tim, Brownlie Douglas and Hewer Paul (2011), "Constructing cultures of caring consumption: An exploratory study of embodiment within an elderly care environment", in *European Advances in Consumer Research*, Vol.9, ed. Bradshaw A., Hackley C., and Maclaran Pauline, MI: Association for Consumer Research, 269-274.
- Tesser, Abraham, Millar Murray and Moore Janet (1988), "Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close", *Journal of Personality and Social Psychology*, 54, 49-61.

Few and Far Between: Identifying Measures of Advertising Visuals that Correlate with Neural Engagement and Sales

Samuel B. Barnett, Northwestern University, USA

Moran Cerf, Northwestern University, USA

ABSTRACT

We present a novel approach to assess visual attention in advertisements. We find that movie trailers with fewer and larger attention-grabbing visuals generate higher collective neural engagement (i.e., Cross-Brain Correlation) among consumers in a movie theater. The number and size of attentional targets also correlate with future population-level ticket sales.

INTRODUCTION

With decreasing attention spans and increasing communication urgency, every second of an engaged mind counts even more. Content creators in every profession aim to engage their audiences in limited time, and the question of how to deliver a message quickly is especially pronounced in advertising. Advertisers and neuroscientists are constantly striving for better answers to this question, especially given the strong economic incentives to communicate efficiently. For context, a typical 30-second advertising slot during a primetime television news broadcast cost \$5,000 in 2016; when more viewers are watching, such as during contentious political debates or sporting events, airtime rates often exceed that price per second (Poggi 2015). During *Super Bowl LI*, a single second of advertising time cost over \$167,000 according to the American Marketing Association (Watters 2017). Furthermore, these costs only reflect the airtime and do not account for the cinematography and production expenses. Producing just one second of a Hollywood film or advertisement often costs over \$20,000 (\$22,109 mean budget per second for the ten highest grossing films in 2016; IMDb.com, Seattle, Washington).

Since images often convey messages more efficiently than words (Simion & Shimojo 2006; Cerf, Frady, and Koch 2009), visual attention to natural stimuli has increasingly become a focus of research. Certain commonalities in visual attention have been identified through a variety of techniques, such as eye tracking (Teixeira et al., 2010), saccade models (Itti & Koch 2001; Mackay et al. 2008), electroencephalography (EEG; Charland et al. 2013), functional magnetic resonance imaging (fMRI; Falk, Berkman, and Lieberman 2012; Poldrack 2008), and biometric measures (Ohme et al. 2011). In particular, elevated neural similarity across viewers during rich visual stimuli (e.g., videos) has been linked to heightened collective brain engagement, attention, memory, and population-level sales (Hasson et al. 2004, 2008; Barnett & Cerf 2015, 2017).

Recent research has shown that simpler advertisements with fewer words and lower visual entropy are linked to elevated neural similarity and engagement with content (Putrevu, Tan, and Lord 2004; Pieters, Wedel, and Batra 2010; Barnett et al. 2016).

By extension, we hypothesize that advertisements utilizing images with fewer attentional targets will promote greater neural similarity. However, it is not clear how the size of an attentional target will impact neural similarity. On one hand, a small visual might pinpoint collective attention (i.e., cause everyone to focus on a precise location within the image), thus increasing stimulus processing consistency. On the other hand, perceptual load theory suggests that an image with a larger attention-grabbing portion (e.g., high load) will minimize task-irrelevant attentional allocation (Lavie & Tsal 1994; Lavie 1995). Under this model, attentional targets are parsed as distinct entities (e.g., characters, faces, objects) rather than locations, so neural similarity is presumably increased if the audience simply

focuses on the same entity (even if each viewer's gaze falls on a different location within that entity).

Put simply, does an image make brains think alike if it makes everyone look at the same location (as with a smaller attentional target, which minimizes gaze variance) or pay attention to the same entity (as with a larger attentional target, which minimizes distraction by other entities in the image)? We hypothesize that the latter is true; in other words, we expect that the average size of individual attentional targets throughout an advertisement will correlate with its neural similarity.

We address these hypotheses with a combination of neural and subjective report data. In a field experiment, we measure neural similarity as Cross-Brain Correlation (CBC) of moviegoers in a theater during natural viewing of trailers for upcoming feature films. Since movie trailers are dynamic advertising stimuli that both entertain and persuade, they have been the focus of many recent studies (cf., Boksem & Smidts 2015). We also perform an online survey to assess the number and location of attentional targets for images extracted from each second of the movie trailers.

Finally, in addition to showing that fewer and larger attentional targets correlate with higher CBC, we provide evidence that these metrics predict future sales.

METHODS

A total of 611 subjects collectively participated in this research; 59 viewed movie trailers in a theater while undergoing EEG recordings, and 552 analyzed images extracted from each second of these movie trailers.

EEG Field Experiment

Subjects and Procedure

Subjects watched trailers and movies while undergoing EEG recordings at a commercial theater (AMC Theatres, Northbrook, Illinois). Subjects selected a movie that they had not previously seen and were offered free admission in exchange for participation. To minimize non-neural artifacts in these recordings, subjects refrained from all other activities (e.g., drinking, eating, talking, moving) except viewing the screen. Subjects were fitted with an electrode cap and conductive gel was placed at each electrode site. All subjects were native English speakers with normal (or corrected-to-normal) vision and hearing who provided informed consent.

Task

After the setup procedure, subjects viewed the movie trailers and feature film naturally. Following the movie, subjects responded to a written questionnaire that asked them which trailers they recalled and other questions about their preferences.

EEG Data Acquisition

Subjects' neural data were collected using 32-channel EEG systems (Brain Products, Gilching, Germany) at a rate of 250 Hz. The electrode sites were distributed across the entire scalp according to the actiCAP 64Ch Standard-2 (green holders) montage.

Computation of Neural Similarity

We computed CBC, moment-to-moment synchrony in EEG data across subjects experiencing the same audiovisual stimuli, through-

out each movie trailer. At each electrode site, we measured neural activity over time as the power (dB) of alpha oscillations (Berger 1929), which are often associated with visual attention (Klimesch 2012, Dmochowski et al. 2014). We performed a Short-Time Fourier Transform (STFT) of the EEG signal at each timestep, filtered the Power Spectral Density (PSD) matrix, and multiplied the common logarithm (base 10) of the PSD matrix by 10. Next, we assembled a time series of activity at the given electrode site that was correlated with the stimulus-matched time series of activity at the corresponding site for each subject. At each timestep and site, we averaged the correlations for every pair of subjects. Lastly, we averaged across the sites to arrive at a single value of neural similarity at each timestep, thus producing the CBC time series. CBC values were normalized to range from zero (minimum) to one (maximum).

Stimuli. Each movie was typically preceded by six or seven movie trailers. Throughout the study, a total of 13 trailers (1,775 seconds in length) were presented more than once and subsequently recalled by more than one subject. On average, the length of each trailer was 136 ± 20 seconds (*mean ± standard deviation*).

Identification of Attentional Targets

Subjects and Procedure

We recruited subjects on a crowdsourcing Internet marketplace (Amazon Mechanical Turk, Seattle, Washington) to analyze still images extracted from the first frame of each second of the 13 movie trailers (i.e., 1,775 images), and 25 unique subjects responded to each image.

Task

Each image was divided into a grid of 60 locations (six rows, ten columns) and subjects were asked to (1) identify the location that “grabbed their attention the most,” which we denote as their “primary attentional target,” and (2) report the “total number of items that drew their attention” (e.g., characters, objects, graphics). Subjects spent 13 ± 8 seconds per image. We also included control tasks to verify reasonable effort; in these randomly interspersed tasks, subjects were instructed to choose an asterisked location in the image.

Data was discarded for subjects who failed to answer any control task accurately.

Measures of Central Tendency

We calculated the mean and median numbers of attentional targets across the 25 responses per image. Across all images in a given trailer, we calculated the mean of these means (i.e., “average mean”) and mean of these medians (i.e., “average median”).

RESULTS

Movie trailer CBC averaged $.49 \pm .03$. The highest and lowest trailer CBCs corresponded with z-scores of 2.19 (*X-Men: Days of Future Past*) and -1.37 (*Mr. Peabody and Sherman*), respectively. The CBC distribution is right tailed; that is, engaging, high CBC trailers are rarer than would be expected in a symmetric normal distribution (positive skew of .59).

Most often, one attentional target was reported per image (37% of responses); the median was two (26%), and the mean was 2.12 ± 1.64 . Zero attentional targets were reported for images with no discernible visual content (5%). Responses with more than ten reported targets (2%) were discarded as outliers for all of the following analysis. Also, the plurality (as well as median and mean) of primary attentional targets were in one of the four centermost locations of the frame (rows 3/4 × columns 5/6); however, this was only observed in 30% of responses.

Neural similarity tended to be higher for movie trailers with fewer attentional targets. We observed strong negative correlations between CBC and both average median ($r = -.67, p = .01$) and average mean ($r = -.64, p = .02$) numbers of attentional targets per image. The highest CBC trailer had an average median and average mean of 1.42 and 1.84 targets, respectively, which is significantly fewer ($p < .01$, unpaired two-sample *t*-tests) than the corresponding average median (2.00) and average mean (2.29) of the lowest CBC trailer.

Additionally, we observed that CBC was correlated with spatial dispersion of primary attentional target locations (see legend in Figure 1). In other words, for a given attention-grabbing visual, CBC increased as primary attentional target locations were further apart

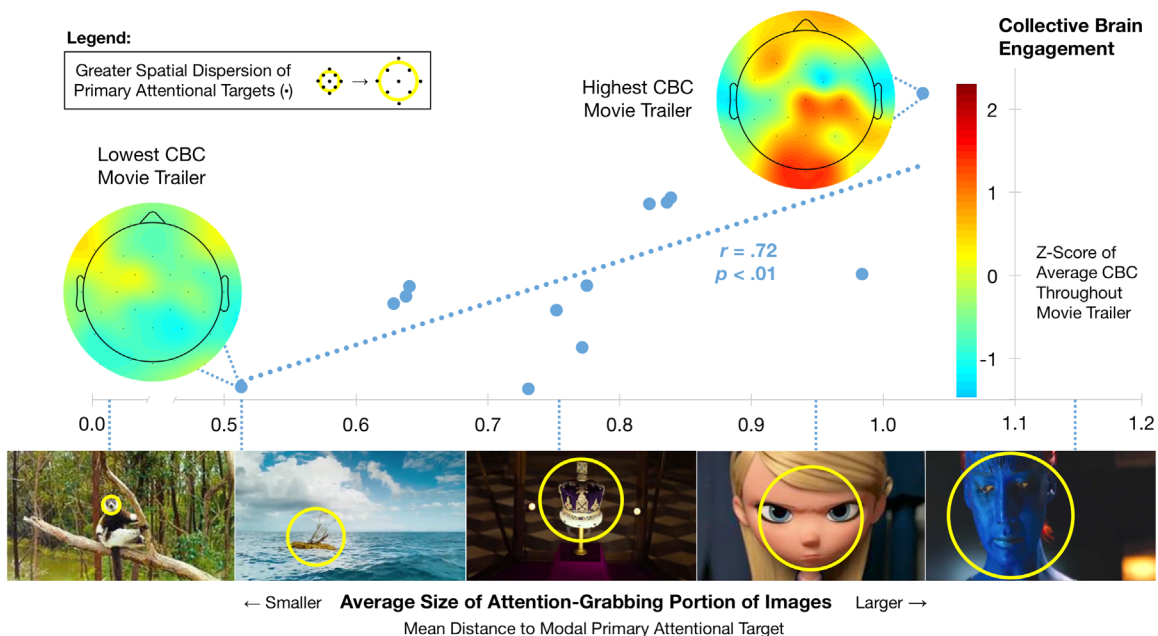


Figure 1: Size of Attention-Grabbing Visual Predicts Collective Brain Engagement During Movie Trailers.

from each other. Specifically, CBC was highly correlated with the standard deviations of primary attentional target locations along both the horizontal ($r = .80, p < .01$) and vertical ($r = .72, p < .01$) dimensions. Therefore, elevated CBC arose for attentional targets that were “few and far between”: fewer items that drew subjects’ attention, but primary targets “far between” each other.

To investigate this phenomenon further, we analyzed images with a median of one attentional target. For each image, we computed the mean distance of all subjects’ primary attentional targets to the within-image mode of these responses, approximating the size of the attention-grabbing portion of the image. These averages of mean distance across trailers ranged from .51 to 1.03 units (where the distance between horizontally or vertically adjacent locations was one unit, and the distance between diagonally adjacent locations was $\sqrt{2} = 1.41$ units). We found a strong positive correlation between CBC and average distance ($r = .72, p < .01$). That is, given a single attentional target, CBC increased with the size of the attention-grabbing area of the image (see Figure 1).

The standard deviation above/below average CBC throughout a given movie trailer (y-axis) is plotted against the average size of the attention-grabbing portion of images in that trailer (x-axis). For reference, five images are each shown with a dotted line indicating its attention-grabbing portion’s size. Additionally, superimposed yellow circles delineate the attention-grabbing regions; the legend illustrates how the circle’s size depends on the spatial dispersion of the attentional targets. Overhead EEG spatial maps (Niedermeyer & Lopes Da Silva 1993) of the regional CBC levels are shown for the lowest and highest CBC trailers (ranging from blue to red for lower and higher CBC, respectively; see gradient adjacent to vertical axis). In addition to greater average CBC, the highest CBC trailer has especially high CBC in posterior regions (represented in red) associated with visual processing areas of the brain.

Similarly, we measured the percentage of primary attentional targets that were at or adjacent to the within-image modal location (i.e., proportion of responses ≤ 1.41 units away from mode selection). These “near-mode percentages” were relatively high across trailers, ranging from 77.91% to 90.11%. Lower percentages corresponded with larger attentional areas since fewer primary attentional targets are concentrated near the modal location. Again, we found that CBC is directly related to the size of an attention-grabbing visual; CBC was negatively correlated with near-mode percentages ($r = -.71, p < .01$).

Given that CBC is positively correlated with the size of the attention-grabbing entity and negatively correlated with the number of attentional targets, we may gain additional predictive power by combining these metrics. For example, the fraction of (mean distance to within-image mode) \div (average median number of attentional targets) is more strongly correlated with CBC ($r = .79, p < .01$) than either the numerator or denominator alone.

In addition to being strongly correlated (positively or negatively) with CBC, these visual components are predictive of the eventual sales of the advertised movies (see Summary Table for statistics on each measure and its correlations with CBC and weekly sales).

The mean and standard deviation of each visual measure utilized in this work were calculated across trailers. The per-trailer averages for each measure were also compared to the average CBCs and ultimate weekly ticket sales of the full movie corresponding with each trailer, and the table displays the resulting correlations. All $|r| > .40$ were statistically significant ($p < .10$).

DISCUSSION

Fewer and larger attentional targets throughout movie trailers were significantly predictive of both higher CBC during viewing and increased sales of the advertised films. These findings agree with and extend prior literature on visual attention in advertising.

For example, lower numbers of attention-grabbing visuals have been associated with improved effectiveness of print advertisements (Book and Schick 1997; Aitchison 2012). Since consumers control the amount of time spent viewing a print advertisement, potential attentional targets are necessarily competing with each other for time and interest, so advertisers provide fewer degrees of freedom to increase focus on key items. We show this phenomenon also holds with video advertisements, despite that consumers do not control the presentation rate. In other words, competition for visual attention is continuously occurring (even frame by frame during a movie trailer).

Furthermore, when an item dominates more of the visual field, it reduces the set of other hypothetical targets for stray attentional resources. Also, when an item is larger, more visual details (e.g., colors, edges, textures) are visible, which demands greater within-item feature processing (i.e., higher perceptual load), thereby enhancing visual attention (Pieters, Wedel, and Batra 2010). Therefore, our observation that larger visuals generate higher brain engagement may be due to maximization of task-relevant (and minimization of task-irrelevant) attention according to perceptual load theory (Lavie & Tsai 1994; Lavie 1995).

Our efforts to capture natural attention in a commercial context were accompanied by many limitations. We were restricted to the theater’s available films and their corresponding trailers; our findings may not hold for other types of video advertisements. Additionally, to maximize the authenticity of the movie viewing experience, subjects did not wear eye tracking goggles, and we instead supplemented the neural data with subjective reports of attentional targets in the online survey. These limitations can be addressed in future studies with different exploratory priorities.

Nonetheless, if “a picture is worth a thousand words” (Flinders 1911), then perhaps one with a single, large attentional target is worth a million.

Summary Table: Fewer and Farther-Distributed Attentional Targets Linked to Higher Collective Brain Engagement and Sales.

Visual Component	Measure	Mean \pm Standard Deviation	Correlation with	
			CBC	Weekly Sales
Number of Attentional Targets	Average Median	1.79 \pm .22 targets	-.67	-.48
	Average Mean	2.15 \pm .19 targets	-.64	-.51
Primary Attentional Target Location	Near-Mode Proportion	84.75% \pm 3.97%	-.71	-.50
(Size of Attention-Grabbing Portion)	Standard Deviation (Horizontal)	15.94% \pm 2.48% of width (10 units)	.80	.46
	Standard Deviation (Vertical)	14.37% \pm 1.74% of height (6 units)	.72	.31
	Mean Distance to Mode	.77 \pm .14 units	.72	.39
Combined	(Mean Distance)/(Average Median)	.44 \pm .13 units/target	.79	.53

REFERENCES

- Aitchison, J. (2012), *Cutting Edge Advertising: How to Create the World's Best Print for Brands in the 21st Century*, FT Press.
- Barnett, S. B. & Cerf, M. (2015), "Connecting on Movie Night? Neural Measures of Engagement Differ by Gender," *Advances in Consumer Research*, 43, 314-318.
- _____ (2017), "A Ticket for Your Thoughts: Method for Predicting Content Recall and Sales Using Neural Similarity of Moviegoers," *Journal of Consumer Research*, 44(1), 160-181.
- Barnett, S. B., White, H. M., & Cerf, M. (2016), "Keep It Simple Stimuli: Brain-Vetted Elements of Movie Trailers Predict Opening Weekend Ticket Sales," *Advances in Consumer Research*, 44, 285-289.
- Berger, H. (1929). "Über das Elektrenkephalogramm des Menschen," *European Archives of Psychiatry and Clinical Neuroscience*, 87(1), 527-570.
- Boksem, M. A., & Smidts, A. (2015), "Brain Responses to Movie Trailers Predict Individual Preferences for Movies and Their Population-Wide Commercial Success," *Journal of Marketing Research*, 52(4), 482-492.
- Book, A. C., & Schick, D. C. (1997), *Fundamentals of copy & layout*, McGraw Hill Professional.
- Cerf, M., Frady, E. P., & Koch, C. (2009), "Faces and Text Attract Gaze Independent of the Task: Experimental Data and Computer Model," *Journal of Vision*, 9(12).
- Charland, P., Leger, P.-M., Allaire-Duquette, G., & Gingras, G. (2013), "A Neuroscientific Perspective For Assessing Student Engagement in E-Learning," *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2013*, 1795-1800.
- Dmochowski, J. P., Bezdek, M. A., Abelson, B. P., Johnson, J. S., Schumacher, E. H., & Parra, L. C. (2014), "Audience Preferences are Predicted by Temporal Reliability of Neural Processing," *Nature Communications*, 5.
- Falk, E. B., Berkman, E. T., & Lieberman, M. D. (2012), "From Neural Responses to Population Behavior Neural Focus Group Predicts Population-Level Media Effects," *Psychological Science*, 23(5), 439-445.
- Flanders, T. (1911), "Speakers Give Sound Advice," *Syracuse Post Standard*, March 28.
- Hasson, U., Nir, Y., Levy, I., Fuhrmann, G., & Malach, R. (2004), "Intersubject Synchronization of Cortical Activity During Natural Vision," *Science*, 303(5664), 1634-1640.
- Itti, L., & Koch, C. (2001), "Computational Modelling of Visual Attention," *Nature Reviews Neuroscience*, 2, 194-203.
- Klimesch, W. (2012), "Alpha-Band Oscillations, Attention, and Controlled Access to Stored Information," *Trends in Cognitive Science*, 16(12), 606-617.
- Lavie, N. (1995), "Perceptual Load as a Necessary Condition for Selective Attention," *Journal of Experimental Psychology: Human Perception and Performance*, 21(3), 451-468.
- Lavie, N., & Tsal, Y. (1994), "Perceptual Load as a Major Determinant of the Locus of Selection in Visual Attention," *Perception & Psychophysics*, 56(2), 183-197.
- Mackay, M., Cerf, M., & Koch, C. (2012), "Evidence for Two Distinct Mechanisms Directing Gaze in Natural Scenes," *Journal of Vision*, 12(4), 1-12.
- Ohme, R., Matukin, M., & Pacula-Lesniak, B. (2011), "Biometric Measures for Interactive Advertising Research," *Journal of Interactive Advertising*, 11(2), 60-72.
- Pieters, R., Wedel, M., & Batra, R. (2010), "The Stopping Power of Advertising: Measures and Effects of Visual Complexity," *Journal of Marketing*, 74(5), 48-60.
- Poggi, J. (2015), "Is the Super Bowl Worth the Price? For these Advertisers, It Might Be," *Advertising Age*, 86.
- Poldrack, R. A. (2008), "The Role of fMRI in Cognitive Neuroscience: Where Do We Stand?" *Current Opinion in Neurobiology*, 18(2), 223-227.
- Putrevu, S., Tan, J., & Lord, K. R. (2004), "Consumer Responses to Complex Advertisements: The Moderating Role of Need for Cognition, Knowledge, and Gender," *Journal of Current Issues & Research in Advertising*, 26(1), 9-24.
- Simion, C., & Shimojo, S. (2006), "Early Interactions Between Orienting, Visual Sampling and Decision Making in Facial Preference," *Vision Research*, 46(20), 3331-3335.
- Teixeira, T. S., Wedel, M., & Pieters, R. (2010), "Moment-to-Moment Optimal Branding in TV Commercials: Preventing Avoidance by Pulsing," *Marketing Science*, 29(5), 783-804.
- Watters, L. (2017). "The History of Super Bowl Commercial Costs," *American Marketing Association*, January 27.

Turkish Consumers' Response to Westernised Ethical Consumption Culture: An Acculturation Theory Approach

Gaye Bebek, Coventry University, United Kingdom

ABSTRACT

We argue that marketing of Western consumption practices is practically imposing a different consumption culture upon consumers in non-Western or emerging markets. By using Berry's (1980) acculturation framework, we investigate consumer acculturation towards an imposed dominant Western marketing practice (organic products) in the multiplicity of the Turkish urban city Istanbul's context.

INTRODUCTION

Aided by increasing availability and media interest, the landscape of environmental products remains resilient (Euromonitor, 2010). Organic produce is the most pertinent in this market; the second eco-friendly product type consumers are willing to pay for more (Visser; 2010; Euromonitor, 2015). Given the promise of lucrative market, last 25 years saw considerable efforts from scholars trying to identify the psychology, norms, values of ethical consumer or the contextual factors of decision-making processes (for ex. Shaw and Clarke, 1999; Stern, 2000; Auger and Devinney, 2007; Chatzidakis, Hibbert and Smith 2007; Kihlberg and Risvik, 2007; Kilbourne and Pickett, 2008; Doran 2009; Devinney et al., 2010; Romani, Grappi and Bagozzi, 2016). Albeit insightful, efforts do not come to an agreement as to what makes an ethical consumer. Recent research suggests understanding ethical consumer may not at all be possible as change necessitates deeper conflicts to be resolved between the ideologies of consumption and protecting the environment which alludes to consuming less (Johnston 2008; Chatzidakis, Maclaran and Bradshaw, 2012; Chazidakis 2015; Carrington, Zwick and Neville, 2016). Scholars cannot exactly capture the phenomenon; but accept it as a peculiarity of Western consumption culture (Thompson and Coskuner-Balli, 2007a; Dombos, 2008; Humphery 2010; Carrington, Neville and Whitwell, 2014; Pecoraro and Uusitalo, 2014).

The premise of this paper accepts that ethical consumption is a Western cultural practice, and draws from acculturation theory to understand how and why this culture is/ is not adopted in different consumption contexts. We investigate this in the complexity and the multiplicity of an urban Turkish city: Istanbul. When change is imposed upon, rather than innate, ethical marketing efforts will be perceived as *imposed Westernised popular* culture. Added to this will be the multiplicity of the Turkish urban cities' consumption cultures. These offer a setting where fragmented cultures of immigrant rural and urban consumers co-exist (Sandikci and Ger, 2001; Sandikci, Ekici and Tari, 2006; Izberk-Bilgin 2010; 2012). Migrants may remain connected with their original culture and manifest this through their consumption patterns (Bardhi and Eckhardt, 2010); or they put in effort to fit in with the host culture (Mehta and Belk, 1991; Penaloza, 1994; Oswald, 1999). Through an emergent design study conducted in Istanbul, we explore Turkish consumers' attitudes towards the imposed dominant organic consumption culture. Focus groups and ethnographic observations stretched over 18 months identify four consumer segments that show different acculturation attitudes resembling Berry's (1980). Findings also suggest that there are two parallel marketing structures which are favoured by different consumer groups.

LITERATURE REVIEW

Consumer Acculturation of Ethical Markets

Consumers negotiate the meaning of products in different ways and may accept/ reject them as part of their consumption practices (Cross, 2000; Bardhi and Eckhardt, 2010). As Rudmin (2003) argues, humans have likelihood of adapting to new practices and consumers manifest their attitudes via consumption practices. Berry's (1980) fourfold acculturation (assimilation, rejection, integration and marginalisation) model has been applied to various contexts (Penaloza, 1989, 1994, 2000; Oswald, 1999; Penaloza and Gilly, 1999; Maldonado and Tansuhaj, 2002; Askegaard, Arnould, and Kjeldgaard, 2005; Ustuner and Holt, 2007; Hughes, 2010; Bardhi and Eckhardt, 2011; Chytkova, 2011). Postassimilationist acculturation researchers argue that acculturation is not a direct path; and show that consumers are in negotiation of their culture and do not necessarily always commit to one culture (Penaloza, 1989; Ger and Ostegaard, 1998; Oswald, 1999; Askegaard, et al 2005; Sandikci et al 2006).

Ethical consumerism as a product of the Western consumption culture (Humphery 2010; Dombos, 2008; Pecoraro and Uusitalo, 2014); is not inborn but rather *brought in* to non-Western cultures or emerging. Consumers in non-Western cultures are then faced with the new Western consumption culture, an *imposed dominant culture*, coinciding with the extant culture. Acculturation framework will shed light on whether consumers accept or reject these product types as part of their own consumption patterns. We investigate this in the context of Turkish culture, particularly in the urban city Istanbul, with added extant multiplicities and hybridised cultures of immigrant rural and urban consumers (Sandikci and Ger, 2001; Sandikci et al, 2006, Izberk-Bilgin 2010; 2012).

Turkish Consumer Acculturation towards Organic Products: Imposed Dominance vs Extant Rural

Newly affluent consumers in emerging markets are potentially the greenest consumers of the future in terms of their earnestness. As an example of this, Turkish organic packaged food shows an increase in current value by 25% in 2015 (Euromonitor, 2016). Surprisingly, Turkish demand and awareness for organic products were non-existent until the late 1990s; production was export oriented. In 1999, the Ministry of Agriculture and Rural Affairs (MARA) and NGOs started to encourage the domestic consumption, and market grew until 2005 when there were 300 sales points in the country (IF-OAM, 2009).

Consumer acceptance and awareness is growing (Akgungor, Miran and Abay, 2010; Aygen and Yagci, 2013), but Turkish consumer culture also possesses unique characteristics which influence consumers' response to marketing phenomena. Scholars noted towards different consumer groups within Turkish culture, which show different consumption styles and can induce conflicts and identity negotiations when these group coincide. These conflicts can be between rural and urban consumers (ie Sandikci et al 2006; Ustuner and Holt, 2007); upper and lower-class consumers (Ustuner and Holt, 2010); or can be ideological tensions caused by different religious beliefs (Sandikci and Ger, 2002; Izberk-Bilgin, 2012).

Sandikci et al (2006) discuss the hybridised version of Western modernity which exists in newly modernised Turkish regions. "Satellite modernities" (Ma, 2001) create an environment where the

Westernised consumer and migrant consumer from the rural regions coincide and consumption culture is negotiated (Sandikci and Ger, 2001; Sandikci et al 2006; Ustuner and Holt, 2007; Izberk-Bilgin, 2010). For Turkey, a secular country with active religious power groups, the conflict of Western and rural ideologies enhances the role of products as part of consumers' social identity construction (Oncu and Weyland, 1997), particularly status induced (Ustuner and Holt, 2007). This creates fragmented consumption practices which can align with the acculturation attitudes Berry (1980) underlines.

The satellite modernity of big Turkish cities entail more rural traditional culture carrying the traces of rural consumption patterns, and a more Westernised culture, along with various fragmented versions (Oncu and Weyland, 1997; Ustuner and Holt, 2007). A more traditional/ rural segment of consumers who shop from the rural areas and open bazaars and believe that natural products are organic in nature has been documented previously (Ozbilge, 2007; Demiryurek et al 2008; Costa et al, 2014). Given Turkish domestic organic products market is growing (Euromonitor 2016), this leads to a new consumption culture being introduced to an already fragmented market. Thus, the multiplicity of the Turkish consumer culture provides a unique context to investigate the consumer attitudes towards mainstream imposed organic products culture as opposed to their extant traditional/rural consumption practices and to what extent they have acculturated.

METHODOLOGY

The research design is adoptive and emergent and evolved as fieldwork took place. The initial tool was exploratory focus group discussions. As we acquired new knowledge, more fieldwork including ethnographic observations and photographic documentation was undertaken. All fieldwork took place in Istanbul, a highly cosmopolitan city in Turkey, attracting high level of immigration from rural areas, and a melting pot of consumption cultures. Total field work was stretched over a period of 18 months with intermittent visits.

We have followed Morgan (1996) and Tadjewski's (2016) recommendations. 10 focus groups with 7-9 participants were conducted. Participants were all residents of Istanbul with some residents of squatters and existing links with the rural regions. Each discussion took between 45 to 60 minutes over lunchtime. Transcription and translation of the scripts from Turkish to English were handled by the moderator (a native Turkish speaker). We have analysed the data through simultaneous manual coding (Auerbach and Silverstein, 2003, Saldana, 2009).

FINDINGS

From the initial focus groups, we identified two different marketing efforts in the Turkish organic markets. These were further supported by our consecutive ethnographic observations.

- a. Supermarkets and niche bazaars selling certified organic produce (Exhibit 1a, 1b, and 3a).
- b. Rural bazaars and markets selling traditional rural products with the unjustified organic assumption (Exhibit 2a, 2b, and 3b).

Aligned with the legitimacy framework (Dowling & Pfeffer 1975; Suchman 1995; Kates, 2004; Johnson et al. 2006; Humphreys 2010) our findings identify a parallel legitimacy in the organic markets in Turkey; each marketing type fitting with the consumption patterns of different consumer cultures in Turkey. The first group of products assume certificate legitimacy and is targeted towards the more Westernised modern consumer group, while the second assumes traditional legitimacy and targets more rural/traditional consumers in the satellite modernity of the cities.

Assimilation: Westernised Moderns

We identify a group of consumers who fully support the packaged organic products. Consumers in this category hold ecocentric views (Thompson and Barton, 1994; González et al, 2015), and find these products as representative of an escape from the chaos of the urban life. They actively search for certificates on products and complain of the lack of clarity of the legitimate certification processes. The supermarkets selling branded certified organic products, or on-line shopping site, similarly offering certified organic products are the main channels of shopping. The interesting point though, consumers tend to isolate themselves from the conventional consumers. In their discourse, the conventional consumers are usually referred to as "they". In this case, consumers tend to build their Westernised identities by using certified consumption as a manifestation tool. They look for certifications because that is what the aspired Western modernity dictates; they support organic products because that is what aspired Westerners do (Dombos, 2008) Therefore, this protection of their consumer group from conventional consumers suggests strong identification with the group and signals status induced consumption.

F2P6: Certificates are the only way to know what you pay for is organic. Some think they can grow organic vegetables at home! That is just ridiculous, you have to make sure the air is not polluted, the soil is not polluted...how can you make sure? Certifying bodies account for all these...

(Female, 30, White-collared worker, no links with rural regions)

F5P7: "If I may say so...I believe that I am part of the more educated consumers, I search for known brands and certificates when buying organic products. The demand must have increased in my neighbourhood [as] my local supermarket expanded their section..."

(Female, 56, Retired artist, no links with rural regions)

Rejection: Rural Consumers of the City

The rural-to-urban immigrants still have connections with their original home cultures. This group of consumers reject the imposed packaged consumption and retain their original consumption patterns. For this group, packaged certified products sold from in supermarkets have no legitimacy, what constitutes as legitimate is traditional and rural cues:

F7P5: "My friend brought some [organic] tomatoes for me from Canakkale"

(Male, 46, white collared worker, links with rural regions)

F7P3: "I know organic means chemical-free, but no one I know is actually uses the term for that, everyone thinks organic equals natural".

(Female, 36, housewife, links with rural regions)

We also identify the contrast between the rejecters' and assimilates' discourse. Whilst assimilates' isolate their "selves" from the conventional consumers, the rejecters' refer to a social grouping when discussing their consumption styles, ie "everybody". Similar to Bardhi et al (2011; 2012) and Oswald's (1999) arguments, this group of consumers want to feel attached to their original culture and manifest this by building their identity around this consumption

style. There are several ways to manifest this consumption pattern. Nearly every neighbourhood in Istanbul has weekly bazaars where produce from rural regions are sold. The first way of manifesting the rejection of packaged consumption is shopping from such outlets. Yet, rural-to-urban immigrants will not have access to every aspect of rural consumption styles. Immigrant life demands certain level of effort if they want to retain original cultures. This effort is seen in growing number of consumers making agreements with farms out of Istanbul.

F7P7: “We do not trust the ones that are sold in the supermarkets, but we have agreements with some farms out of Istanbul, we phone them and they send us via post”

(Male, 43, self-employed, links with rural regions)

Integration: Altered shopping methods for the same products

The multiplicity of Istanbul makes leeway for hybridised version for Westernised ethical consumption and traditional consumption patterns. A most pertinent way is to shop from ecological bazaars. These bazaars offer certified organic produce in a traditional/rural setting (Exhibit 3a). The consumers who shop from these ecological bazaars manifest traces of both cultures: acceptance of certified organic produce as the norm, and maintenance of the traditional rural shopping styles.

F6P2: “If I will shop for organic, I shop from [these] bazaars. I want to touch and smell [laughs] what I am buying...I enjoy the ambiance and the banter of the sellers! Thanks to those bazaars I learnt how a strawberry should taste like!”

(Female, 34, white-collared worker, links with rural regions)

We see a similar pattern for the traditional rural consumption culture learning to accept the certain demands of the urban life. We identify a marketing practice for branded products, which do not claim to be organic, but marketed for their rural origins. These products are sold in supermarkets and they are branded aptly as “extra geleneksel” (extra traditional, Exhibit 3b).

F6P4: “When I was a child, we used to grow fruits and vegetables in our farm. I can never forget the taste of those...and this is the closest I get to it. Yes, it is a little bit more expensive, but it is worth it”

(Male, 32, white-collared worker, links with rural regions)

We note this as an effort to integrate the urban consumption culture into the original traditional consumption culture and resemble consumers’ reactions towards Protected Destination of Origin (PDO) (Grunert and Aachmann, 2016). Another consumption practice that embodies elements of rural/traditional consumption whilst also adapting to the organic consumption is growing organic produce at home. This retains the element of rural farming culture but also accepts the idea and the benefits of the organic consumption. This resembles a co-optation of the dominant culture (Thompson and Coskuner-Balli, 2007b; Exhibit 3c).

Marginals: Anthropocentric Sceptics

A final group of Turkish consumers seem to reject both the traditional rural culture as well as the imposed Westernised organic culture. They adhere to consumption as usual and reject both marketing efforts and focus on other priorities; such as price, convenience, quality, or value for money. As ethical and organic products have price premiums (Gifford and Nilsson, 2014; Davies and Guts-

che, 2016) they do not find their place in the marginals’ shopping basket. In-between the imposed Westernised organic consumption culture and traditional/rural culture, these consumers have moved away from both. Within the marginals there is a group of sceptical consumers who believe certified organic consumption is another marketing whim.

F5P3: “People object to nuclear stations’ being built but they don’t mind buying a giant LED TV for their own pleasure. They are “protecting” the nature, but they don’t mind turning the air conditioner on.”

(Male, 29, white-collared worker, no links with rural regions)

Noted is a group of consumers who hold anthropocentric views (Thompson and Barton, 1994; González et al, 2015); believing this is the way the earth is evolving, and human kind can adapt to this. This is akin to the developmental realist justification (Devinney et al, 2010); and act of neutralising the inaction to buy socially responsible products by supporting with the argument that “this is the way we evolve”, and is usually seen in emerging markets (Devinney et al, 2010).

F6P3: “If this is the natural way we are evolving, how natural can ‘organic’ products be? Technological advancement does bring the demands of the modern life with it, along with the convenience.”

(Male, 59, retired, links with rural regions)

CONCLUSION

This study aims to contribute to the ethical consumption literature by offering a novel lens to understand the impact of imposed ethical consumption practices over existing consumption patterns. Accepting ethical consumerism as a product of the Western culture, we use acculturation framework to explore consumers’ response in a non-Western emerging market: Turkey. Consumption is a vehicle to communicate identities but more importantly it provides a more fluid context in which consumers can more easily switch codes as and when required (Oswald, 1999), which makes consumption a necessary competence to cohabit in a global culture. The contemporary urban culture in Turkey further necessitates this culture swapping to be a competence of consumers (Sandikci and Ger, 2001). As Sandikci et al (2006) outline in Turkey there is no one immigrant culture and no one fixed host culture to adapt.

Our findings show that through the lens of acculturation, Turkish consumers’ responses towards Westernised ethical consumerism can be captured via Berry’s (1980) framework: Turkish consumers get assimilated, reject or integrate the ethical consumption culture, or they marginalise. We identify an extant organic consumption culture which resembles that of rural consumer culture, and an imposed dominant organic culture which is more institutionalised and being surged by the policy makers. These two cultures coincide in the urban cities. Both cultures are represented via different marketing structures and assume different legitimacy frames.

Findings suggest acculturation is a promising concept to further shed light on consumers’ acceptance of outsider products and consumption styles, particularly for the case of emerging and non-Western cultural contexts given the dominance of the Western consumption style in general. Although promising, our study takes place in the context of Turkey, which bears its own complexities, especially for products that are potentially used as part of status induced consumption practices and signal consumers’ social identities (Ustuner and

Table 1: Summary of results

Imposed Dominant Organic Consumption Culture: Certificate Legitimacy				
	Assimilation (Y/N)	Exemplary Quotes	Rejection (N/Y)	Exemplary Quotes
	Extant Organic Consumption Culture: Rural/traditional legitimacy	Consumers accept imposed culture of organic product consumption. Certified organic products have legitimacy. Traditional cues do not possess legitimacy. Examples of consumption practices include buying packaged certified organic products from mainstream supermarkets and websites (ekoorganik.com)	F2P6: <i>Certificates are the only way to know what you pay for is organic. Some think they can grow organic vegetables at home! That is just ridiculous, you have to make sure the air is not polluted, the soil is not polluted...how can you make sure? Certifying bodies account for all these...</i> F5P7: <i>"If I may say so...I believe that I am part of the more educated consumers, I search for known brands and certificates when buying organic products. The demand must have increased in my neighbourhood [as] my local supermarket expanded their section..."</i>	Consumer reject imposed culture. Retain traditional consumption patterns. Rural or traditional products have legitimacy and destination of origin have legitimacy. Certificates have no legitimacy. Examples of consumption practices include shopping form bazaars for authentic rural products, or shopping online from farms (memlekettengelsin, koydenyayladan, kars bali).	F7P5: "My friend brought some [organic] tomatoes for me from Canakkale" F7P3: "I know organic means chemical-free, but no one I know is actually uses the term for that, everyone thinks organic equals natural". F7P7: "We do not trust the ones that are sold in the supermarkets, but we have agreements with some farms out of Istanbul, we phone them and they send us via post"
Integration (Y/Y)		Exemplary Quotes	Marginalisation (N/N)	Exemplary Quotes
	Consumers accept partially the imposed culture practices while retaining the rural, traditional patterns. Both certificates and rural/traditional cues have legitimacy. Examples of consumption practices include buying certified organic products from bazaars (shopping from bazaars retains the rural/traditional consumption practice), or shopping from markets for rural products branded as "extra traditional". Consumers also co-opt organic consumption by growing at home themselves (pink tomatoes network)	F6P2: <i>"If I will shop for organic, I shop from [these] bazaars. I want to touch and smell [laughs] what I am buying...I enjoy the ambiance and the banter of the sellers! Thanks to those bazaars I learnt how a strawberry should taste like!"</i> F6P4: <i>"When I was a child, we used to grow fruits and vegetables in our farm. I can never forget the taste of those...and this is the closest I get to it. Yes, it is a little bit more expensive, but it is worth it"</i>	Consumers reject imposed culture practices as well as rural/traditional patterns. Neither certificates nor rural/traditional cues have legitimacy. Skeptics and Consumers as Usual Examples of consumption practices can be defined as "consumption as usual". Other priorities (bargains, taste, convenience, accessibility) take precedence. Consumers are skeptics and do not "buy-into" organic produce or rural/traditional cues (ie extra traditional" products).	F5P3: <i>"People object to nuclear stations' being built but they don't mind buying a giant LED TV for their own pleasure. They are "protecting" the nature, but they don't mind turning the air conditioner on."</i> F6P3: <i>"If this is the natural way we are evolving, how natural can 'organic' products be? Technological advancement does bring the demands of the modern life with it, along with the convenience."</i>

Holt, 2010). Thus our results are not generalisable. Further studies should look into cross-cultural comparisons for more generalisable results or investigate the role of these products on social identity construction processes.

REFERENCES

- Akgüngör, S., Miran, B., and Abay, C. (2010), "Consumer willingness to pay for organic food in urban Turkey," *Journal of International Food and Agribusiness Marketing*, 22(3-4), 299-313.
- Askegaard, S., Arnould, E. J., and Kjeldgaard, D. (2005), "Postassimilationist ethnic consumer research: Qualifications and extensions," *Journal of consumer research*, 32(1), 160-170.
- Auerbach, C., and Silverstein, L. B. (2003), *Qualitative data: An introduction to coding and analysis*, NYU press.
- Auger, P., and Devinney, T. M. (2007), "Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions," *Journal of Business Ethics*, 76(4), 361-383.







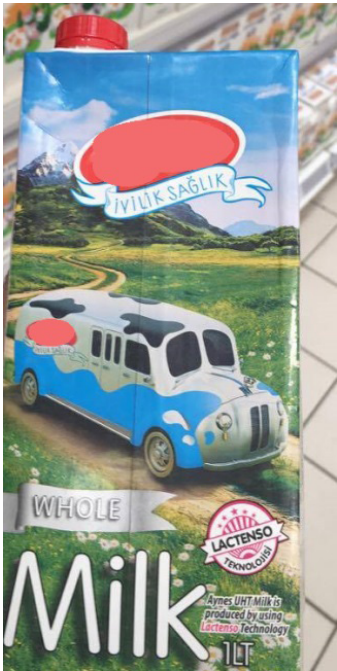

Assimilation exhibits:		Rejection exhibits:	
1a) Packaged certified branded organic sold in supermarkets		2a) Rural produce sold in bazaars	
			
1b) Websites selling certified organic products		2b) Websites selling rural produce	
			
Integration exhibits:		Marginals/ Skeptics and consumers as usual exhibits:	
3a) Shopping for certified organic from bazaars”	3b) Packaged rural produce sold in supermarkets: “extra traditional”	4a) Bargain brands/products	
			
3c) Co-optation: Growing organic traditionally at home			
			

Figure 1: Acculturation Exhibits

- Aygen, Z., and Yagci, E. (2013), "All Shades of Green: The Case of Bomonti in Urban Istanbul," *International Journal of Design and Nature and Ecodynamics*, 8(4), 336-346.
- Bardhi, F., and Eckhardt, G. (2010), "Beyond acculturation: Understanding nomadic consumption," Special Session, *European Advances in Consumer Research*, 9.
- Bardhi, F., Eckhardt, G. M., and Arnould, E. J. (2012), "Liquid relationship to possessions," *Journal of Consumer Research*, 39(3), 510-529.
- Bardhi, F., Eckhardt, G., and Arnould, E. (2011), "Understanding the Changing Role of Possessions in Global Mobility," *E-European Advances in Consumer Research Volume 9*.
- Berry, John W. (1980), "Acculturation as Varieties of Adaptation," in *Acculturation: Theory, Models and Some New Findings*, ed. Amado M. Padilla, Boulder, CO: Westview Press, Inc., 9-27.
- Carrington, M. J., Neville, B. A., and Whitwell, G. J. (2014), "Lost in translation: Exploring the ethical consumer intention-behavior gap," *Journal of Business Research*, 67(1), 2759-2767.
- Carrington, M. J., Zwick, D., and Neville, B. (2016), "The ideology of the ethical consumption gap," *Marketing Theory*, 16(1), 21-38.
- Chatzidakis, A. (2015), "Guilt and ethical choice in consumption: A psychoanalytic perspective," *Marketing Theory*, 15(1), 79-93.
- Chatzidakis, A., Hibbert, S., and Smith, A. P. (2007), "Why people don't take their concerns about fair trade to the supermarket: The role of neutralisation," *Journal of Business Ethics*, 74(1), 89-100.
- Chatzidakis, A., Maclaran, P., and Bradshaw, A. (2012), "Heterotopian space and the utopics of ethical and green consumption," *Journal of Marketing Management*, 28(3-4), 494-515.
- Chytikova, Z., and Özçaglar-Toulouse, N. (2010), "She, who has the spoon, has the power: Immigrant Women's Use of Food to Negotiate Power Relations," *Advances in Consumer Research Volume 37*.
- Cross, G. S. (2000), *An all-consuming century: Why commercialism won in modern America*. Columbia University Press.
- Davies, I. A., Davies, I. A., Gutsche, S., and Gutsche, S. (2016), "Consumer motivations for mainstream "ethical" consumption," *European Journal of Marketing*, 50(7/8), 1326-1347.
- Demiryürek, K., Stopes, C., and Güzel, A. (2008), "Organic agriculture: the case of Turkey," *Outlook on AGRICULTURE*, 37(4), 261-267.
- Devinney, T. M., Auger, P., and Eckhardt, G. M. (2010), *The myth of the ethical consumer* hardback with DVD. Cambridge University Press.
- Dombos, T. (2008), "Longing for the west": the geo-symbolics of the ethical consumption discourse in Hungary. In *Hidden Hands in the Market: Ethnographies of Fair Trade, Ethical Consumption, and Corporate Social Responsibility* (pp. 123-141), Emerald Group Publishing Limited.
- Doran, C. J. (2009), "The role of personal values in fair trade consumption," *Journal of Business Ethics*, 84(4), 549-563.
- Dowling, J., and Pfeffer, J. (1975), "Organizational legitimacy: Social values and organizational behaviour," *Pacific sociological review*, 122-136.
- Euromonitor International (2010), *Ethical Packaged Food: Does it really have a future?*
- Euromonitor International (2012), *Green Buying Behaviour: Global online survey strategic analysis*.
- Euromonitor International (2015), *Passport: Eco Worriers- Global Green Behaviour and Market Impact*.
- Euromonitor International (2016), *Passport: Organic packaged food in Turkey*.
- Ger, G. and Ostergaard, P. (1998), "Constructing immigrant identities in consumption: appearance among the Turko-Danes," *NA-Advances in Consumer Research Volume 25*.
- Gifford, R., and Nilsson, A. (2014), "Personal and social factors that influence pro-environmental concern and behaviour: A review," *International Journal of Psychology*, 49(3), 141-157.
- González, E. M., Felix, R., Carrete, L., Centeno, E., and Castaño, R. (2015), "Green shades: A segmentation approach based on ecological consumer behavior in an emerging economy," *Journal of Marketing Theory and Practice*, 23(3), 287-302.
- Grunert, K. G., and Aachmann, K. (2016), "Consumer reactions to the use of EU quality labels on food products: A review of the literature," *Food Control*, 59, 178-187.
- Hughes, M. Ü. (2010), "From Resistance to Integration: Changing Consumer Acculturation Practices of Immigrants," *NA-Advances in Consumer Research Volume 37*.
- Humphery, K. (2010), *Excess: Anti-consumerism in the West*. Polity.
- Humphreys, A. (2010), "Semiotic structure and the legitimization of consumption practices: The case of casino gambling," *Journal of Consumer Research*, 37(3), 490-510.
- International Federation of Organic Agriculture Movement (IFOAM), (2009), Turkey: Case Studies for Organic Agricultural Development. [Online] Available: http://www.ifoam.org/growing_organic/2_policy/case_studies/turkey_cases_studies.php
- Izberk-Bilgin, E. (2010), "Lifting the veil on infidel brands: Islamist discourses of anticonsumerism," *NA-Advances in Consumer Research Volume 37*.
- Izberk-Bilgin, E. (2012), "Infidel brands: unveiling alternative meanings of global brands at the nexus of globalization, consumer culture, and Islamism," *Journal of Consumer Research*, 39(4), 663-687.
- Johnson, C., Dowd, T. J., and Ridgeway, C. L. (2006), "Legitimacy as a social process," *Annual review of sociology*, 53-78.
- Johnston, J. (2008), "The citizen-consumer hybrid: ideological tensions and the case of Whole Foods Market," *Theory and Society*, 37(3), 229-270.
- Kates, S. M. (2004), "The dynamics of brand legitimacy: an interpretive study in the gay men's community," *Journal of consumer research*, 31(2), 455-464.
- Kihlberg, I., and Risvik, E. (2007), "Consumers of organic foods-value segments and liking of bread," *Food quality and preference*, 18(3), 471-481.
- Kilbourne, W., and Pickett, G. (2008), "How materialism affects environmental beliefs, concern, and environmentally responsible behaviour," *Journal of Business Research*, 61(9), 885-893.
- Ma, E. (2001), "Mapping transborder imagination", in: Joseph Chan and Bryce McIntyre (eds) *In Search of Boundaries: Communication, Nation-States, and Cultural Identities*. Stanford, Conn.: Ablex Publishing Corp.
- Maldonado, R., and Tansuhaj, P. (2002), "Segmenting a Local Latino Market Using Berry's Acculturation Taxonomy," *NA-Advances in Consumer Research Volume 29*.

- Mehta, R., and Belk, R. W. (1991), "Artifacts, identity, and transition: Favorite possessions of Indians and Indian immigrants to the United States," *Journal of consumer Research*, 17(4), 398-411.
- Morgan, D. L. (1996), "Focus groups," *Annual review of sociology*, 22(1), 129-152.
- Öncü, A., and Weyland, P. (1997), *Space, Culture and Power: new identities in globalizing cities*. Zed Books.
- Oswald, L. R. (1999), "Culture swapping: Consumption and the ethnogenesis of middle-class Haitian immigrants," *Journal of consumer research*, 25(4), 303-318.
- Özbilge, Z. (2007), "An analysis of organic agriculture in Turkey: the current situation and basic constraints," *Journal of Central European Agriculture*, 8(2), 213-222.
- Pecoraro, M. G., and Uusitalo, O. (2014), "Conflicting values of ethical consumption in diverse worlds—A cultural approach," *Journal of Consumer Culture*, 14(1), 45-65.
- Peñaloza, L. (1994), "Atravesando fronteras/border crossings: A critical ethnographic exploration of the consumer acculturation of Mexican immigrants," *Journal of Consumer Research*, 21(1), 32-54.
- Peñaloza, L. (2000), "The commodification of the American West: Marketers' production of cultural meanings at the trade show," *Journal of Marketing*, 64(4), 82-109.
- Penaloza, L. N. (1989), "Immigrant consumer acculturation," *NA-Advances in Consumer Research Volume 16*.
- Peñaloza, L., and Gilly, M. C. (1999), "Marketer acculturation: The changer and the changed," *The Journal of Marketing*, 84-104.
- Romani, S., Grappi, S., and Bagozzi, R. P. (2016), "Corporate socially responsible initiatives and their effects on consumption of green products," *Journal of Business Ethics*, 135(2), 253-264.
- Saldana, J. (2009), *An introduction to codes and coding*, The coding manual for qualitative researchers, 1-31.
- Sandikci, O., and Ger, G. (2001), "Fundamental fashions: the cultural politics of the turban and the Levi's," *NA-Advances in Consumer Research Volume 28*.
- Sandikci, O., and Ger, G. (2002), "In-between modernities and postmodernities: theorizing Turkish consumptionscape," *NA-Advances in Consumer Research Volume 29*.
- Sandikci, O., Ekici, A., and Tari, B. (2006), "Consumer acculturation as a dialogical process: case studies from rural-to-urban migrants in Turkey," *NA-Advances in Consumer Research Volume 33*.
- Shaw, D., and Clarke, I. (1999), "Belief formation in ethical consumer groups: an exploratory study," *Marketing Intelligence and Planning*, 17(2), 109-120.
- Stern, P. C. (2000), "New environmental theories: toward a coherent theory of environmentally significant behaviour," *Journal of social issues*, 56(3), 407-424.
- Suchman, M. C. (1995), "Managing legitimacy: Strategic and institutional approaches," *Academy of management review*, 20(3), 571-610.
- Tadajewski, M. (2016), "Focus groups: history, epistemology and non-individualistic consumer research," *Consumption Markets and Culture*, 19(4), 319-345.
- Thompson, C. J., and Coskuner-Balli, G. (2007a), "Enchanting ethical consumerism the case of community supported agriculture," *Journal of Consumer Culture*, 7(3), 275-303.
- Thompson, C. J., and Coskuner-Balli, G. (2007b), "Countervailing market responses to corporate co-optation and the ideological recruitment of consumption communities," *Journal of Consumer Research*, 34(2), 135-152.
- Thompson, S. C. G., and Barton, M. A. (1994), "Ecocentric and anthropocentric attitudes toward the environment," *Journal of environmental Psychology*, 14(2), 149-157.
- Üstüner, T., and Holt, D. B. (2007), "Dominated consumer acculturation: The social construction of poor migrant women's consumer identity projects in a Turkish squatter," *Journal of consumer research*, 34(1), 41-56.
- Üstüner, T., and Holt, D. B. (2010), "Toward a theory of status consumption in less industrialized countries," *Journal of consumer research*, 37(1), 37-56.
- Visser, W. (2010), "The age of responsibility: CSR 2.0 and the New DNA of business," *Journal of business systems, governance and ethics*, 5(3), 7.

Ephemeral Consumerism: Crossing Territories of the Indian Female Body

Anoop Bhogal-Nair, De Montfort University, United Kingdom

Andrew. M. Lindridge, Newcastle University, United Kingdom

INTRODUCTION

The delicate, ephemeral boundaries that permeate everyday life in complex marketplaces presents consumers with both opportunity and threat. The understanding of 'movement' in this paper is not akin to the notion of migration, but looks to understand how the body, as an active, territorial agent (Smith et al, 2016) and carrier of cultural meaning, challenges the social structures embedded in patriarchal morality. Indeed, Smith et al. (2016) view the body's mundane and extraordinary practices and experiences as simultaneously shoring up and tearing down territories and borders. However, it is important to remember social and economic histories imbued in places can be welcoming and embracing or alienating and exclusionary (Phillips and Robinson, 2015). In this vein, spaces and places serve to provide opportunity or threat – and at times, both. As the product of intersecting discourses, borders and territories serve to both limit and expand an individual's epistemological vision (Agnew, 2008).

India's relationship with women's identity, their bodies and even their ownership is a complex one, varying from religious representations and embodiment through to sexual glorification offered through Bollywood films. Such relationships exist within a society undergoing rapid modernisation producing conflicting opinions about what constitutes a woman. It is within this contrasting relationships that we explore both rural and urban Indian women's engagement with their bodies through adoption of western clothing and freedom to choose alternative forms of identity, within a wider context of a patriarchal society. Identities that may both be temporal or permanent created in one space or in multiple spaces but all within the constraints of a modernising society where patriarchal values dominate. Yet female engagement with western- or stigmatic-forms of consumption as ephemeral experiences, serve to temper bodily territoriality have been rarely discussed within the marketing literature.

CONCEPTUAL FRAMEWORK

In societies where the female body is held to be sacred (Agnew, 1997), engaging with the 'modernity project' through acts of consumption presents women with contrasting cultural values of tradition and modernity. Chatterjee (1989) argues that in societies like India, the female body is consumed through a material/spiritual dichotomy that manifests in the discourses of nationalistic modernity. Womanhood, then, is positioned through a prism of patriarchal moralities where the structures surrounding female conduct not only become embodied but also reconstituted through consumptive behaviour.

As noted by McClintock (1992) women in the social sphere are still deemed the atavistic and authentic 'body' of national traditions, simultaneously functioning as the living archive of the national archaic (Reuben, 1994). Effectively Indian women are juxtaposed between contrasting and opposing forces; revered and subjugated, worshiped and molested, free to express themselves in different domains, and yet voiceless (Olivelle, 1999, 2004). Within this ambivalence, modernity has created a sphere of empowerment through consumer culture, providing opportunities to challenge, subvert or re-negotiate societal patriarchy in a material world once reserved for men. Women become active agents and look to construct their own individual 'body projects' in light of the opportunities provided to them through the market. Within the fissure of self as individual and self as collective, women negotiate their physical and bodily territories through

a complex interplay of differing cultural contrasts between the old, traditional (rural areas) and the new, modern (urban areas).

As both a cultural and social project (Delanty, 1999), modernity is not merely bound to a departure from tradition and faith to logic and scientific fact, but one which resides in the fluid, ouroboric state of society in being able to ingest and absorb those elements which serve to temper, challenge or contradict the status quo. Consumption choices account for new sociocultural patterns that have come to dominate urban lifestyles in emerging markets, highlighting how the "epistemological styles" (Appadurai, 1990) of life have shifted to incorporate the new and alien. This phenomenon highlights one of Giddens' (1991) central critiques; societies with a social order based firmly in tradition would provide individuals with clearly defined roles, the post-traditional society requires individuals to carve out their roles and identities. In modern social life, the notion of lifestyle takes on significance and it is now tradition, identity and society that consumption becomes a tool to showcase individual's participation in the modernity project. Yet it is within these very roles that women challenge, perpetuate and reinforce on a daily basis whether it be cultural, religious or social. An enforcement that may be as voluntarily as it is involuntary.

Population movements from the rural to the urban offer many opportunities to engage with modernity, consumption symbolic of the urban modernity and adapting who we are. Within this Delanty (1999) notes the dualism of modernity as being both a cultural and social project, where the former focuses upon the autonomy of the subject (the self-assertion of the self, reflexivity), and the latter as a process of fragmentation (destruction of cultural foundations).

In sum, traditional forms supply support for, as well as against, change. It is within these forms, we argue, which prop up the properties of what is now deemed as a modernity unique and specific to those who are central to this research.

METHOD

Multi-method interpretive research data was collected over a three-month period at Bharati College, an all- female college in New Delhi, India. The college was selected due to its diverse student body (both urban and rural students) and access was negotiated through communication with the principal of the college and staff members of the English department. 23 young urban and rural women were selected, interviewed and observed. Observations facilitated the production of written ethnographic accounts and descriptions, where notes on the college site, city and the female researcher's own experiences of navigating through the city were all documented. A mixture of focus groups and one-to-one interviews formed one source of data. Each interview lasted up to ninety minutes and interviews were conducted in both Hindi and English. Transcribed interviews were analyzed using Spiggle's (1994) seven analytical stages. Reading and then re-reading the transcripts produced preliminary codes, with coded sheets annotated to identify comparisons, metaphors, and tropes (Meamber and Venkatesh, 2000). This produced several emergent themes, including 'perceived superiority', 'discrimination and ridicule' and 'liberation' and 'morality'.

Through a projection technique, participants created posters and took photographs of their consumer experiences of a 'modernising India'. Respondents were invited to talk through their photographs and posters and explain to the researcher the motivations for the im-

ages taken and the explanations and rationale for the posters that were created.

Finally, the findings were considered with the literature providing a more informed understanding, whilst subjecting the findings to further empirical scrutiny.

DISCUSSION

The findings showed how participants considered the role of the body as central to negotiating both consumption activities and notions of modernity. Conclusions were drawn about the centrality of consumption for the young women in being able to forge alternative identities which have not been socially scripted. However, the attempts made at constructing this alternative (through rebellion, seeking loopholes and testing boundaries) was constrained through forms of control and surveillance from the familial and social spheres respectively, presenting an ongoing tug-of-war between traditional, social narratives of the conduct of women, and an individually ascribed notion. Women, as noted by Liddle and Joshi (1986) have been seen to be given new sets of possibilities which enable them to survive outside of the confines of a patriarchal structure, yet considering our findings, seems much less optimistic. The college became a site for territorial interactions that brought to the fore a form of superficial emancipation. It was the complex dialogical process through which bodily territories interacted that failed to present a clear binary between self and society, but further perpetuated patriarchal moralities as ascribed by the surrounding social structures. The findings support Lury's (2001) notion that images and products follow a trajectory which encompasses the processes of undoing, destruction and construction. The opportunities and choices presented to the young women, particularly urban, of television programming, lifestyles, clothing, education and professions were ones which they were pleased to have access to, yet the adoption, appropriation and negotiation of these elements were still, to some degree, conducted within their respective territorialities mediated by the familial and social. Young urban women were relatively unperturbed by consuming elements of Western culture, yet their rural counterparts were comparatively sceptical and presented on numerous occasions a fear of loss.

The body was a site of risk and the girls were more than aware of this aspect and had tailored, where appropriate, not only their choice in clothing purchases but also their behaviour. There were numerous examples of where purchasing behaviour had come under scrutiny, however, at times much of this criticism had been self-imposed and demonstrated a deep-set understanding of territorial bargaining: Shivangini's potential purchase of shorts, Deepika's resistance to her father's rule of not wearing jeans, Anya's experience with the researcher in purchasing undergarments and jewellery, Baby's discomfort in wearing jeans and make-up in a rural setting and Swati's explanation of the rural bus journey to college and how dress deems one as 'good' or 'bad'.

Swati, a rural participant, provides an apt example both fearing rejection from her village community for transcending the norms and expectations of her village and her fear of rejection from her urban peers in her college. This example raises many deep-set concerns. The threat of 'transformation' through ephemeral movements into new territories – the city and college. It is important to note that in light of this idea, the young women constructed identities through 'structural realities' (Derné, 2005) which were specifically embedded into the social and cultural fabric of India. Additionally, what the body could potentially be exposed to through engaging in the act of consumption at various sites had prompted an increased level of surveillance and control by parents, society and rural peer groups over

the young women. This notion of the body is constructed heavily in the social realm, where the "significance of the body is determined ultimately by social structures which exist beyond the reach of individuals" (Shilling, 2006: 63), or in Goffman's (1963) words, the meanings attributed to the body are "determined by shared vocabularies of the body idiom which are not under the immediate control of individuals" (p.35). Ultimately, what the young women become are territorial agents, where the dynamic of place and space serve to temper a multi-faceted bodily territoriality that becomes negotiated through ephemeral boundary-crossing.

Despite this, it would be false to assume that resistance to these social dictates did not exist in the village setting nor amongst rural girls. There were elements of resistance where stories of rural girls changing into jeans whilst on the college campus were numerous. The college campus became a haven for consumption of the unfamiliar, immoral and Western, in addition to being a place where the body could be showcased.

Several commentators have noted that the increasing influence of consumer cultures have imposed an individualising effect on citizens-turned-consumers (Bauman, 2005; Du Gay, 1996). Binkley (2009:25) asserts that "consumer cultures impose an individualising, reflexive or narcissistic orientation on individuals who become self-enterprising, self-governing and disembedded from collective, shared contexts". What seems to be apparent from this definition of consumer culture is that it is an inherently Western notion of the term. There seems to be little acknowledgement for the term 'culture' within the assessment and it pushes to turn a complex phenomenon into a distinct binary where consumer and culture are placed at opposite ends. Although there may be some element of truth in Bauman's (2005:30) assertion that "there is no such thing as collective consumption", the findings present consumption as a social process in that it relates to a continuous expression of territories through a continuous cycle of negotiation and re-negotiation which is prompted by a collective form of moral policing.

Through the urban girls' rejection of their college and its associated 'backward' connotations, the college environment had significantly restricted their ability to fully explore their lifestyles/tastes and meant that much of their frustration fell upon the shoulders of the majority, rural student body. This group was subsequently sidelined and at times mocked by the urban crowd for their 'backward' dress, lack of fluency in English, body language, lack of exposure to the 'foreign' and overall lack of drive and professional ambition. In other words, the girls were seen to lack in all attributes associated with a modern, cosmopolitan notion of an Indian woman, as defined by the young women themselves.

The 'self' emerged as an ontological dilemma where the preoccupation with the 'self' was looked down upon by rural respondents who felt that the loss of collectivity would result in a loss of tradition. The self in terms of grooming and maintaining trends was a project of necessity for the urban respondents; the rural girls on the other hand critiqued this expression of self-indulgence as unnecessary, especially before marriage. Control and surveillance were of particular importance as they operated as mechanisms to curb and control not only women as their physical selves, but formed to protect the 'morality' of the nation. Ultimately, as material and discursive sites where tradition is performed (Oza, 2001), the body posed many complex and often contradictory negotiations for the young women in light of their constructions of identity.

CONCLUSION

Our paper explored the often conflict issues surrounding territorial bodies and how they are constructed, presented, and displayed

within an all-female territory. Somers (1994) explanation of stories and narrative as an 'ontological condition' provides an apt conclusion here. Somers places authority back into the hands of the respondents; being able to develop an intricate understanding of the ways in which this group of consumers are able to construct a multiplicity of identities, through skilful cultural navigation, was at the heart of this study. The process of 'making sense' and the ways in which the young women were guided through 'social, public and cultural narratives' whilst negotiating their own sense of selves are of central importance in developing a rich understanding of consumption behaviour amongst this group of respondents. Above all, this paper, simply put, is about experiences and not solutions; it is about presenting to the reader the sorts of questions that force a renegotiation of Western theoretical perspectives and where some theoretical assumptions could not lie further from the realities of lived consumer experiences in the East.

REFERENCES

- Agnew, Vijay (1997), "The West in Indian Feminist Discourse and Practice" *Women's Studies International Forum*, vol. 20 (1): 3-19.
- Agnew, Vijay (2008), "Borders on the Mind: Re-framing Border Thinking", *Ethics & Global Politics*, vol.1: 175-91.
- Appadurai, Arjun (1990), Topographies of the Self: Praise and Emotion in Hindu India, *Language and the Politics of Emotion*, ed. Lutz, C.A and Abu-Laghod, L., Cambridge: Cambridge University Press.
- Bauman, Zygmunt (2005), *Work, Consumerism and the New Poor*, Buckingham: Open University Press.
- Binkley, Sam (2009), "The Civilizing Brand: Shifting Shame Thresholds and the Dissemination of Consumer Lifestyles", *European Journal of Cultural Studies*, vol. 12(1): 21-39.
- Chatterjee, Partha (1989), "Colonialism, Nationalism, and Colonialized Women: The Contest in India" *American Ethnologist*, vol.16: 622-33.
- Delanty, Gerard (1999), *Social Theory in a Changing World*, London: Polity Press.
- Derne, Steve (2005), "The (Limited) Effect of Cultural Globalisation in India: Implications of Culture Theory", *Poetics*, vol. 33(1): 33-47.
- Du Gay, Paul (1996), *Consumption and Identity at Work*, London: Sage.
- Giddens, Anthony (1991), *Modernity and Self-Identity: Self and Society in the Late Modern Age*, Cambridge, MA: Polity Press.
- Goffman, Erving (1963), *Behaviour in Public Places: Notes on Social Organisation of Gatherings*, New York: The Free Press.
- Liddle, Joanna and Joshi, Rama (1986), *Daughters of Independence: Gender, Caste and Class in India*, London: Zed Books.
- Lury, Celia (2001), *Consumer Culture*, Cambridge: Polity Press.
- McClintock, Anne (1992), "The Angel of Progress: Pitfalls of the Term 'Post-Colonialism.'" *Social Text*, vol. 10: 84-98.
- Meamber, Laurie and Venkatesh, Alladi (2000), "Ethnoconsumerist Methodology for Cultural and Cross-Cultural Consumer Research," in S. Beckman and R.H.Elliott (eds), *Interpretive Consumer Research*, Copenhagen University Press, 87-108.
- Mukherjee, Prabhati (1983), "The Image of Women in Hinduism", *Women's Studies International Forum*, vol. 6 (4): 375-81.
- Olivelle, Patrick (1999), *Dharmasūtras: the Law Codes of Āpastamba, Gautama, Baudhāyana, and Vasistha*, Oxford: Oxford University Press.
- Olivelle, Patrick (2004), *The Law Code of Manu*, New York: Oxford University Press.
- Oza, Rupal (2001), "Showcasing India: Gender, Geography and Globalisation", *South Asian Research Journal*, Vol. 7: 1-36.
- Phillips, Deborah and Robinson, David (2015), "Reflections on Migration, Community, and Place", *Population, Space and Place*, vol.21: 409-420.
- Reuben, Bunny (1994), *Mehboob: India's DeMille*, New Delhi: Harper Colins.
- Shilling, Chris (2006), *The Body and Social Theory*, London: Sage.
- Smith, Sara (et al) (2016), "Territory, Bodies and Borders", *Area*, vol.48 (3): 258-261.
- Somers, Margaret (1994), "The Narrative Constitution of Identity: A Relational and Network Approach", *Theory and Society*, vol. 23(5): 605-649.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research", *Journal of Consumer Research*, vol. 21(3): 491-503.

Is Sweaty Betty a Hollister Follower? Parsing the Poetics of Branding

Stephen Brown, Ulster University, Northern Ireland

Pauline Maclaran, University of London, UK

Sharon Ponsonby-McCabe, Ulster University, Northern Ireland

Lorna Stevens, University of Westminster, UK

Roel Wijland, Otago University, New Zealand

INTRODUCTION

According to Alain Badiou (2014), a fashionable French philosopher, the “age of the poets” is over. For the best part of one hundred years high modernist poetry was the touchstone of western thought. But those days are gone, he says, never to return. *The Washington Post* agrees. Despite valiant efforts to revive the art form, such as National Poetry Month, the patient is either dead (Zomparelli 2010) or terminally ill (Petri 2013), depending on who’s asking.

The business community begs to differ, however. Numerous corporations, Meredith (2000) reports, refuse to let poetry go gently into that good night. American Airlines hands out complimentary anthologies, as do Amtrak, Safeway and Lancôme. DaimlerChrysler and Bertelsmann sponsor poetry performances, readings, slams, and recitation contests like Poetry Out Loud (*Economist* 2014). Blue-chip consultancies invite esteemed poets to mentor top management teams (Morgan, Lange, and Buswick 2010). The BBC, British Airlines, Marks & Spencer and other elite Anglophone organizations routinely appoint poets-in-residence (Walton 2014). Business schools, too, are coming to terms with the poetic imperative (Coleman 2012); ditto individual academic disciplines (Ramsey 2006), marketing and consumer research among them (Belk, Fischer, and Kozinets 2013).

Impressive as these developments are, more needs to be done if poetry is to fulfil its full potential (Downey 2016). This paper, therefore, contends that poetry is an apt metaphor for branding in our increasingly abbreviated age. We begin with a brief review of poetry’s place in the consumer research firmament. This is followed by a potted history of branding and its poetic components. Our brands-are-poems metaphor is outlined thereafter and demonstrated with an empirical study of Hollister Inc, an iconic American brand. A brand of trope and poetry...

PUTTING POETRY IN ITS PLACE

A decade or so ago, poetry was described as a looming presence over our discipline (Arnould and Thompson 2005). Twelve years on, it’s no longer looming but loitering with intent. Annual anthologies are being published; special sessions at conferences are commonplace; freestanding poems are appearing in prominent journals and edited volumes alike (e.g. Dholakia 2005; Kozinets 2002; Schouten 2009; Sherry 2008). These works, what is more, come in a wide range of forms, from haiku, sonnets and elegies to light verse, free verse and, as often as not, “concrete” or “pattern” poetry, where the words are set out in striking geometrical arrangements (Fry 2005). Prose poems, such as Holbrook’s (1994) lyrical paean to New York City, also form part of marketing’s literary tradition, alongside short stories, screenplays, novels, and dramatizations of diverse stripe (Schroeder 2014).

In addition to individual artworks, a light sprinkling of learned articles about poetry is evident. Some seek to make the case for the art form, arguing that it is well established in other academic disciplines, the hard and life sciences among them (Sherry and Schouten 2002). Others point to the palliative benefits poetry bestows on its readers and writers, not least solace to scholars in their demanding day jobs (Downey 2016). Yet others contend that verse is more than

an important source of empirical inspiration (Belk 1986) but a valuable means of conveying information in a cogent, compact, compelling manner (Canniford 2012). It is a condensed mode of communication that is becoming ever more appropriate in an aphoristic world of short-form social media messages like likes, tweets, tags and texts (Johnson 2011).

Another important element in marketing’s poetic ecosystem is literary criticism. Thanks, more than anyone else, to the endeavors of Barbara B. Stern (1989), a diverse array of literary theories has been brought to bear on marketing matters. Alongside Scott (1994), Hirschman (1989), McQuarrie and Mick (1996), Stern showed that poetics – the formal study of poetry – deserves a place in marketing’s methodological and theoretical pantheon. Indeed she even performed, in accordance with best critical practice, a cogent close reading of several lengthy poems by leading consumer researchers (Stern 1998), concluding that poetry is a superior way of representing truth than the standard academic article. It is a way, we believe, that can be adapted to the study of branding.

THE HISTORY AND POETICS OF BRANDING

Brands, Moore and Reid (2008) remind us, have been around for thousands of years, ever since makers’ marks made an appearance on ancient Roman pottery. However, as Blackett (1998) makes clear, there is an important qualitative difference between trade-related marks and 21st century brands. The former are part of a corporation’s intellectual property, valuable assets that demand constant vigilance. The latter include intangible attributes, such as personality and identity, which are predicated on uncontrollable consumer perceptions.

Although the history of branding, Blackett (1998) contends, is less venerable than many imagine, it has made up in alacrity what it lacks in antiquity. From a standing start in fast-moving consumer goods, when mass production, mass consumption, mass marketing and distribution emerged in the administrative and industrialized centers of the western world (Bastos and Levy 2012), branding’s imperium has spread to every conceivable product and service category, from cities and celebrities to charitable organizations and university colleges (Bengtsson and Ostberg 2006; Muñiz and Schau 2005). Even the once unassailable fine arts are falling under branding’s dominion. In a domain where a “shift from art to marketing” is discernible (Alvarez 2006, p. 107), “each artist, regardless of temperament, must become his or her own producer, promoter and publicist” (Timberg 2015, p. 7). And brand for that matter. If branding is about being different, attracting attention and standing out from the crowd, then it’s as important as artistry itself when building a career in the brutally competitive cultural industries.

The arts, to be sure, have not been immune to branding’s blandishments. When Stern (1998) waxed lyrical about the poetics of commerce, for example, she was reiterating H.G. Wells who wrote about the poetry of patent medicine promotions in 1909; she was seconding William Stead’s (1899, p. 62) announcement that “ordinary persons cannot write advertising any more than they can write poetry;” she was echoing T.S. Eliot, who inserted brand names into his earliest experiments in verse and named his breakthrough poem after a brand (Crawford 2015); she was on a direct line of descent

from the peerless Claude Hopkins, the doyen of scientific marketing, who made his name with a rhyming slogan for Schlitz (Poor Beer vs. Pure Beer) and later articulated his credo for advertising copy in the imperishable iambic tetrameter *The More You Yell, The More You Sell* (Feldwick 2015).

Poetry, in point of fact, has been part and parcel of commerce since the birth of the brand. Mellifluous brand names like Hubba Bubba, Sweaty Betty, Coca-Cola and “Zanozan” are more impactful than less euphonious alternatives (Argo, Popa, and Smith 2010). Rhyming tag lines, such as *A Mars a Day/Helps You Work Rest and Play*, rarely fail to resonate with consumers (Sedivy and Carlson 2011; Schouten 1998). Jingles similar to “Pepsi Cola Hits the Spot,” rank among the most insidious earworms imaginable, thanks to their often unforgettable combination of rhyme, rhythm, refrain (Cone 2008). Alliteration, assonance, onomatopoeia, and every other trick in the poetaster’s book have been pressed into marketing service, not least among academicians, whose introductory textbooks are interspersed with acronyms, mnemonics, and wordplay (Brown 2002). Social media are equally partial to rhythmic tweets, rhyming texts, honeyed hashtags and dulcet postings (Johnson 2011). Oreo’s much-admired instant response to the power outage during Superbowl XLVII – “you can still dunk when it’s dark” – is retweet testament to poetry’s profile-raising prowess.

From a scholarly perspective, nevertheless, perhaps the most important connection between poetry and branding is metaphor. The very word is a figure of speech (Twitchell 2003) and those who have sought to formally define, or encapsulate, the concept unfailingly resort to figurative language (Brown 2016). A brand, we are reliably informed, is a relationship, a rainbow, a prism, a pyramid, an umbrella, an onion, an amoeba, an iceberg, a doppelgänger, a gestalt, a promise, a conversation, an idea to live by (see de Chernatony 2009; Jakob 2015). A brand, others sagaciously observe, is nothing less than “an opus, a complex design, a mosaic, a symphony, an evolving cultural construct” (Bastos and Levy 2012, p. 360). We likewise talk about brand image, identity, personality, aura, essence, love and lifecycles, metaphors one and all (Kitchen 2008). Perhaps the only thing that brands haven’t been likened to, oddly enough, is poetry...

REASONS WHY

Yet strange as the comparison initially appears, a moment’s reflection reveals at least eight pertinent parallels between poems and brands. First and foremost, poems are very distinctive. They stand out on the page like tropical islands in a wide blue ocean of prose (Baker 2009). If being different is one of the routes to branding success, poetry is a toll-free turnpike. Poems, secondly, are more than mere “verbal icons” (Wimsatt 1954). Like brands, they are profoundly visual thanks to their striking imagery, which captures and commandeers the mind’s eye (Sutherland 2010). The most powerful poems induce synesthesia (Richards 1924), activating many senses simultaneously, much like iconic experiential brands (Thompson, Rindfleisch, and Arsel 2006). Dynamism, thirdly, is a trait many poems possess. Powered by driving rhythms and chiming rhyme schemes (“Rhymes the rudders are of verses/By which, like ships, they steer their courses”), poetry parallels the zest, pizzazz, and irrepressible energy that the best brands are blessed with (Kotler 2003). Voice or tone, fourthly, refers to the uniqueness, the singularity, the inimitable stylistic flourishes that make outstanding poets stand out (Alvarez 2006). Uniqueness, likewise, is something that charismatic brands enjoy (Apple, Nike, IKEA, for example), and copycats strive to emulate. They are endowed with an unmistakable tone of voice which speaks volumes even when whispered (Wijland 2011, 2015; Wijland and Fell 2009).

The fifth parallel pertains to constraints. Poems in traditional meters – unfree verse, as it were – are constrained by the requirements of the form, be it seventeen-syllable haiku, fourteen-line sonnets or the rigid rules of the villanelle (Morner and Rausch 1995). Brands too are unfree for the most part. They face all sorts of restrictions: Resource shortages, financial controls, competitive pressures, historical baggage, which can in fact be beneficial, because branding breakthroughs often involve “beautiful constraints” (Morgan and Barden 2015). More beautiful still – and the sixth salient feature – is the simple fact that poetry is comparatively compact. Poems typically pack a lot into a little (Eagleton 2007). Their power is predicated on compression. They are thus well suited to today’s ferociously frugal, do-more-with-less forms of marketing communication (Polman 2015).

Legal aspects comprise the seventh concordance. Both poems and brands are legally protected – the former through copyright, the latter via trademarks – and as anyone who has ever sought permission to reproduce a line or two of poetry is well aware, versifiers are just as protective of their intellectual property as brand owners (Davis 2008). The eighth obvious similarity is that brands-are-poems complements prior tropes, particularly the increasingly popular proposition that brands are narratives, stories and, not least, myths (Cayla and Arnould 2013). Many of the latter, remember, began life in poetic form when they were passed down orally by the lyricists of pre-literate societies (Fenton 2003). Poetry, in sum, is a pocket-sized mode of storytelling, something that can be artfully employed by culturally inclined consumer researchers. It provides a compact method of presenting findings in today’s short-form-favoring world of texts-tags-tweets.

CONSIDER HOLLISTER

According to its official brand biography, the Hollister Company (HCo) is the retail store scion of an inveterate adventurer, John Hollister, Jr., who travelled far and wide throughout the Dutch East Indies during the early days of the 20th century. On his return to the United States, Hollister settled in California where, in the year of our Lord 1922, he established the emporium that not only bears his name but commemorates the great man’s far eastern adventures in aspects of its in-store décor.

Not a word of this pre-post-colonial farrago is true, however, not even remotely. Hollister’s back-story is cut from the whole cloth. It’s as fabulously fantastic as several other literary masterpieces from 1922, including Joyce’s *Ulysses*, Wittgenstein’s *Tractatus*, Eliot’s *Waste Land* and Malinowski’s *Argonauts of the Western Pacific* (Jackson 2013). If Nobel Prizes were awarded for the noble art of brand narrative, Hollister’s shaggy dog story would surely be in with a shout. Or on the shortlist at least.

The reality is rather more mundane. Hollister is a subsidiary of Abercrombie & Fitch, the upscale fashion brand. Headquartered in Columbus, Ohio, its first retail outlet opened in July 2000 – to popular acclaim – and a program of national and international expansion soon transpired (Foster and McClelland 2015). As of 2016, HCo comprises some 600 stores in nineteen different countries, from Germany (19 stores) via Canada (12 stores) to Japan (4 stores) and the UAE (3 stores). More competitively priced and targeted at a slightly younger market segment than A&F, Hollister sells an idealized version of the Southern California lifestyle (surf, sand, sunshine, seductive sexuality) to would-be way-cool high school students. With its striking beach-hut exterior, disorientating dimly-lit interior, pounding indie soundtrack, buff ‘n’ beautiful sales associates, vast video screens featuring live feeds from the Pier at Huntington Beach, CA, and a select range of fashionable casualwear, with seagull logo much

to the fore, Hollister exudes a synthetic So-Cal surf shop vibe for *Baywatch* wannabes worldwide. When it comes to theming and retail theater (Kozinets, et al 2002), HCo is the acme of atmospheric.

Our Hollister dataset consists of 105 autobiographical accounts by consumers in the brand's youthful target market. Their introspective essays averaged 2,000 words, supplemented with photographs, videos, clipart and, in one case, a flashlight (to symbolize the store's Stygian interior). When analyzed in accordance with the precepts of Consumer Culture Theory (Arnould and Thompson 2005), the reflections reveal a multiplicity of conflicting feelings about the brand: love/hate, disgust/delight, disdain/desire and, more often than not, delirious discombobulation. But from a poetic perspective, the experiential accounts are especially intriguing because the majority of essayists intuitively employ an archetypal narrative structure. Namely, that of the classical quest, the epic journey, the thrills and spills-filled adventure, where trials and tribulations are overcome and the author-hero ultimately triumphs (Hirschman 2000).

Although manifold forms of poetry are associated with questing – the Homeric epic in dactylic hexameter, Dante's *Divine Comedy* in terza rima, Milton's *Paradise Lost* in blank verse – one of the most common is the ballad, both in its demotic (folk ballad) and artistic (literary ballad) variants. Often quite lengthy and characterized by a rollicking rhythm of alternate four- and three-beat lines (usually in quatrains, rhyming abcb), ballads rank among the foremost learn-by-heart literary works in the western tradition (Fry 2005). Seminal examples include Coleridge's *Ancient Mariner*, Longfellow's *Evangeline*, Yeats' *Fiddler of Dooney*, Kipling's *Barrack Room Ballads*, Moore's *Night Before Christmas*, and Thayer's much-loved *Casey at the Bat*. *Rime of the Hollister Follower* accords with that tradition (Figure 1). Sweaty Beatty swears by it:

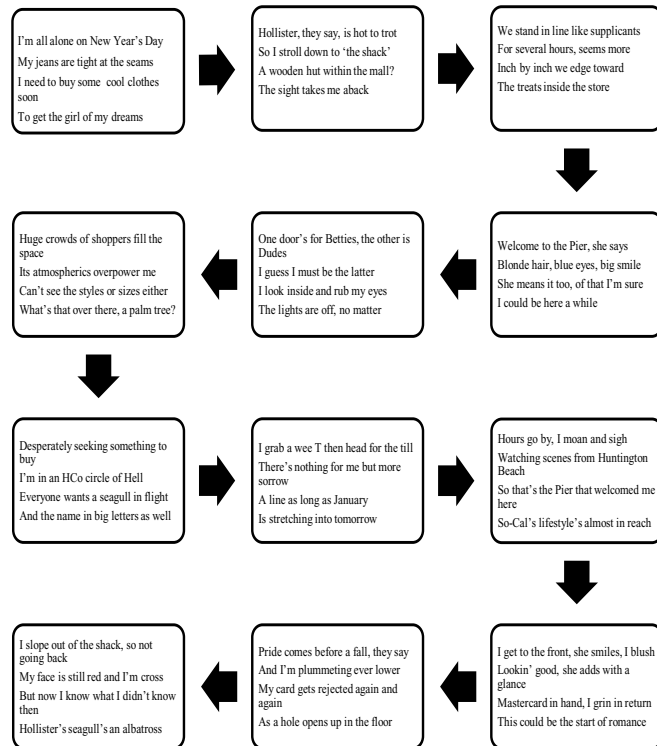


Figure 1: The Rime of the Hollister Follower

REFERENCES

Argo, Jennifer J., Monica Popa and Malcolm C. Smith (2010), "The Sound of Brands," *Journal of Marketing*, 74 (4), 97-109.

Arnould, Eric J. and Craig J. Thompson (2005), "Consumer Culture Theory (CCT): Twenty Years of Research," *Journal of Consumer Research*, 31 (March), 868-82.

Alvarez, Al. (2006), *The Writer's Voice*. London: Bloomsbury.

Badiou, Alain (2014), *The Age of the Poets*, trans. Bruno Bosteels. London: Verso.

Baker, Nicholson (2010), *The Anthologist*. London: Simon & Schuster.

Bastos, Wilson and Sidney J. Levy (2012), "A History of the Concept of Branding: Practice and Theory," *Journal of Historical Research in Marketing*, 4 (3), 347-68.

Belk, Russell W. (1986), "Art Versus Science as Ways of Generating Knowledge About Materialism," in *Perspectives on Methodology in Consumer Research*, David Brinberg and Richard J. Lutz, eds. New York: Springer, 3-36.

Belk, Russell W., Eileen Fischer, and Robert V. Kozinets (2013), *Qualitative Consumer & Marketing Research*. London: Sage.

Bengtsson, Anders and Jacob Ostberg (2006), "Researching the Cultures of Brands," in *Handbook of Qualitative Research Methods in Marketing*, Russell W. Belk, ed. Cheltenham: Edward Elgar, 83-93.

Blackett, Tom (1998), *Trademarks*. Basingstoke: Macmillan.

Brown, Stephen (2002), "The Specter of Kotlerism: A Literary Appreciation," *European Journal of Management*, 20 (2), 129-46.

Brown, Stephen (2016), *Brands and Branding*. London: Sage.

Canniford, Robin (2012), "Poetic Witness: Marketplace Research Through Poetic Transcription and Poetic Translation," *Marketing Theory*, 12 (4), 391-409.

Cayla, Julien and Eric J. Arnould (2013), "Ethnographic Stories for Market Learning," *Journal of Marketing*, 77 (July), 1-16.

Coleman, John (2012), "The Benefits of Poetry for Professionals," *Harvard Business Review*, November 27, (accessed May 16, 2014), [available at www.blogs.hbr.org].

Cone, Steve (2008), *Powerlines: Words that Sell Brands, Grip Fans, and Sometimes Change History*. New York: Bloomberg.

Crawford, Robert (2015), *Young Eliot: From St Louis to The Waste Land*. London: Jonathan Cape.

Davis, Jennifer (2008), "Between a Sign and a Brand: Mapping the Boundaries of a Registered Trade Mark in European Union Trade Mark Law," in *Trade Marks and Brands: An Interdisciplinary Critique*, Lionel Bently, Jennifer Davis and Jane C. Ginsburg, eds. Cambridge: Cambridge University Press, 65-91.

de Chernatony, Leslie (2009), "Towards the Holy Grail of Defining 'Brand'," *Marketing Theory*, 9 (1), 101-5.

Dholakia, Nikhilesh (2005), "Poetry," *Consumption, Markets & Culture*, 8 (2), 183-9.

Downey, Hilary (2016), "Poetic Inquiry, Consumer Vulnerability: Realities of Quadriplegia," *Journal of Marketing Management*, 32 (3-4), 357-364.

Eagleton, Terry (2007), *How to Read a Poem*, Oxford: Blackwell.

Economist (2014), "Philosopher Kings: Business Leaders Would Benefit From Studying Great Writers," *The Economist*, October 4, 80.

Feldwick, Paul (2015), *The Anatomy of Humbug*. Beauchamp: Matador.

Fenton, James (2003), *An Introduction to English Poetry*. London: Penguin.

- Foster, Jamye and Melina A. McLelland (2015), "Retail Atmospherics: The Impact of a Brand Related Theme," *Journal of Retailing and Consumer Services*, 22 (January), 195-205.
- Fry, Stephen (2005), *The Ode Less Travelled: Unlocking the Poet Within*. London: Hutchinson.
- Hirschman, Elizabeth C. (1989), *Interpretive Consumer Research*. Provo: Association for Consumer Research.
- Hirschman, Elizabeth C. (2000), *Heroes, Monsters & Messiahs: Movies and Television Shows as the Mythology of American Culture*. Kansas City: Andrews McMeel.
- Holbrook, Morris B. (1994), "Loving and Hating New York: Some Reflections of the Big Apple," *International Journal of Research in Marketing*, 11 (September), 381-5.
- Jackson, Kevin (2013), *Constellation of Genius: 1922, Modernism and All That Jazz*. London: Windmill.
- Johnson, Christopher (2011), *Microstyle: The Art of Writing Little*. New York: Norton.
- Kitchen, Philip J. (2008), "Marketing Metaphors and Metamorphosis: An Introduction," in *Marketing Metaphors and Metamorphosis*, Philip J. Kitchen, ed. Basingstoke: Palgrave.
- Kotler, Philip (2003), *Marketing Insights from A to Z*. New York: Wiley.
- Kozinets, Robert V. (2002), "Desert Pilgrim," *Consumption, Markets & Culture*, 5 (2), 171-86.
- Kozinets, Robert V., John F. Sherry, Benet DeBerry-Spence, Adam Duhachek, Krittinee Nuttavuthisit, Diana Storm (2002), "Themed Flagship Brand Stores in the New Millennium: Theory, Practice, Prospects," *Journal of Retailing*, 78 (1), 17-29.
- Meredith, Robyn (2000), "Marketing Departments are Turning to Poets to Help Inspire their Companies' Clientele," *The New York Times*, March 21, accessed February 23, 2015 (available at www.nytimes.com).
- Moore, Karl and Susan Reid (2008), "The Birth of the Brand: 4000 Years of Branding," *Business History*, 50 (4), 419-32.
- Morgan, Adam and Mark Barden (2015), *A Beautiful Constraint: How to Transform your Limitations into Advantages*. Chichester: Wiley.
- Morgan, Clare, Kirsten Lange, and Ted Buswick (2010), *What Poetry Brings to Business*. Ann Arbor: University of Michigan Press.
- Morner, Kathleen and Ralph Rausch (1995), *NTC's Dictionary of Literary Terms*. Lincolnwood, IL: NTC Publishing Group.
- Muñiz, Albert M., Jr. and Hope Jensen Schau (2005), "Religiosity in the Abandoned Apple Newton Brand Community," *Journal of Consumer Research*, 31 (4), 737-47.
- Petri, Alexandra (2013), "Is Poetry Dead?" *The Washington Post*, January 22, (accessed June 1, 2015), [available at www.washingtonpost.com].
- Polman, Paul (2015) "Foreword," in *Frugal Innovation: How to Do More With Less*, Navi Radjou and Jaideep Prabhu. London: The Economist,, xv-xvi.
- Ramsey, Caroline (2006), "Why Do I Write About Organizations in Poetry?" in *The Social Construction of Organization*," Dian M. Hosking and Sheila McNamee, eds. Copenhagen: Copenhagen Business School Press, 13-22.
- Richards, I.A. (1924), *The Principles of Literary Criticism*. London: Routledge & Kegan Paul.
- Schouten, John (1998), "When a Rose is Eros: A Demianagramatical Study of Brand Names," *Consumption, Markets & Culture*, 2 (4), 321-45.
- Schouten, John (2009), "A Study in Loss: Six Poems," *Consumption, Markets & Culture*, 12 (4), 389-92.
- Schroeder, Jonathan E. (2014), "Editorial," *Consumption, Markets & Culture*, 17 (6), 519-21.
- Scott, Linda M. (1994), "The Bridge from Text to Mind: Adapting Reader-Response Theory to Consumer Research," 21 (December), 461-480.
- Sedivy, Julie and Greg Carlson (2011), *Sold on Language*. Chichester: Wiley.
- Sherry, John F., Jr. (2008), "Three Poems on Markets and Consumption," *Consumption, Markets & Culture*, 11 (3), 203-6.
- Sherry, John F. Jr. and John Schouten (2002), "A Role for Poetry in Consumer Research," *Journal of Consumer Research*, 29 (September), 218-34.
- Stead, William (1899), *The Art of Advertising: Its Theory and Practice Fully Described*. London: T.B. Brown.
- Stern, Barbara B. (1989), "Literary Criticism and Consumer Research: Overview and Illustrative Analysis," *Journal of Consumer Research*, 16 (December), 322-234.
- Stern Barbara, B. (1998), "Poetry and Representation in Consumer Research," in *Representing Consumers: Voices, Views and Visions*, Barbara B. Stern, ed. New York: Routledge, 290-307.
- Sunderland, John (2010), *Fifty Literature Ideas You Really Need to Know*. London: Quercus.
- Thompson, Craig J., Aric Rindfleisch, and Zeynep Arsel (2006), "Emotional Branding and the Strategic Value of the Doppelgänger Brand Image," *Journal of Marketing*, 70 (1), 50-64.
- Timberg, Scott (2015), *Culture Crash: The Killing of the Creative Class*. New Haven: Yale University Press.
- Twitshell, James B. (2004), "An English Teacher Looks at Branding," *Journal of Consumer Research*, 31 (September), 484-89.
- Walton, Paul (2014), "Ode to a Brand: Four Poems," *Business Life*, March 17, (accessed August 7, 2014), [available at www.businesslife.com].
- Wells, H.G. (1909), *Tono-Bungay*. London: Collins.
- Wijland, Roel (2011), "Anchors, Mermaids, Shower-curtain Seaweeds and Fish-shaped Fish: The Texture of Poetic Agency," *Marketing Theory*, 11 (2), 127-41.
- Wijland, Roel (2015), "Bad Blood and Tender Nomadics: The Returns of Poetic Brutality," *Advances in Consumer Research*, 43, 433-437.
- Wijland, Roel and Cliff Fell (2009), "Critical Brand Poetics: 'From The M at the End of the Earth'," *Journal of Marketing Management*, 25 (7-8), 745-761.
- Wimsatt, William K. (1954), *The Verbal Icon: Studies in the Meaning of Poetry*. Lexington: University of Kentucky Press.
- Yakob, Faris (2015), *Paid Attention: Innovative Advertising for a Digital World*. London: Kogan Page.
- Zomparelli, Daniel (2010), "Poetry is Dead: What the Hell Happened?" *Poetry is Dead*, January 18, (accessed January 1, 2015), [available at www.poetryisdead.ca]

Extensions, Intensities and the Convergent Advertisement

Hélène de Burgh-Woodman, University of Notre Dame, Australia

ABSTRACT

Convergence media disrupts how advertising is constructed, disseminated and used by consumers. This paper asks whether assemblage thinking can be mobilized to apprehend this new advertising/consumer landscape. If viewed as complex assemblages, rather than as texts or persuasive devices, a more reflexive theoretical frame for convergent advertising may evolve.

INTRODUCTION

The current era of technological innovation has enabled the development of new media forms (Jenkins 2006), new consumer identities (Shau and Gilly 2003) and access to ever-evolving visual-affective worlds. The impact on advertising has been profound, suggesting “a disappearance of the advertisement in its traditional form... and its intensification and hybridization in oblique ways and through new media” (Campbell 2013,142). In effect, this transformation from static persuasive mechanism to integrated entertainment form (Campbell 2013) fundamentally challenges how advertising is constructed, disseminated and ultimately used by consumers (de Burgh-Woodman and Payne 2013). However, as different media channels continue to shape advertising consumption, equally traditional approaches to *understanding* both the dissemination and uses of advertising content come under increasing scrutiny as their capacity to adequately interpret and capitalize upon new consumer engagements with advertising is questioned (Taylor 2006).

The essential question posed in this conceptual paper is whether assemblage thinking, as imagined by Deleuze and Guattari (1980), can be fruitfully mobilized to better apprehend this new advertising/consumer landscape? While consumer engagement with the marketplace has radically changed through the advent of digital media, the theoretical evolution to understand these changes has lagged. As researchers grapple with the reality of the digital world, they are confronted with the need for theoretical resources for interpreting this landscape. In response to repeated calls for more nuanced theoretical perspectives that can deal with a rapidly transforming media landscape (Duguet 1981; Kuntzel 1980; Schroeder 2006; Speilman 2008; Taylor 2006), the present paper aims to show how assemblage thinking (Deleuze and Guattari 1980) as perhaps distinct from assemblage theory (De Landa 2015, 2006) enables a more reflexive perspective on how both the construction, dissemination and uses of advertising can be understood. To date, assemblage thinking has been applied in various contexts such as brands (Lury 2009), consumer communities (Parmentier and Fischer 2014) and the public sphere (Campbell 2013). However, assemblage thinking has not been applied extensively to advertising. In this paper, we focus specifically on how the advertisements by noted film directors blur cinema/art/advertising lines to form multi-faceted assemblages composed of filmic, artistic and persuasive components.

CONVERGENCE AND ASSEMBLAGE

Convergence

Based on Levy (2001), the term convergence was coined by Jenkins (2006) to explain the flow of content across multiple media platforms, the cooperation between multiple media industries, the search for new structures of media financing that fall at the interstices between old and new media, and the migratory behavior of media audiences” (p.3). The emergence of convergence catalyzes the

shift from static advertising forms to the “re-appearance” (Campbell 2013) of advertising as a sophisticated entertainment form akin to a film, documentary or video game. The effect of convergence is that advertising becomes constructed for multiple media platforms, engages disparate audiences and utilizes creative modalities such as film, documentary and photographic production to generate content (Dena 2004). Convergence extends advertising aesthetics (Brown, and Patterson 2001; Joy and Sherry 2003; Schroeder 2006; Venkatesh and Meamber 2006) and provides a platform for diverse, enriched new forms of advertising production. These forms give rise to consumers engaging in ‘spreading’ (Jenkins et al. 2015) activities, whereby ads become shared cultural resources. Equally, the advent of embedded marketing “reflects the merging interests and priorities of the entertainment, communication, advertising and brand marketing industries” (Hackley 2005). This evolution has given rise to the “mini-film” (Copping 2010; Chen 2015) ad genre that consciously hybridizes advertising and traditional cinematic forms. The spreadable nature of convergence media potentially prompts the same self-extension, symbolic meaning and personal reflexivity we attribute to the object-possession (Belk 1988) transposed into a digital context (Belk 2013). It becomes important, then, to view advertising potentially as part of these kinds of culturally mediated collections.

Assemblage

Assemblage theory has attracted attention from consumer researchers seeking to understand diverse contexts such as individual consumption experiences (Canniford and Shankar 2013), consumer communities (Scaraboto and Fischer 2016; Thomas, Price, and Schau 2013) and families (Epp, Schau, and Price 2014; Epp and Velagelati 2014). As mentioned, assemblage theory has also been used to understand brands (Enwistle and Slater 2012 2013; Lury 2009). Assemblage theory allows us to excavate how ideas are composed to create new interactions between artistic, market and media platforms. Assemblage thinking was originally flagged by Deleuze and Guattari (1980) and elaborated as theory by DeLanda (2006, 2015). DeLanda describes assemblages as “agentic systems of diverse components that interact with one another in ways that can either stabilize or destabilize an assemblage’s identity” (DeLanda 2006, 12). Assemblages “draw attention to the material and expressive “capacities” of components: capacities are defined as what components have the potential to do when they interact with other entities” (Parmentier and Fischer 2015 p.1229). Material components have a function or presence, others have an expressive or symbolic function that organize the assemblage. Equally, assemblages are characterized by extensions (the evolving inclusion of new components via expansion) and intensities (the greater or lesser power of individual components within the assemblage) (DeLanda 2015). Finally, assemblages are not fixed in time or space. They are able to adapt and shift over time (DeLanda 2006). In the same way that research has suggested brands can hold together or dissipate as assemblages (Lury 2009; Parmentier and Fischer 2015), advertisements can also be regarded as assemblages in that they collate diverse components that interact to produce a tangible, stabilized (yet open to destabilization or deterritorialization) entity – the ad or campaign itself. Embedded within the ad or ads are an amalgam of components that acquire expressive capacities as they interact with other entities.

METHOD

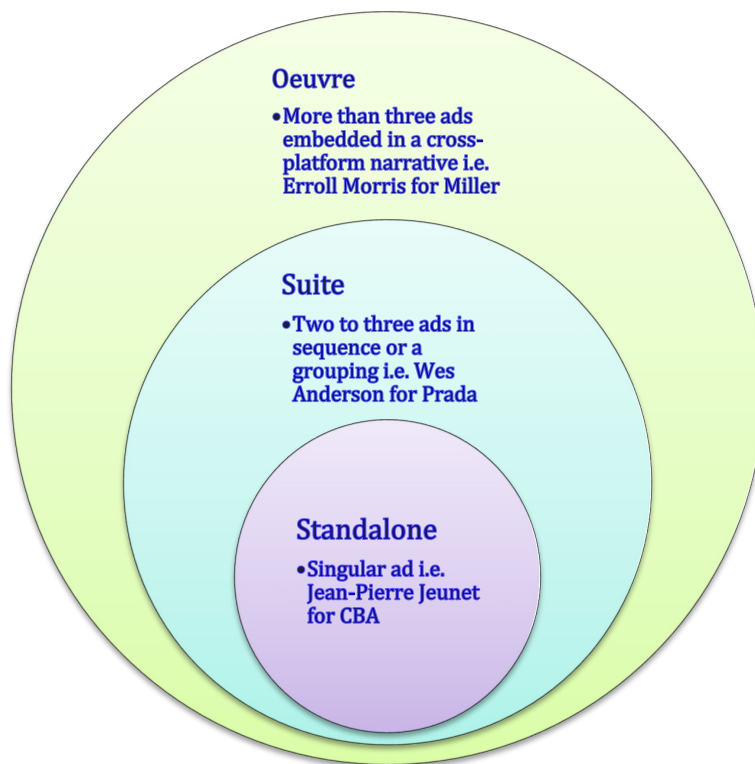
In this research, a two-step method was utilized. The first step was to undertake an analysis of the assemblage’s intensities. To achieve this, critical visual analysis (Schroeder 2002; Schroeder and Borgerson 1998) was used. Following the operations of *description*, *interpretation*, *contextualization* and finally *comparison*, Schroeder’s visual analysis method was adapted to take in diverse elements of the moving image such as its complex intertextual and technological qualities (Conomos 2007), spatio-temporal structures, perceptual and affective dimensions (Deleuze 1989) and audio-visual relationships (Chion 2009). The data used included 69 campaigns (sets of ads - some of which comprised multiple/numerous ads for the one campaign but captured here as one campaign count) directed by Wes Anderson, Darren Aronofksy, Michael Bay, Sofia Coppola, David Fincher, Jean-Pierre Jeunet, Spike Jonz, Ang Lee, Baz Luhrmann, David Lynch, Errol Morris, Martin Scorsese, Ridley Scott, and Joe Wright.

The second step was to map a classificatory typology of certain advertising forms. This classificatory typology reflects assemblage extension. Assemblages can be understood as accumulative to the extent that an assemblage can exist microcosmically (i.e. an individual ad), extend to a larger level (i.e. a suite of connected ads that

extend the same set of structures and can be read as one large assemblage) or sit within an overarching assemblage (i.e. form a component of an entire oeuvre of inter-related transmedia communications for a particular brand). Therefore, the first step involved isolating a specific data set of ads made by film directors (described below), classifying said data set into one of three types i.e. 1. *Singular* 2. *Suite* or 3. *Oeuvre*. Once the data had been organized into one of these three types, the nature of the typology was elaborated, tracing the accumulation of visual, rhetorical and symbolic force.

DISCUSSION

Deleuze and Guattari (1980) emphasize the rhizomic nature of assemblages as entities with ‘multiple roots’ that spring up across time and space. This inherent quality is reflected in convergence media itself and, by extension, convergent advertising as it moves across multiple platforms, springing ‘new roots’. Advertising created by film directors further augments this rhizomic nature as the ads can be viewed as rhizomic ‘lines of flight’ (Deleuze and Guattari 1980) connecting to greater cinematic, narrational, authorial and stylistic multiplicities that render our view of rhizomic advertising as ‘always in the middle, between things, inter-being, intermezzo...the rhizome is alliance, uniquely alliance’ (pg. 26). Viewing advertising in this



- Extension of stylistic elements
- Extension of narrative
- Extension of product based brand name
- Extension of film director brand
- Extension to other media/marketing platforms
- Extension of cultural forms/memories
- Extension of consumer spreadability

- Extension of stylistic elements
- Extension of narrative
- Reinforcement of affect
- Extension of spatio-temporal parameters
- Extension of cultural forms/references or memories
- Extension of consumer spreadability

- Advertising intent
- Narrative intent
- Stylistic intent
- Stylistic extension of cinematic content
- Extension of film director identity
- Extension of filmic references
- Representation of other cultural forms/references or memories
- Consumer spreadability

- Narrative
- Visual-narrative affect
- Stylistic audio-visual effect
- Stylistic character (often replication of film maker’s cinematic stylistics)
- Microcosmic storyworld
- Consumer transportation
- Authorial stamp
- Reflexivity
- Consumer affect and memory
- Media platform

Figure 1: Key Extensions and Intensities

way also requires us to see its extensions and intensities as perpetually engaged, shifting and changing the nature of the assemblage. The following figure (Figure 1) captures some of the dominant components at work in an advertising assemblage, thus representing the core of the typology evolved from the classification of the data along the axes of extension and intensity. The figure presented here is not exhaustive but rather designed to demonstrate some of the core relationships between components and how the nature of the assemblage either alters or preserves certain core components depending on whether it is a standalone ad, a suite or an oeuvre. The relationship between extensions and intensities is symbiotic as the affective, narrative, stylistic and referent intensities of the ad enable both de-territorialization in the form of larger, emergent assemblages and re-territorialization of key assemblage components. Like certain forms of cinema itself (Brown and Fleming, 2011), the simultaneous capacity for de-territorialization and re-territorialization through extension and intensification of affective, stylistic, narrative and referent intensities is shown to characterize the data presented here.

Intensities

DeLanda (2015) emphasizes intensities that interact within the assemblage. As the valence of different intensities morph and realign within the assemblage, so too does the assemblage itself. Thus, we should bear in mind these intensities are not static but always in an iterative dialogue of becoming with one another. In the case of convergent advertising, seemingly the most powerful intensity that affects all others within the assemblage is narrative. In its shift from persuasive spectacle to entertainment (Gurevitch 2010), convergent advertising is marked by a return to strong narratives (i.e. Lee's mini-film for BMW, Anderson's set of ads for Prada) that galvanize the other assemblage components. Chen (2015) also notes that narrative facilitates consumer transportation and fantasy processes, both of which appear as necessary intensities in the convergent assemblage as they drive consumer affect (in the Deleuzian sense) and the desire to seek extensions across platforms.

Drawing from narrative, particularly in the context of film directors who make ads, visual-narrative affect (or the synergy between the storyline, its visual realization and the emotional affect on the consumer) and the stylistic visual effects intensify the narrative through aesthetic and audio cues (Chion 2009). Linked to stylistic character, the style and effect of the ad is often a replication of the film director's cinematic signature (Wes Anderson for H&M, David Lynch for Calvin Klein), intensified by similar visual styling, use of the same cast (Lara Flynn Boyle for David Lynch's Calvin Klein Obsession, Adrien Brody as train conductor in a similar role to his Grand Budapest character for Wes Anderson for H&M, Nicole Kidman referencing her *Moulin Rouge* 'Satine' character for Baz Luhrmann for Chanel) and a replication of similar cinematic techniques and strategies to create a rich storyworld that harkens to other similarly rich storyworlds (Jean-Pierre Jeunet for Chanel referencing *Amélie*). Further intensities include the authorial presence or stamp of the director (Gerstner and Staiger 2003) whose distinctive stylistics and filmic techniques inhabit and frame the viewing experience. Finally, convergent ads embody an inherent reflexivity, moving somewhere between ad and art, low and high culture, disposable snippet and cinematic experience. These multiple intensities thus work within the ad itself but also affect consumer perception, engagement and use.

Extensions

The convergent nature of these ads, many of which are part of a set (in some cases like Errol Morris' Miller ads, the set runs to 80

ads and each extends the 'world' of the Miller Man as he moves from home, to diners, to lakes and open roads. Here one territorialized space spills into the next, i.e. de-territorializes, only to be recuperated or re-territorialized by the constant narrative thread), opens up what Deleuze and Guattari (1980) call 'lines of flight', reflecting, again, a rhizomic multiplicity that can 'turn up' at any time. Extensions in the convergent ad assemblage enable core intensities such as narrative, stylistics, spatio-temporal parameters and authorial stamp to spill over either into other ads to compose a suite i.e. a larger assemblage that at once extends and intensifies core components. David Lynch's *Calvin Klein Obsession* ads represent this suite approach where each one of the four ads draws from a great writer (D.H. Lawrence, F. Scott Fitzgerald, Ernest Hemingway, Gustave Flaubert), utilize black and white photography and evoke a similar brooding mood with tell-tale Lynchian close-ups and abstractions of bodily forms. While each ad is complete (or territorialized) in its own right, there is nonetheless a larger narrative, stylistic and interpretative becoming that spills across the four ads. Where these components are further extended into larger assemblages again, an oeuvre is composed. Unlike a suite, which essentially replicates the intensities of the singular ad across a further two or three ads, an oeuvre further intensifies its original components but embeds within a much larger brand, marketing and cultural assemblage where the original assemblage potentially faces de-territorialization as its components moves across a greater diversity of platforms, confronts additional, more complex branding/marketing/ cultural components and offers maximum opportunity for consumer spreadability – which, in turn, replicates further de-territorialization as components find new, possibility de-commodified, assemblages with which to interact. One such example of an oeuvre is David Lynch's four ads for *Georgia Coffee*. The four ads make no sense unless they are viewed in sequence. However, the entire aesthetic, narrative and symbolic composition of the ads rely on the consumer's thorough knowledge of the *Twin Peaks* series. The ads' *mise en scènes* such as the Red Room in the Black Lodge, Ghostwood Forest and the local diner harken back to the symbolic spaces of *Twin Peaks* with the return of Agent Cooper and his love of coffee introducing the customary comedic relief. More broadly, the ad provokes troubling questions in the context of oeuvre as the *Twin Peaks* season 2 cliffhanger (1990) left Agent Cooper imprisoned in the Red Room with his body/soul taken over by the omnipotent evil of "Bob". While the fate of Agent Cooper was resolved in the series 3 return (2017), these ads' airing between seasons posed questions around where and who Agent Cooper was. Was he still trapped in the Red Room with his imposter doppelgänger promoting Georgia Coffee? Read against the overwhelming cult following, the copious textual extensions (such as *Laura Palmer's Diary* and the *Guide to Twin Peaks*) and the larger cinematic opus of Lynch himself, these ads take on monumental symbolic and narrative intensity within a highly extended assemblage.

CONCLUSION

The question posed in this paper is whether assemblage thinking can be mobilized to apprehend a rapidly evolving advertising/consumer landscape. The analysis of 69 ad campaigns by noted film directors demonstrates how assemblage thinking enables us to reconceptualize convergent advertising as a rhizomic intersection of intensities (within the assemblage) and extensions that implicate diverse components from media, filmic, cultural and persuasive influences. From the consumer perspective, new terrains of engagement, sharing and spreadability (to borrow Jenkins' term) are made possible if advertising as static 'genre' is exploded, challenged by a

conceptualization of advertising as a liminal entity, working at once within and across its territories or planes.

This paper is an early step towards considering how assemblage thinking may account for the fluid nature of convergent advertising as it shifts and morphs into new forms. As such, further research is needed to see how this thinking might work as a sustainable framework. However, assemblage thinking animates the necessity to consider the intersectional, embedded nature of convergent advertisements, seeing them not as snippets of media 'content' or grabs of persuasive rhetoric but rather emergent forces, driven by the authorial, narrational, stylistic and cultural components that propel them across platforms, linking rich terrains of cultural referents, filmic influences and fantastical possibilities. At once de-territorialized so as to surge across platforms and re-territorialized back into the storyworld at the heart of the assemblage, this way of conceptualizing convergent advertising in the contemporary media environment opens up new possibilities for consumers and scholars alike.

REFERENCES

- Belk, Russell (2013), "Extended Self in a Digital World," *Journal of Consumer Research*, 40 (October), 477-500.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September), 139-68.
- Bernardo, Nuno (2011), *The Producers Guide to Transmedia: How to Develop, Fund, Produce and Distribute Compelling Stories across Multiple Platforms*, London: beActive Books.
- Brown, William and Fleming, David (2011), "Deterritorialization and Schizoanalysis in David Fincher's *Fight Club*," *Deleuze Studies*, 5 (2), 275-299.
- Brown, Stephen and Anthony Patterson (eds.) (2001), *Imagining Marketing: Art, Aesthetics and the Avant-Garde*, New York, NY: Routledge.
- Campbell, Elaine (2013), "Public Sphere as Assemblage: The Cultural Politics of Roadside Memorialization," *British Journal of Sociology*, 64 (September), 526-547.
- Campbell, Norah (2013), "The Signs and Semiotics of Advertising" in *Routledge Companion to Visual Organization*, eds. E. Bell, S. Warren and J. Schroeder, London: Routledge, 130-143.
- Canniford, Robin and Avi Shankar (2013), "Purifying Practices: How Consumers Assemble Romantic Experiences of Nature," *Journal of Consumer Research*, 39 (February), 1051-69.
- Chen, Tsai (2015), "The Persuasive Effectiveness of Mini-films: Narrative Transportation and Fantasy Proneness," *Journal of Consumer Behaviour*, 14 (January/February), 21-27.
- Chion, Michel (2009), *Film, A Sound Art*, New York, NY: Columbia University Press.
- Conomos, John (2007), *Mutant Media: Essays on Cinema, Video Art and New Media*, Sydney: Artspace/Power Publications.
- Copping, Nicola (2010), "David Lynch's New Film for Christian Dior," *Financial Times* <http://www.ft.com/intl/cms/s/2/38daed66-5ecc-11df-af86-00144feab49a.html>.
- de Burgh-Woodman, Helene and Catherine Payne (2013), "Consuming the Aesthetic of the Everyday: A Visual Analysis of Errol Morris' "High Life", *Asia Pacific Advances in Consumer Research Volume 10*, Duluth, MN: Association for Consumer Research, 51-60.
- De Landa, Manuel (2015), *Assemblage Theory*, Edinburgh: University of Edinburgh Press.
- De Landa, Manuel (2006), *A New Philosophy of Society: Assemblage theory and social complexity*, London: Bloomsbury Press.
- Deleuze, Gilles (1989), *Cinema 2: The Time Image*, Minneapolis MI: University of Minnesota Press.
- Deleuze, Gilles and Felix Guattari (1980), *Mille plateaux* Paris: Minuit.
- Dena, Christy (2004), "Current State of Cross Media Storytelling: Preliminary Observations for Future Design," *European Information Systems Technologies Event*, The Hague, Netherlands.
- Duguet, Anne-Marie (1981), *Vidéo, la mémoire au poing*, Paris: Hachette.
- Epp, Amber M., and Linda L. Price (2010), "The Storied Life of Singularized Objects: Forces of Agency and Network Transformation," *Journal of Consumer Research*, 36 (February), 820-37.
- Epp, Amber M., Hope Jensen Schau, and Linda L. Price (2014), "The Role of Brands and Mediating Technologies in Assembling Long-distance Family Practices," *Journal of Marketing*, 78 (3), 81-101.
- Epp, Amber M., and Sunaina Velagelati (2014), "Outsourcing parenthood? How Families Manage Care Assemblages using Paid Commercial Services," *Journal of Consumer Research*, 41 (December), 911-935.
- Gerstner, David and Janet Staiger (2003), *Authorship and Film*, New York, NY: Routledge.
- Gurevitch, Leon (2010), "The Cinema of Transactions: The Exchangeable Currency of the Digital Attraction," *Television and New Media*, 11(5), 367-385.
- Hackley, Christopher (2005), *Advertising and Promotion: Communicating Brands*, London and Thousand Oaks, CA: Sage.
- Jenkins, Henry (2006), *Convergence Culture: Where Old and New Media Collide*, New York, NY: New York University Press.
- Jenkins, Henry, Sam Ford and Joshua Green (2015), *Spreadable Media: Creating Value and Meaning in a Networked Culture*, New York, NY: New York University Press.
- Joy, Annamma and John F. Sherry (2003), "Speaking of Art as Embodied Imaginations: A Multisensory Approach to Understanding Aesthetic Experience," *Journal of Consumer Research*, 30 (September), 259-82.
- Kuntzel, Thierry (1980), "Video about Video," *Videoglyphes*, Paris.
- Levy, Pierre (2001), *Cyberculture*, Minneapolis, MI: University of Minnesota Press.
- Lury, Celia (2009), "Brands as Assemblage," *Journal of Cultural Economy*, 2 (1-2), 67-82.
- Meamber, Laurie and Alladi Venkatesh (1999), "The Flesh is Made Symbol: An Interpretive Account of Contemporary Bodily Performance Art," in *Advances in Consumer Research* Vol. 26, eds. E.J. Arnould and L. Scott, Provo, UT: Association for Consumer Research, 190-4.
- Scaraboto, Dianne and Eileen Fischer (2016), "Triggers, Tensions and Trajectories: Towards an Understanding of the Dynamics of Consumer Enrolment in Uneasily Intersecting Assemblages," in *Assembling Consumption: Researching Actors, Networks and Markets* eds. R. Canniford and D. Badje, London and New York, NY: Routledge.
- Schau, Hope Jensen and Mary Gilly (2003), "We are What We Post? Self-Presentation in Personal Web Space," *Journal of Consumer Research*, 30 (December), 385-404.
- Schroeder, Jonathan (2006), "Critical Visual Analysis" in *Handbook of Qualitative Research Methods in Marketing*, ed. R. Belk, Cheltenham: Edward Elgar.

Schroeder, Jonathan and Janet Borgerson (1998), "Marketing Images of Gender: A Visual Analysis," *Consumption, Markets and Culture*, 2(2), 161–201.

Speilman, Yvonne (2008), *Video. The Reflexive Medium*, Boston, MA: MIT Press.

Taylor, C. (2006), "The Future of International Advertising Research: Suggestions for Moving the Discipline Forward," in *International Advertising and Communication: Current insights and empirical findings* eds. S. Diehl. and R. Terlutter, pp 491-505.

Global Local Dialectical Relationship in a Mediterranean Context

Amina Djedidi, Université Paris-Est, France

Nacima Ourahmoune, KEDGE Business School, France

Daniele Dalli, Università di Pisa, Italy

ABSTRACT

We study the sources of brand iconicity in a Southern Mediterranean Non-Western context where the leader is the local brand versus the giant *Coca-Cola* (epitome of a global brand). We reveal how local cultural macro-social and micro discourses are intertwined to sustain this situation of inversed brand leadership in Algeria.

INTRODUCTION

CCT Research and cultural branding approaches have often neglected Non-Western contexts ('the invisible half', Jafari et al. 2012). Although iconic brands like l'Occitane, Fiat, Camper, Prada, Dolce and Gabbana brands have been investigated through Mediterranean conceptualizations (Cova and Cova 2001; Rinallo 2007; Visconti 2010; Dalli and Romani 2012; Carù, Cova and Dalli 2014; Visconti and Di Giuli 2014) all these brands emerged from Northern Mediterranean contexts (France and Italy). The present research addresses the Southern Mediterranean side through the case study of Algerian number one soda, Hamoud Boualem (HB).

Previous research showed local or regional cultures can be leveraged by local brands to secure a distinctive and motivating positioning against global players (Ger 1999; Steenkamp, Batra, and Alden 2003; Özsomer 2012) and the ability of local brands to tap into cultural values and imaginaries shared in common with local consumers as a competitive advantage vs. global brands (Bhardwaj, Kumar, and Kim 2010; Dalli and Romani 2012; Riefler 2012). Indeed, Béji-Bécheur, Ourahmoune, and Özçağlar-Toulouse (2014) portray the way Mediterranean people are tied to their culinary inheritance, either real or collectively imagined.

We study the sources of brand iconicity in a Southern Mediterranean Non-Western context where the leader is the local brand versus the giant *Coca-Cola* (epitome of a global brand). We reveal how local cultural macro-social and micro discourses are intertwined to sustain this situation of inversed brand leadership in Algeria.

METHOD

The case study method adopted in this research allows to investigate the interplay between local and global dynamics and is relevant for studying cultural branding and marketing (Dalli and Romani 2012; Holt 2006). From 2013 to 2016, we used multiple data sources including: company interviews (4HB managers, 2stakeholders, and 2 firm owners' family member); 29consumers with a varied sample in terms of gender, age (19 to79), occupation, education and location (North, South, and Abroad). Verbal and visual data also included participant observation in the company and in consumption contexts (home, family events), archival documents, and company website in order to cross-validate the complex dimensions of the topic. The research team includes three Mediterranean researchers. The first author is Algerian and has collected the data providing a point of entry in the field and ability to speak Algerian. The two other researchers have experience investigating Mediterranean contexts including Algeria, and being French-Algerian and Italian provided analytical distance in terms of interpretation. The results are the negotiated understanding of the themes that emerged from the extensive varied data collected.

FINDINGS AND DISCUSSION

The name Hamoud Boualem (HB) comes from Youcef Hamoud, the founder, a flavorist who produced aroma in Algiers and started producing artisanal lemonade with lemon taste end of 19th century. We discovered that HB is not a "me too" sort of brand grown up in the shadow of a multinational brand as it has appeared in 1876 few years before *Coca-Cola* was invented. The brand won the golden medal at Paris Universal Exposition in 1889 (Algeria was a French colony at that time).

Currently HB is a beloved brand in Algeria: it was elected the best product/brand in 2010 Algerian Food National Fair and the most beloved brand to Algerian consumers compared to all brands in any product categories in 2011. HB developed partnerships at the national and international scale. It holds the leader position followed by *Coca-Cola* in many coastal towns.

Therefore, HB Managers present HB as a public property that belongs to all Algerians: it is not an Algerian firm, it is the Algerians' firm.

To uncover the sources of brand iconicity of HB as a Non-Western, Southern Mediterranean brand we articulate our findings around three prominent themes that emerged from data analysis: food, embeddedness and myth.

Food

HB as a milestone for local food-drink know-how

Through HB consumption, Algerian consumers emphasize the way they become specialists of taste. Consumers highlight skills and know-how regarding proper combinations to adopt for health sake, gustative pleasure, and social conformity to normative taste. Even young generations extensively mention the importance of Social taste constellation of food and drinks "*When you eat something greasy and heavy, like M'hajeb –coastal tomato and onion stuffed crepe-, I ask my family to purchase white HB, it helps digesting, it tastes lemon, and I like lemon. ... For other kind of dishes, it goes with Selecto, the black HB*" (Farah, F, Coast, 27y). These constellations of food-drink combinations can also be related to special occasion meals versus ordinary meals "*During Eid el Edha -Islamic celebration involving a sheep sacrifice-, white HB goes with barbecue, and for other (dishes), it is Selecto*" (Zohra, F, Desert_Coast, 65y). HB is lived as an incorporated culinary heritage, having M'hajeb with HB is natural even when living abroad: "*Now that you are here, I'd like to prepare M'hajeb; I need to go downtown to buy Selecto*" (Kahina, F, Coast_Luxembourg, 34y).

For multi-domestic industries, demand is heterogeneous across countries and regions and it is difficult to standardize products and market offerings in general. In these conditions, local firms can build their competitiveness at home as they are considered as more authentic as food and drink are culture-bound categories for which it is easier to establish local and cultural associations (Özsomer 2012). Then, through rituals and hedonic attitudes toward food consumers integrate local brands in their self-representations, often in terms of know-how. Béji-Bécheur et al. (2014) demonstrate the way a typical South Mediterranean food (couscous) helps in building such self-representations. This latter goes through all the social codes that either translate personal preferences or local culinary know-how.

HB as celebration drink

Till the 1990's, soda consumption habits were different and linked to special occasions. Now that soda is consumed on a daily basis. Yet HB still is an icon of Algerian feasting decor which paradoxically reinforces its status as a high-end product despite being present on a daily basis. As alcoholic beverage is a minor practice, HB's meaning is displaced like Champagne in other contexts: « *HB is served also in marriage ceremonies, when you celebrate your middle school graduation, your baccalaureate. You would not serve Coca or Juice, you would serve Hamoud in the yellow crates (for glass bottles), and so we share joy through HB.* » (Soumia, F, Coast, 30y). Then, categorizing is not only horizontal and cognitive, it is vertically connected and associated with particular socio-cultural practices (Delmestri and Greenwood 2016). These reflects status games and habitus that forms specific local taste regimes (Bourdieu 1979; Ourahmoune and Özçağlar-Toulouse 2012). When global iconic brands might sound fascinating or like 'a luxury' in emerging markets, our data suggest consumers' tastes may consider the global brands as a less relevant alternative in satisfying social, cultural, and traditional needs as well as gustative, hedonistic motives.

Embeddedness

Company rootedness in Algeria's modern history

HB history is strongly intertwined with Algerian modern history. It is the oldest Algerian company that is still active and it has been through good and bad times, just like Algeria did. During Algerian war for independence (1954-1962), HB was the first contributor of the Front of National Liberation. Consequently, two of HB's managers were imprisoned. Consuming HB drinks at that time was a form of support for the "*firm bravery*" (HB family member, M, 94y). Algerian economy became increasingly dependent on oil, leading to hardship when the price collapsed during the 1980's oil glut. HB, then, faced budget deficit for years. The Algerians' riot in 1988 led Government to open the market and gave a new impetus to HB.

Product category as Mediterranean rooted drink

Tracing the culture of citrus and of lemonade shows that it is widespread across the Mediterranean. Algeria had witnessed the birth of citrus fruits, like Clementine. The now global citrus based soda Orangina has also started close to Algiers in 1930's. Other citrus derived products like lemonade are well known and widespread across the Mediterranean cultures just as olive oil and bread: they are called Cherbet in Algeria. Algerian citrus based sorbet, Creponné, is a close version of Italian Limoncello alcohol free ice cream. This engrained citrus based consumption is reinforced by the absence of culturally accepted consumption of alcoholic beverages. Then, consumers are socialized in a Mediterranean culture of lemonade and sparkling nonalcoholic beverages. Their expectations, knowledge, and specific tastes are imbued by HB recipes. Eckhardt (2005) highlighted that a product category foreignness overshadows the perception of brand localness. Through unfolding elements of the history of citrus and citrus based drinks, sodas are less likely to be the American way of life, but a deeply rooted Mediterranean product and life style. In this sense, the story of sodas and the role of HB in Algeria are not antagonist or dependent on the positioning of multinational, usually US brands: these seems to be two parallel stories in which the local and the global lived together in the same market without ruling out the other.

Coast-bound local food-drink constellation

HB is rooted in the coastal area of Algeria rooted in the 1600km Mediterranean coastal area.

Moving south, *i.e.* getting farther from the sea, regional dishes are still related to HB for those who were in touch with the coast culture. Mastering codes of social know-how can also be illustrated through regional dish-drink combinations for Rachid who spent his childhood in the desert, then moved for 20 years to Algiers, and then established again in desert: "*(about food and drink) You have great and big Matabig -southern tomato and onion stuffed crepe- or Batout -typical southern dish made of local bread mixed with tomato and pepper- then you sip a glass of HB*" (Rachid, M, Desert Coast, 57y). The same combination (regional dish-HB) was noticed with Zohra who was raised in the south, then moved to Algiers in the 1970'.

For southerners who have always lived in desert with no connection with the coast, more laxity is tolerated towards global brands consumption that happens to intrude regional traditional dish-drink combinations. HB and *Coca-Cola* can be substitutable options to accompany occasion related dishes: "*In Eid el Edha, barbecue can only be enjoyed with HB or Coca-Cola, with barbecue it is white or black HB, a very fresh one, yes, and we add pressed citrus to it, whether it is black or white, and we drink it a lot in Eid el Edha*" (Seif, M, Desert, 48y).

Food-drink constellations can also show boundaries between personal and collective tastes and, then, creating legitimacy regarding being a connoisseur with culinary know-how, like illustrated in the discussion between household informants: "*We only purchase Coca-Cola when we cook Matabig or Pizza or Coca -Stuffed turnover- (Amira, F, Desert, 42y) or Seffa -typical southern couscous-*" (Lamia, F, Desert, 50y). Then Amira interrupts: "*No, Seffa goes with milk, my son only eats it with milk.*" Researcher: "*who, amongst you, would purchase Coca-Cola when cooking Matabig, Pizza or Seffa?*" (In chorus) "*Yes Coca-Cola!*" Researcher: "*and who, amongst you, would purchase HB when cooking them?*" "*Yes, we also purchase HB (in a less convincing way) yes, we consume Coca-Cola and N'gaoues -inland local brand- (Amira) and we consume N'gaoues for Ramadan (Samira, F, Desert, 60y)*".

Myth

HB and sodas as a curative "magic potion"

Sodas being one of the targeted categories for health related awareness campaigns, some informants highlighted the fact that their occasional consumption of sodas is a way of enhancing their well-being. Surprisingly, the same objective, *i.e.*, well-being, has been related by other informants using different arguments. Indeed, soda becomes a "*magic potion*" to enhance traditional dishes digestion of, to reduce belly located fat and to fight throat infection.

HB as blessed firm

HB tries to be authentically close to the Algerian consumer by donating to the Ministry of Solidarity, providing free meals, offering free air conditioner to Sahara people. HB managers and stakeholders strongly believe that HB owners are noble people who have their ancestors' benediction, hence HB success. Their nobleness is translated, according to local culture, in their actions of donating and spreading joy amongst disadvantaged people.

Their benediction is partially explained through being true to principles "*(interests), they never use them and they give them to poor people. HB formally rejects bribery and bank interest. These are educated people who have value and who do not change their principles whatever the circumstances are*" (TM, M, Retired HB banker). Sticking to local values tends also to explain how circumstances helped "*blessed*" HB to overcome difficulties that turned to be beneficial because. For instance, in the 1980', Government set a

unique controlled system for imported ingredients. Some HB competitors used lobbying to have the best ingredients and leave the worst for HB. Since HB priority is quality, it had to reduce product outcome to maintain quality. As HB drinks became rare on the market, it was associated with luxury: “When you go at someone’s place and HB was served, that was ‘La Classe!’” (TM, M). Later on, HB won the trial at court and all these constraints disappeared.

CONCLUDING CONTRIBUTIONS

Our research contributes an understanding of the drivers of brand iconicity -a prominent research topic (Holt 2004) - displaced in a Southern Mediterranean non-Western context. We address recent calls for more diverse and inclusive research and more meta-regional approaches to add depth to cultural branding and consumer behavior constructs (Jafari et al. 2012, Carù et al. 2014).

Specifically, systematically locating the discourses at the micro-level of analysis (e.g. the lived experiences of the brand from various actors) in the macro-socio-historical context (secondary data analysis) allows to shed light on the sources of brand legitimacy that secure HB an iconic position in Algeria despite global competition marked by *Coca-Cola* as the epitome of the modern global brand.

In this process, we offer a captivating account on how consumers actively work at reversing the narrative of the giant global *Coca-Cola* as first. The hegemonic local brand Hamoud is fueled with consumers’ energy to safeguard space for their specific status games, pleasures and traditions reflecting their habitus. Furthermore, we show Hamoud’s osmosis with key moments of the national Algerian narrative to weave a unique relationship with consumers coupled with a mystique of magic and blessing. Yet, our findings suggest Hamoud is given central role of a positive catalyzer in the scripts related to food in Algeria rather than acts of explicit ideological resistance toward *Coca-Cola* that coexists and is consumed with other foods.

Moreover, results advocate that these consumption dynamics are explained by: 1/ the long historical expertise of the Mediterranean context as per the category of product and 2/ the history of Hamoud as it appeared a few years before *Coca-Cola* - which reflects Mediterranean expertise, 3/ The expertise of consumers socialized in drinking soda and their invaluable ability to reconfigure and elevate HB status as a mediator of refined local norms of good taste when it comes to food protecting the brand iconicity despite *Coca-Cola*’s impressive marketing and communication resources.

Table 1: Results Summary

Themes	Sub-themes
Food as a category products that mediates consumers cultures and traditions emerges at a site where consumers express complex meanings associated with HB	<ul style="list-style-type: none"> • HB as central to experiences of specific foods • Consumers work on setting subtle boundaries of good taste (some foods are more suitable for Hamoud other for Coca, some foods will be accompanied by white lemonade versus black one) • Food/beverage associations: Dos and Don’ts to secure position of connoisseurship. • Extensive and lively conversations witnessed during ethnography around the topic and the interviews signal the pleasure of speaking about food and demonstrate knowledge, skills, refinement or creativity • Habitus: incorporated norms of socialization as per local food constantly reworked and validated through self-pleasure and social validation • As celebration drink: festive versus ordinary foods, festive versus ordinary occasions: the brand adapts consumers’ routines and events (weddings, family events, Muslim celebration like Eid el Edha and Ramadhan, A-level celebration). • As a sparkling drink in a context where alcohol is not a major social practice, HB is elevated to the status of a special drink and even a status symbol –glass bottles for weddings consider as chic (informant use the French word – <i>classe!</i>).
Embeddedness characterized the very intimate relationship the history of Hamoud with modern Algerian history as well as the intricate link of the product category with the long Mediterranean history of soda	<ul style="list-style-type: none"> • Brand rootedness in Algeria’s modern history • Brand as a reflection of ruptures and national narrative drama increases consumer intimacy and passion toward the brand • Product category as Mediterranean rooted drink: old skill regional competence, presence of various products of similar inspirations across the Mediterranean space (lemonades and ice creams based on citrus) • Innovations in the Algerian context related to lemonade, citrus and shared recipes with other locations in the Mediterranean space • Coast-bound local food-drink constellation extensively expressed by consumers. • Differences emerge among consumer preferences and practices as per location within Algeria (North-Mediterranean/ South-Desert). • Results reinforce the legitimacy of the category of product as a Mediterranean cultural heritage when one thinks of soda as a marker of American way of life
Myth. The brand builds its iconicity beyond expertise, time and space on spiritual elements.	<ul style="list-style-type: none"> • HB and sodas as a curative “magic potion”. HB as pourvoyeur of well-being for consumers. • Blessed firm as described by the management as rhetoric of key factor success of the brand • Brand imbued with a mystique, an aura from a consumer perspective • Brand shows attention to ethics (not corrupted in a country where political and economic elites are subject to suspicion of corruption and nepotism) • Solidarity and social responsibility actions toward vulnerable populations expressed as conformed to dogma of Islamic inspiration and of caritas

REFERENCES

- Askegaard, Soren. (2006), "Brands as a Global Ideospace," in *Brand Culture*, ed. Jonathan. E. Schroeder and Miriam. Salzer-Mörling, London: Routledge, 91-102.
- Béji-Bécheur, Amina., Nacima. Ourahmoune, and Nil. Özçağlar-Toulouse (2014), "The polysemic meanings of couscous consumption in France," *Journal of Consumer Behaviour*, 13 (3), 196-203.
- Bhardwaj, Vertica., Archana. Kumar, and Youn-Kyung. Kim (2010), "Brand analyses of US global and local brands in India: The case of Levi's," *Journal of Global Marketing*, 23(1), 80-94.
- Bourdieu, Pierre. (1984), *Distinction; A Social Critique of the Judgement of Taste*, London: Routledge.
- Carù, Antonella., Bernard. Cova, and Daniele. Dalli (2014), "Mediterranean marketing and southern thinking: retrospects and prospects," *Journal of Consumer Behaviour*, 13(3), 157-163.
- Cova, Véronique. and Bernard. Cova (2001), *Alternatives Marketing : réponses marketing aux évolutions récentes des consommateurs, Paris: Dunod.*
- Dalli, Daniele. and Simona. Romani (2012), "From rural Mediterranean to global markets. Realism and diversity in the Camper experience". In *Marketing management: A cultural perspective*, edited by Linda Penaloza, Nil Özçağlar-Toulouse, and Luca M. Visconti, 43-59. London: Routledge.
- Delmestri, Giuseppe. and Royston. Greenwood (2016), "How Cinderella Became a Queen," *Administrative Science Quarterly*, 61(4), 507-550.
- Eckhardt, Giana. (2005), "Local Branding in a Foreign Product Category in an Emerging Market," *Journal of International Marketing*, 13 (4), 57-79.
- Ger, Güliz. (1999), "Localizing in the Global Village: Local Firms Competing in Global Markets," *California Management Review*, 41 (4), 64-83.
- Holt, Douglas. B. (2004), *How Brands Become Icons: The Principles of Cultural Branding*, Boston: Harvard Business School Press.
- (2006), "Jack Daniel's America: Iconic Brands as Ideological Parasites and Proselytizers," *Journal of Consumer Culture*, 6(3), 355-377.
- Jafari, Aliakbar., Fuat. Firat, Ahmet. Süerdem, Soren. Askegaard and Daniel. Dalli (2012), "Non-western contexts: the invisible half," *Marketing Theory*, 12 (1), 3-12.
- Ourahmoune, Nacima. and Nil. Özçağlar-Toulouse (2012), "Exogamous weddings and fashion in a rising consumer culture: Kabyle minority dynamics of structure and agency," *Marketing Theory*, 12 (1), 81-99.
- Özsomer, Ayşegül. (2012), "The Interplay between Global and Local Brands: A Closer Look at Perceived Brand Globalness and Local Iconness," *Journal of International Marketing*, 20 (2), 72-95.
- Riefler, Petra. (2012), "Why Consumers Do (Not) Like Global Brands: The Role of globalization Attitude, GCO and Global Brand Origin," *International Journal of Research in Marketing*, 29 (1), 25-34.
- Rinaldo, Diego. (2007), "Metro/Fashion/Tribes of men: Negotiating the boundaries of men's legitimate consumption," in *Consumer Tribes*, ed. Bernard. Cova, Robert. Kozinets and Avi. Shankar, New York: Elsevier/Butterworth-Heinemann, 76-92.
- Steenkamp, Jan-Benedict., Rajeev. Batra and Dana. L. Alden (2003), "How Perceived Brand Globalness Creates Brand Value," *Journal of International Business Studies*, 34, (1), 53-65.
- Visconti, Luca. M. (2010). "Authentic brand narratives: co-constructed Mediterraneanness for l'Occitane brand." in *Research in Consumer Behavior*, ed. Russell. W. Belk, UK: Emerald, 231-260.
- Visconti, Luca. M. and Alberta. Di Giuli (2014), "Principles and levels of Mediterranean connectivity: Evidence from Prada's 'Made in Worlds' brand strategy," *Journal of Consumer Behaviour*, 13 (3), 164-175.

Gender as a Softly Assembled Performance: Interrogating the Tenuous Possession-Self Link When Women Don't Want Pink and Men Don't Want Blue

Carly Drake, University of Calgary, Canada

Scott Radford, University of Calgary, Canada

ABSTRACT

The extant product gender literature uses experimental designs in arguing that consumers' [static] gender identities match their product choice. Conversely, interview data from the present study illustrate that decisions regarding product gender are not always a reflection of the [fluid] gendered self. These findings complicate theory on this possession-self link.

INTRODUCTION

In 2012, the 'Cristal for Her' pens, introduced by Bic, received a dose of negative publicity and ridicule in both media (e.g., West 2012) and product reviews. On Amazon, over 2,000 people shared their opinions about Bic's assumption, based on gender stereotypes, that women need slim, pastel-colored pens. Some women joked that the pens would be useful for completing feminine tasks, such as writing recipe cards, while others wondered how they could get a man's permission to write with the pens. While most of the reviews were negative, a small minority provided more positive feedback. One customer wrote: "Serious review here . . . They are really nice pens and I'm glad I got them" (Amazon 2014). This example highlights the potential challenges that a firm faces if it relies on gender stereotypes to alter an otherwise gender-neutral product to be "for her" or "for him."

Referencing traditional gender roles by employing gender stereotypes in product design may be an effective way of appealing to men and women in a sex-based market segmentation strategy (Alreck 1994). In contrast, there is also evidence that showing men and women in non-traditional gender roles can also be successful (Zawisza et al. 2006), in part because it appeals to consumers seeking more realistic representations of femininity and masculinity (Barry 2013). However, as the Bic example illustrates, since such research has largely focused on stereotypes in advertising, attention must be paid to gender stereotypes in product design and the role they play in consumers' lives as part of the extended self (Belk 1988).

Bic's sex-based marketing segmentation strategy is premised on a correlation between gender identity and product preference. Yet, recent research on gender performativity (e.g., Corbett 2008) suggests that consumers' gender identities are more fluid than identity-based segmentation strategies consider. In juxtaposing sex-based market segmentation strategies with the increasing scholarly acknowledgment of gender's fluidity, the present study asks: How do consumers understand and navigate gender identity when selecting products? Further, how do they evaluate gender cues from products targeting the stereotypical man or woman? The resulting analysis extends theory on the possession-self link in relation to gender identity, and offers a critical voice to conversations surrounding the use of gender in guiding product design.

GENDER IN PRODUCT DESIGN AND CONSUMER BEHAVIOR

Products have sex-typed identities in that consumers can readily and consistently identify them as "male" or "female" and, correspondingly, "masculine" and "feminine" (Milner and Fodness 1996; Fugate and Phillips 2010). Product gender is inherent in many designs, such as the feminine curve of a wine glass or the masculine angularity of an off-road vehicle. While these designs may elicit a

perception of gender, gendered products have the same basic characteristics, but the design, packaging, or advertising is intentionally modified to appeal to the stereotypical man or woman (Alreck 1994). These design decisions are linked to traditional sex roles rooted in sex-trait stereotypes (e.g., masculine strength and feminine gentleness; Williams and Best 1990).

The present study considers consumer responses to both product gender and gendered products as part of consumer identity projects (i.e., consumption that both constructs and bolsters the self). Since consumers use products as signals to express their self-concept to themselves and others (Berger and Heath 2007) they prefer products congruent with their self-concept (Van den Hende and Mugge 2014). Studies on the possession-self link have explored many elements of the self-concept, including those surrounding sex and gender. One stream of this research (e.g., Alreck et al. 1982; Van den Hende and Mugge 2014) argues that individuals respond to stimuli that reflect an identity tied to their biological sex (i.e., their physical maleness or femaleness; West and Zimmerman 1987). Here, a woman would be feminine-identified and seek feminine products. A second stream (e.g., Fry 1971; Feiereisen et al. 2009) posits that individuals respond to stimuli that reflect their gender identity (i.e., their self-perceived endorsement of stereotypically masculine or feminine traits; Palan et al. 1999). Here, masculinity and femininity are not confined to the physical realms of maleness and femaleness, respectively, and a feminine-identified person would seek feminine products.

GENDER AS A SOFTLY ASSEMBLED PERFORMANCE

While the aforementioned consumer research assumes gender identity is static, elsewhere scholarship argues that the identities individuals construct around gender are stable, but never fixed (Fausto-Sterling 2012). Here, gender is considered a "softly assembled" collection of behavioural attractors that vary in form and stability depending on an individual's life history and the context and task at hand (Harris 2000). Gender-related causal chains are elusive since consumers' enactments of gender are complex and personalized. Indeed, "norms do not exist without variance; the repetition of patterns or averages is never exact" (Corbett 2008, p. 839).

Poststructuralist feminist theory on gender performativity understands gender not as something one is, but something one does (West and Zimmerman 1987). A person who (un)intentionally succeeds at doing gender meets society's expectations of how men and women look and act. Alternatively, a person who does not meet society's gender-related expectations is *undoing* gender, or deconstructing it (Deutsch 2007). Decisions regarding product gender and gendered products can be considered performances that make statements about the gendered self and influence its ongoing development (Schultze 2014).

This theoretical framework is adopted to explore product gender because consumer goods can represent the kinds of social values and norms that exacerbate gender stereotypes that limit men and women in their self-expression (Caldas-Coulthard and van Leeuwen 2002). Feminist theory and methods offer the resources needed to critically engage with these goods and their consumption. Since there is little consumer research on product gender from this perspective, the pres-

ent study asserts that critical engagement is necessary for researchers to understand how these products are evaluated and used.

METHOD AND STUDY DESIGN

Twenty consumers (6 men and 14 women) living in a large city in western Canada and ranging in age and social location participated in the study. Because of the personal nature of the interview topics and the need for a diverse array of perspectives, participants were recruited using convenience, snowball, and purposive sampling (Creswell 2014). Between July 2015 and February 2016, the first author met with participants for 60- to 90-minute semi-structured interviews (McCracken 1988) focused around the act of shopping, identity, and social influence in a retail context. Participants were also shown a series of seven photographs of gendered products (e.g., bread, tea) and asked questions about the products and their packaging (see figure 1). Most participants chose a pseudonym.

The interview transcripts were reviewed using a feminist critical discourse analysis (CDA) approach. CDA views discourse as a countable noun that is not only the language of individual communication, but the larger systems of thought within a particular historical location (Foucault 1971). Feminist CDA, specifically, examines discourses that promote and reproduce androcentric perspectives that, for example, define appropriate behavior and attributes for women

(Sunderland and Litosseliti 2002). This approach can advance analyses of the way power and ideology work in discourse to sustain patriarchal social structures (Lazar 2007).

Adopting Fairclough's (1992) framework, interview transcripts were first reviewed for their internal mechanisms (e.g., grammar and vocabulary) by reading each text in its entirety, noting differences and commonalities between them. Second, patterns and themes were grouped together as discourses to be read and analyzed as cohesive wholes. In doing so, what participants deemed "thinkable" and "sayable" (Foucault 1971) from the perspective of their respective social locations could emerge. Third, the discourses were explained from a macro perspective by positioning the groupings within broader conversations regarding gender.

IDENTIFYING AND INTERPRETING PRODUCTS' GENDER CUES

By interpreting products' gender cues, participants engage in four discourses, which will now be discussed in turn (and are summarized in the attached table). Consistent with the understanding of gender as a softly assembled performance, assigning participants to a single discourse is an unfruitful task, and one not undertaken here, as participants do not consume one type of products (e.g., masculine or feminine) exclusively.



Figure 1: Gendered Products

Discourse 1: Complying with Social Norms by Doing Gender

The first discourse surrounds participants' doing gender in relation to the gendered products they were shown as well as through their daily consumption habits. Individuals who most consistently participate in this discourse have gender identities that "match" their biological sex. As these participants navigate gendered products and product gender, their purchases correspond with the possession-self link and they may abide by strict rules in selecting products. Ben, 57, cites his requirements in a bicycle: "You don't want to look like your mom put you on it. You don't want to look like a geek out there."

To Ben, not looking like a geek means avoiding feminine pastel colours in favour of darker ones, like the grey of his current bicycle. His rule revolves around image – looking like you rely on your mom is forbidden if one is to do gender correctly, especially in a social context like a bike trail where one's ability to do gender is presented for judgment (West and Zimmerman 1987). For this reason, a product's gendered positioning influences its evaluation. For those who most consistently engage in this discourse, the idea of a product being meant for the opposite sex is a powerful influence that threatens their self-concept and perceived social standing.

Discourse 2: Defying Expectations by Undoing Gender

The second discourse follows participants' undoing gender both in their reactions to the gendered products they were shown and their daily consumption habits. Those who most consistently participate in this discourse are feminine-identified women, but they break the possession-self link according to guidelines they set for themselves. Chiefly, they do not want to be "put in a box" in terms of their consumption, because they consider their lives as women as being more nuanced than the stereotypes employed in gendered products. For example, Karen, 48, speaks of a desire to "rebel" against what is expected of her as a woman. This opinion corresponds with research that notes the failure of identity appeals in marketing when consumers' agency in expressing an identity is restricted (Bhattacharjee et al. 2014).

These women criticize companies that rely on a sex-based market segmentation strategy. Responding to a photo of gendered tea, Jennifer, 30, says, "It's just so offensive. It's upsetting. . . I do want to try the tea but I'm not going to buy it." This quote reveals a clear boundary condition to the possession-self link. That is, taking offense to a product – even one with appealing qualities – is grounds for dismissing that product. In response to a set of earplugs showcasing hyper-masculinity and hyper-femininity, Deloris, 26, she says, "I think generally when things are like this I try to buy gender neutral . . . Just something in the middle." Participants may also avoid products altogether or buy products meant for the opposite sex.

Discourse 3: Muting Gender as a Daily Performative Choice

In some cases, gender and its related norms and values are muted in participants' consumption habits. Those who most consistently participate in this discourse do not use gender as a heuristic in their consumption habits. They may argue gender identity is unimportant to them and/or lament the arbitrariness of "masculine" and "feminine" labels. Products' gendered positioning or use of stereotypes holds little sway, and these participants select what appeals to them with no agenda to conform or rebel. As the co-owner of an art gallery, Greg, 30, values creativity and risk-taking. Despite his masculine gender identity, he purchases products that have an aesthetic he enjoys. A pink suit and a women's coat are among the most feminine items in his closet that deviate from his typically masculine taste.

Moreover, Lorian (who identifies as masculine) and Stephanie (who did not provide a gender identity) articulate a frustration with the array of outdoor-gear options available to them as women. Lorian, 30, says pink and purple pastels are impractical because "when I'm on a glacier or on the side of a mountain, I want something vibrant that's gonna be seen from a helicopter if there's an incident." Pragmatism is a powerful heuristic in these participants' consumption decisions when they mute gender. This discourse's muting of gender aligns with the notion that gender varies in salience across different situations (Ridgeway and Correll 2004) to the point that at some times it may be completely irrelevant (Deutsch 2007).

Discourse 4: Muting Gender as an Incidental Performative Option

Muting gender is not solely the realm of consumers who participate in that discourse on a daily basis. For example, individuals who most consistently do or undo gender through consumption may list consumption contexts (e.g., at home – away from social gaze) and purchases that do not implicate gender (e.g., for price-conscious consumers: products that might be on sale). For all participants, there is also cause to mute gender as an incidental performative option when the product is seen as "illegitimately" gendered. Participants question marketers' urge to gender a product. Their skepticism may stem from annoyance, confusion, or amusement.

In turn, they offer what they perceive as more legitimate grounds on which marketers can gender a product: (1) ergonomics; and (2) biology (i.e., differences that may *actually* exist between men and women, beyond perceived aesthetic preferences). Responding to a photo of gendered earplugs, feminine-identified Valerie, 34, says that earplugs typically do not fit her ears, so if there were something designed for a woman's ear, "I might consider buying it on that attribute alone." Similarly, she says she considered buying a tea that promised to help menstrual cramps, and that the function of such a product meant she might overlook its aesthetic "pinkness." That this observation is separate from participants' doing and undoing of gender again shows that gender can be silenced (or less salient) in some consumer contexts.

DISCUSSION

The extant product gender literature uses experimental designs to argue that consumers' static sex- and gender-based identities match their product choice. By contrast, the present study argues that decisions regarding product gender and gendered products can be considered performances that reflect and shape the softly assembled gendered self (Schultze 2014). Decisions regarding product gender and gendered products are not always a reflection of this gendered self. This finding complicates theory on this possession-self link by highlighting cases in which the link is broken, illustrating – in keeping with the idea of gender as a softly assembled performance – that no one develops as a simple mechanical reiteration of social norms (Butler 2004). Even participants content to regularly do or undo gender have exceptions to their habits.

Regardless of their identities and habits, participants question the separation of gender-

neutral products into their masculine and feminine counterparts. As such, moving beyond gendered products based on men and women's perceived aesthetic preferences to products that cater to men and women's respective biological and ergonomic needs may draw support. Future research must monitor these opinions against the backdrop of ever-evolving structures in terms of gender and related identities. By understanding how identities are formed and act-

Table 1: Summary of Findings

Discourse	Illustrative Quotes	Analysis
<p>Complying with gender norms and “doing gender” regarding gendered products and daily consumption habits. Participants’ gender identities “match” their biological sex and purchasing habits.</p>	<p>“If I ever heard someone say about a vehicle that I was interested in, ‘Oh, that’s a girly car’ or one of those kinds of comments, it would probably turn me off of that car.” (Robert, 52, masculine-identified)</p> <p>“I don’t want to accidentally wear something that’s for women . . . Like practicality-wise I know [women’s lip balm] does the same thing [as men’s lip balm] but I guess it’s just that identity aspect of it. I would not want someone else to see me using a pink lip balm.” (Ernie, age 21, masculine-identified)</p>	<p>The idea of a product being meant for the opposite sex is a powerful influence that threatens these participants’ self-concept and perceived social standing.</p> <p>Females discuss choosing and enjoying products that reflect their gender identity. Males more eager to discount products meant for the opposite sex. These findings correspond with research that shows women may face backlash if they violate feminine norms (Rudman and Phelan 2008), but men are generally held to stricter standards (Williams 1985) and are rewarded socially for adhering to masculine norms (Connell 2005).</p>
<p>Defying expectations and “undoing gender” regarding gendered products and daily consumption habits. Participants’ gender identities may “match” their biological sex, but not necessarily their purchases. Their breaking the possession-self link with purchases is an act of rebellion.</p>	<p>“I would say that I am typically, I know ‘repulsed’ is a strong word but I’m typically repulsed by things that are overly femininely presented.” (Valerie, age 34, feminine-identified)</p> <p>“No, [I wouldn’t buy the toolkit] because it would annoy me because it’s pink. I would buy a real one. Obviously it’s not strong enough because it’s pink. Yeah, I wouldn’t buy it.” (Catherine, 40s, feminine-identified)</p>	<p>These participants do not want to be “put in a box” in terms of their consumption, because they consider their lives as women as being more nuanced than the stereotypes employed in gendered products.</p> <p>Findings from this discourse correspond with research that notes the failure of identity appeals in marketing when consumers’ agency in expressing an identity is restricted (Bhattacharjee et al. 2014), and extends these findings to the context of product design.</p>
<p>Muting gender as a daily performative choice. Gender is “muted” regarding attitudes towards gendered products and daily consumption habits.</p> <p>Participants’ gender identities may “match” their biological sex, but these identities are unimportant in consumption. Products’ gendered positioning holds little sway over these participants compared to other attributes (i.e., practicality).</p>	<p>“It wouldn’t matter to me which [tea] to buy . . . Because I’d be the one drinking it so I’d want to buy what I like.” (Martin, age 45, feminine-identified)</p> <p>“I would say [I’m] feminine but not very typical feminine. Um, not super tomboy-y, but I do enjoy playing sports, for example, or I don’t really relate with typical girl things. I don’t like pink. Anything very typical of girl things I’m very <i>laissez-faire</i> about.” (Coral, age 26, feminine-identified)</p>	<p>This discourse aligns with research that shows that gender can be silenced or less salient (Ridgeway and Correll 2004 to the point that at some times it may be completely irrelevant (Deutsch 2007). For these participants, gender is consistently unimportant in their consumption habits.</p>
<p>Muting gender as an incidental performative option. Participants’ purchases may typically conform with or defy social norms, but there are specific instances in which they elect to mute gender.</p> <p>A situation in which all participants mute gender in this manner is when they criticize products they see as “illegitimately” gendered (i.e., they are gendered based on perceived aesthetic tastes that are rooted in stereotypes).</p>	<p>“Why do men need protein and why do women get calcium, you know? Men can have calcium and Vitamin D . . . I don’t like products that would separate stuff like that.” (Catherine, 40s, feminine-identified, in response to a photo of gendered bread)</p> <p>“I thought they were kind of funny because I was like, ‘What determines that these are men’s flavours and what determines that these are women’s flavours?’” (Walter, 28, masculine-identified, in response to photos of gendered tea and bread)</p>	<p>These observations are separate from participants’ doing and undoing of gender in the sense that even participants who typically conform with or rebel against social norms will opt to mute gender when they find it to be unimportant.</p> <p>As with the third discourse, this finding shows that gender can be silenced (or less salient) in some consumer contexts (Ridgeway and Correll 2004) to the point that at some times it may be completely irrelevant (Deutsch 2007). Different from the discourse regarding muting gender as a daily performative choice, this discourse emerges in specific contexts or in relation to specific purchases.</p>

ed upon through consumption practices, researchers can better understand the broader norms and values that guide consumers' lives.

REFERENCES

- Alreck, Pamela L., Robert B. Settle, and Michael A. Belch (1982), "Who Responds to 'Gendered' Ads, and How?," *Journal of Advertising Research*, 22 (2), 25-32.
- Alreck, Pamela L. (1994), "Commentary: A New Formula for Gendering Products and Brands," *Journal of Product & Brand Management*, 3 (1), 6-18.
- Amazon (2014), "Bic Cristal for Her Ball Pen," Retrieved October 14, 2104 from <http://www.amazon.com/BIC-Cristal-1-0mm-Black-MSLP16-Blk/dp/B004F9QBE6>.
- Barry, Ben (2013), "Does My Bottom Line Look Big in This?" *Strategic Direction*, 29 (1), 3-5.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (2), 139-68.
- Berger, Jonah and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34 (2), 121-34.
- Bhattacharjee, Amit, Jonah Berger, and Geeta Menon (2014), "When Identity Marketing Backfires: Consumer Agency in Identity Expression," *Journal of Consumer Research*, 41 (2), 294-309.
- Butler, Judith (2004), *Undoing Gender*. New York: Routledge.
- Caldas-Coulthard, Carmen Rosa and Theo van Leeuwen (2002), "Stunning, Shimmering, Iridescent: Toys as the Representation of Gendered Social Actors," in *Gender Identity and Discourse Analysis*, Lia Litosseliti and Jane Sunderland, eds. Amsterdam: John Benjamins Publishing Company.
- Connell, R. W. (2005), *Masculinities*, Second ed. Berkeley: University of California Press.
- Corbett, Ken (2008), "Gender Now," *Psychoanalytic Dialogues*, 18 (6), 838-56.
- Creswell, John W. (2014), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Deutsch, Francine M. (2007), "Undoing Gender," *Gender & Society*, 21 (1), 106-27.
- Ehrnberger, Karin, Minna Räsänen, and Sara Ilstedt (2012), "Visualising Gender Norms in Design: Meet the Mega Hurricane Mixer and the Drill Dolphia," *International Journal of Design*, 6 (3), 85-98.
- Fairclough, Norman (1992), *Discourse and Social Change*, Cambridge, Mass: Polity Press.
- Fausto-Sterling, Anne (2012), "The Dynamic Development of Gender Variability," *Journal of Homosexuality*, 59 (3), 398-421.
- Feiereisen, Stéphanie, Amanda J Broderick, and Susan P Douglas (2009), "The Effect and Moderation of Gender Identity Congruity: Utilizing "Real Women" Advertising Images," *Psychology & Marketing*, 26 (9), 813-43.
- Foucault, Michel (1971), "Orders of Discourse," *Social Science Information*, 10 (2), 7-30.
- Fry, Joseph N. (1971), "Personality Variables and Cigarette Brand Choice," *Journal of Marketing Research (pre-1986)*, 8 (000003), 298.
- Fugate, Douglas L. and Joanna Phillips (2010), "Product Gender Perceptions and Antecedents of Product Gender Congruence," *Journal of Consumer Marketing*, 27 (3), 251-61.
- Harris, Adrienne (2000), "Gender as a Soft Assembly: Tomboys' Stories," *Studies in Gender & Sexuality*, 1 (3), 223-50.
- Lazar, Michelle M. (2007), "Feminist Critical Discourse Analysis: Articulating a Feminist Discourse Praxis," *Critical Discourse Studies*, 4 (2), 141-64.
- McCracken, Grant David (1988), *The Long Interview*. Newbury Park, CA: Sage.
- Milner, Laura M. and Dale Fodness (1996), "Product Gender Perceptions: The Case of China," *International Marketing Review*, 13 (4), 40-51.
- Palan, Kay M., Charles S. Areni, and Pamela Kiecker (1999), "Reexamining Masculinity, Femininity, and Gender Identity Scales," *Marketing Letters*, 10 (4), 357-71.
- Ridgeway, Cecilia L. and Shelley J. Correll (2004), "Unpacking the Gender System: A Theoretical Perspective on Gender Beliefs and Social Relations," *Gender and Society*, 18 (4), 510-31.
- Rudman, Laurie A. and Julie E. Phelan (2008), "Backlash Effects for Disconfirming Gender Stereotypes in Organizations," *Research in Organizational Behavior*, 28 (0), 61-79.
- Schultze, Ulrike (2014), "Performing Embodied Identity in Virtual Worlds," *European Journal of Information Systems*, 23 (1), 84-95.
- Sunderland, Jane and Lia Litosseliti (2002), "Gender Identity and Discourse Analysis: Theoretical and Empirical Considerations," in *Gender Identity and Discourse Analysis*, Lia Litosseliti and Jane Sunderland, eds. Amsterdam: John Benjamins Publishing Company.
- Van den Hende, Ellis A. and Ruth Mugge (2014), "Investigating Gender-Schema Congruity Effects on Consumers' Evaluation of Anthropomorphized Products," *Psychology & Marketing*, 31 (4), 264-77.
- West, Candace and Don H. Zimmerman (1987), "Doing Gender," *Gender & Society*, 1 (2), 125-51.
- West, Lindy (2012), "Bic's Ridiculous Lady Pens Cost 70% More Than Identical Regular Pens," Retrieved August 31, 2015 from <http://jezebel.com/5938681/bics-ridiculous-lady-pens-cost-70-more-than-identical-regular-pens>.
- White, Katherine and Darren W. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Psychology*, 16 (4), 404-14.
- Williams, Dorie Giles (1985), "Gender, masculinity-femininity, and emotional intimacy in same-sex friendship," *Sex Roles*, 12 (5-6), 587-600.
- Williams, John E. and Deborah L. Best (1990), *Measuring Sex Stereotypes: A Multination Study*. Thousand Oaks, CA: Sage Publications.
- Zawisza, Magdalena, Marco Cinnirella, and Anna Maria Zawadzka (2006), "Non-Traditional Male Gender Portrayal as a Persuasion Tool in Advertising," *Social Influence*, 1 (4), 288-300.

Web 2.0: Online Communities or Bla-Bla Land?

Natalia Drozdova, Norwegian School of Economics, Norway

Denis Utochkin, Norwegian School of Economics, Norway

Ingeborg A. Kleppe, Norwegian School of Economics, Norway

ABSTRACT

This paper explores users' interactions on Twitter and Kickstarter. Not only do users interact with each other significantly more often on Kickstarter than on Twitter, they also express a stronger community feeling. This paper contributes to the understanding of the variations of possible interactions across different online platforms.

INTRODUCTION

The brand community framework (Kozinets 1999; Muniz and O'Guinn 2001) has been extremely fertile in studying the eruption of consumer-generated online content that followed the launch of Web 2.0 in 2004. In online conversations, a brand can work as a shorthand signifier (Holt, 2004) connecting consumers to aggregates of other consumers in a nongeographically bound online space (Belk, 2013). Cova (1997) suggests that the linking value of a brand can be more important than the consumption of the brand product or service. The early years of Web 2.0 have inspired an abundance of brand community insights, such as the concept of collective creativity in online crowds (Kozinets, Hemtsberger, and Schau 2008); consumer-to-consumer co-creation of word-of-mouth-marketing (Kozinets, Valck, Wojnick, Wilner 2010); how marginalized consumers use online communities to quest after greater inclusion in mainstream markets (Scaraboto and Fischer 2013); and how ordinary consumers can earn online leadership to an audience (McQuarrie, Miller, and Phillips 2013).

A recent study challenges the strong hold of the consumer community concept (Arvidsson and Caliendo, 2015). They claim that people's online activity is not driven by communicative interaction around a shared identity with a brand. Instead, they claim that it is the platform – or the mediation – that drives individual postings that might be inspired by ongoing affective trends or sentiments. Contrary to communities, a public is not about consumer-to-consumer communication. Arvidsson and Caliendo (2015) claim that online posting is mostly about publicity, not community.

Arvidsson and Caliendo (2015) study the #LouisVuitton on Twitter, and based on a quantitative content analysis their research suggests that people do not address each other in their tweets. The #LouisVuitton case confines to a larger group of studies that uses the field of fashion as their online study context (Dolbec and Fisher 2015; McQuarrie, Miller, and Phillips 2013; Scaraboto and Fisher 2013). The combination of Twitter as a mediating platform and the field of fashion constitutes a specific study context that might tint the conclusions regarding community versus public online content. The motivation for this research comes from this assumption, as we suggest that fields outside fashion in combination with other platforms need to be studied in order to make reliable conclusions regarding the types of interactions online.

In this study, we follow up on Arvidsson and Caliendo's (2015) research and take their findings to a different context. As Web 2.0 has evolved, social media migrates to other sectors of the economy. In particular, the finance and banking sectors are blooming with new online platforms. Kickstarter, a reward-based crowdfunding platform, is the finance counterpart to pure social media platforms such as Twitter and Facebook. Crowdfunding is defined as an open call, essentially through the Internet, for the provision of financial resources either in the form of donation or in exchange for some

form of reward and/or voting rights in order to support initiatives for specific purposes (Schwienbacher & Larralde, 2010). Reward-based crowdfunding is one type of crowdfunding where funders get various non-financial benefits in exchange for their contribution such as a token souvenir or a promise of a future customer privilege such as early access to a product. Kickstarter attracts entrepreneurs who call for backers wanting to buy into new ideas at an early stage. Founders can inform about the development of the project and backers can post and have conversations on the project site.

We study the case of Obsidian Entertainment, a video game developer that has a large following both on Twitter and on Kickstarter. Our research question explores to what degree consumers interact with each other in conversations on these two very different online platforms.

THEORY

We use the conceptual dichotomy between publics and communities proposed by Arvidsson and Caliendo (2015). A community is based on, and supported by, interaction between its members, while publics are largely non-interactive and are instead sustained by a mediation device such as a specific topic of interest, brand, celebrity, hashtag, etc. Moreover, consumers participate in a community by engaging, communicating, and interacting with other community members. Participation in a public only requires sharing one's sentiment or perspective on a topic that ties the public together, without engaging in a conversation or expecting a reaction from other members of the public. Finally, members of communities develop and maintain a shared identity, while members of a public use publicity to reinforce their individual identities.

METHOD

Case

In order to avoid a bias stemming from potential differences between consumers communication around long-established brands and brands that first emerged through crowdfunding campaigns, we chose to analyze a brand that had a sufficiently large following before its Kickstarter success. Game developer Obsidian Entertainment fits this criterion. The studio had been founded by game designers well-known for their 1990s projects and released five major titles by 2012, accumulating a considerable fan base. In 2012, the developer turned to Kickstarter to seek funding for their new game. Obsidian Entertainment received nearly USD 4 million from more than 73,000 backers in 60 days. The game, named Pillars of Eternity, was released in 2015, enjoying critical acclaim and commercial success. Project's comments section spawned a massive discussion with more than 63,000 postings, making it a fertile ground for content analysis.

Measurement

We compare Twitter and Kickstarter on the two dimensions suggested by Arvidsson and Caliendo (2015). In doing so we build on qualitative and quantitative data using three algorithms written in Python, two for collecting Kickstarter comments and fetching tweets with specific keywords, respectively, and one for conducting computer-assisted text analysis on collected data. We collected and analyzed a total of 13,942 tweets and 60,882 Kickstarter comments.

Since we are interested in investigating consumers' communication patterns, we exclude all postings by the brand representatives.

Interaction dimension. We define 'interactive communication' as postings in which users address one another. Both on Kickstarter and Twitter, users type @USERNAME when addressing other members. By counting the number of comments or tweets containing the @ symbol and excluding instances where it is followed by an email domain name, we find the number of times users have reached out to other members of the online platform. We also analyze how features of the platform can facilitate/discourage users' interaction.

Identity dimension. We conduct a qualitative analysis to identify the core values of the collective and also employ quantitative techniques to estimate the number of postings that contain personal pronouns that point towards a sense of shared identity ('we', 'our', 'us') and individual identity ('I', 'my', 'me').

Arvidsson and Caliandro (2015) identify communicative dimension as the third measure of communities and publics. It is rooted in the interaction dimension and the identity dimensions. Therefore, we will not measure it separately in this paper.

FINDINGS

The analysis reveals significantly higher interaction between the users of the Kickstarter platform in comparison with Twitter. On the Kickstarter commentary, in 48 % (29026 comments) of the comments backers were addressing other backers. On Twitter, only 8 % (435 tweets) of the tweets that mentioned Obsidian Entertainment were addressed to a Twitter account other than the ones affiliated with the brand. Twitter provides an easier way to address other users (users can be tagged to create an interactive link to their profile), while Kickstarter does not provide this option. On the other hand, the 'newsfeed' on Kickstarter presents a flow of the comments in chronological order. This news feed appears the same for all users. Twitter, however, lacks a centralized discussion thread.

In order to analyze the identity dimension, we first conducted a qualitative analysis of the Kickstarter commentary and Twitter feed. We followed the Corley and Gioia (2004) data-analyzing template. First, we meticulously managed our data by organizing postings chronologically in a collated data file. Second, we read the data file and searched for emerging patterns and systematic variation. We were particularly looking for shared consciousness, rituals and traditions, and a sense of moral responsibility (in accordance with Muniz & O'Guinn, 2001).

Analysis of the Kickstarter commentary revealed a rather strong *we*-feeling, with many funders expressing a group sentiment instead of an individual one – 'So, are we getting any details on...', 'We want Linux support!', 'We love your work more than you think =>', 'Everyone here is rooting for you!', 'We are all counting on you!'. Even though first person singular pronouns are prevalent, the share of comments that refer to 'we-ness' is substantial: mentions of individual self appears in 42% of backers' comments, while 13% of the postings by funders appeal to the shared communal identity. The ratio of 'we-comments' to 'I-comments' was therefore estimated at 0.29 (the higher the value, the larger the share of 'we'-postings compared to comments referring to one's individual identity).

Funders also express excitement of being one of the people behind a project and are looking forward to sharing this experience with others – 'Hey Guys, im happy to collaborate in funding this project. I'm a developer too ...', 'Looking forward to belong to your party and go on this adventure together'. It seems that on Kickstarter there is a natural *we*-feeling, as only the ones who pledged funds to the project can leave comments on comment feed. Therefore, there is a natural border between the 'we-who-funded-the-project' and the 'outsiders'.

Kickstarter gives backers a common goal which unites people and makes them willing to work together towards its achievement ('Hey everyone ! Next is going to look fantastic! Let's work together to make Project Eternity a reality!', 'I'm i,n – hope that we get enough money for a MAC version'). Many funders also monitor the progress in achieving this common goal, and share their observations with others - 'We're so close to hitting the half-way point. It's just unbelievable!! This game is SO happening!', 'Half way there!!'

Shared rituals and traditions is another important element of a community, whose function is to maintain the culture of the community. The analysis of Kickstarter community revealed the use of slang by many funders. Probably the most popular is 'Shut up and take my money', which was used at least 175 times. The frequent usage of the phrase was noticed by the commenters, with one of them actually admitting: 'I think this project warrants a "Shut up and take my money!" meme!' Also, many creative variations of this phrase were used, such as 'Please cease your vocalizations and accept my gold coins!'

Another important element of the brand community is moral responsibility. Moral responsibility is a sense of duty to the community as a whole, and to individual members of the community. The existence of moral responsibility implies that the communities formally and informally recognize the bounds of what is right and wrong, appropriate and inappropriate (Muniz & O'Guinn, 2001). Analysis of the Kickstarter commentary reveals the existence of certain ideological preferences, which motivate funders to back the project. Users point out the differences between 'soulless games' produced by publishers and Obsidian – 'Obsidian entertainment going to make a game without a publisher telling them what to do and how to do???? F*** YEAH!', 'we're sick and tired of consolized games and this will be a breath of fresh air!', 'The publisher model is broken, Kickstarter let's us bypass the retardation of the publisher model and go straight to giving the gamers what they want', 'They want freedom from stupid publishers, let's give it to them.'. There is an ideology behind the project, which lets users distinguish between the 'bad publishing model', and the independent project that they are funding.

We also read thoroughly through the tweets mentioning Obsidian Entertainment or Pillars of Eternity. From our initial sample of 13,942 tweets, we excluded tweets containing links (as the majority of them are promo tweets linking to news websites), tweets in languages other than English, as well as postings by official company's account and accounts of its founders. That limited our sample to 2,243 tweets. Content analysis of the tweets revealed three main topics:

Tweets containing various technical inquiries ('Someone needs to talk to the MTG people and convince them to team up with Obsidian Enter.')

Tweets containing announcements ('Just announced! Tyranny, the epic new RPG from Paradox Interactive and Obsidian Entertainment ! #whatifevilwon'), or discussion of potential news events ('I hope Obsidian Entertainment gets the rights to Fall-out and they make a game (with enough time and resources this time) that outsells FO4.')

Tweets containing personal experiences ('Today is my 1 year anniversary of working at Obsidian Entertainment! It's been a great year! Time definitely flies when you're having fun.', 'Took some time to escape into Obsidian Entertainment's "Tyranny" rpg. It's awesome. (steam)')

While the share of postings appealing to individual identity was nearly equal for Kickstarter and Twitter communication (47% and 48% respectively), the ‘we’-feeling is considerably weaker on Twitter: ‘we-ness’ was expressed in mere three per cent of the tweets in our sample, resulting in a ratio of ‘we’-tweets to ‘I’-tweets of 0.095. In addition, we were not able to identify any shared traditions or rituals. The emotional modality of the tweets is very diverse. Some users express strong positive emotions - ‘*obsidian entertainment BEST F***ING DEVS IN THE WHOLE WORLD*’, while others share very negative experiences - ‘*Obsidian Entertainment has to be the poorest excuse for a game development company ever. Every game they’ve released has been trash.*’. While Kickstarter limits the possibility to comment only to the ones who funded the project, Twitter does not impose any limitations of such type, therefore it seems natural that emotional modality of the comments on Twitter is significantly wider than on Kickstarter.

DISCUSSION

This paper reveals significant differences between the users’ interactions on Twitter and Kickstarter. Not only do users interact with each other significantly more on Kickstarter than on Twitter, they also express a stronger community feeling. The common goal (funding the project) and the feeling of belonging to the same project seem to unify Kickstarter users. We find indication of all three dimensions of community (Muniz & O’Guinn, 2001) such as consciousness of kind, shared slang, and moral responsibility (expressed via ideological preferences towards independent game development) on Kickstarter. On Twitter, on the other hand, users seem to lack communal feeling and strong unifying factors, which is in line with the findings by Arvidson and Caliandro (2015).

Based on our analysis, we suggest that brand communities and brand publics co-exist on the Internet. Indeed, it is possible that communities and publics are but two points on a continuum of consumer collectives.

The important contribution of our analysis is the variations of possible interactions across different online platforms. Some plat-

forms may in fact be a ‘bla-bla land’, but others may facilitate strong community feelings among users. Further research is needed in order to fill in the gaps on the public-community continuum of consumer interactions online as well as observe consumer behavior in other study contexts.

REFERENCES

Arvidsson, A., & Caliandro, A. (2016). Brand public. *Journal of Consumer Research*, 42(5), 727-748.

Belk, R. W. (2013). Extended Self in a Digital World. *Journal of Consumer Research*, 40(3), 477-500.

Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 173-208.

Cova, B. (1997). Community and consumption: Towards a definition of the “linking value” of product or services. *European Journal of Marketing*, 31(3/4), 297-316.

Dolbec, P. Y., & Fischer, E. (2015). Refashioning a field? Connected consumers and institutional dynamics in markets. *Journal of Consumer Research*, 41(6), 1447-1468.

Holt, D. B. (2004). *How Brands Become Icons: The Principles of Cultural Branding*. Boston MA: Harvard Business School Press.

Kozinets, R. V. (1999). E-tribalized marketing?: The strategic implications of virtual communities of consumption. *European Management Journal*, 17(3), 252-264.

Kozinets, R. V., Hemetsberger, A., & Schau, H. J. (2008). The wisdom of consumer crowds: Collective innovation in the age of networked marketing. *Journal of Macromarketing*, 339-354.

Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of marketing*, 71-89.

McQuarrie, E. F., Miller, J., & Phillips, B. J. (2013). The megaphone effect: Taste and audience in fashion blogging. *Journal of Consumer Research*, 40(1), 136-158.

Table 1: Summary of Results

Obsidian Entertainment, Project Eternity	Kickstarter	Twitter
Interaction dimension	- Share of backer-to-backer (consumer-to-consumer) comments: 48%	- Share of tweets addressing someone other than official Obsidian account (consumer-to-consumer postings): 28%
	Generally, Twitter users interact with each other significantly less than Kickstarter users.	
Identity dimension	- Existence of We-feeling ‘We’-postings to ‘I’-postings ratio: 0.322 47 % of all posts used first person singular pronouns 15 % of all posts used first person plural pronouns - observable usage of common slang (‘Shut up and take my money’ used more than 175 times) - moral responsibility (expressed via ideological preferences towards independent game developing)	- Lack of we-feeling ‘We’-postings to ‘I’-postings ratio: 0.072 48 % of all posts used first person singular pronouns 3 % of all posts used first person plural pronouns - no common slang or shared rituals - no shared understanding of moral responsibility expressed
	Kickstarter users seem to be unified by the existence of common goal (funding the project). They use significantly more we-postings than Twitter users, share common slang and express shared ideological preferences. Tweets, on the other hand, do not merge into a coherent discussion.	

418 / Web 2.0: Online Communities or Bla-Bla Land?

Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412-432.

Muniz, A. M., & Schau, H. J. (2005). Religiosity in the Abandoned Apple Newton Brand Community. *Journal of Consumer Research*, 31(4), 737-747.

Scaraboto, D. & Fisher, E. (2013). Frustrated fatshionistas: An institutional theory perspective on consumer quests for greater choice in mainstream markets. *Journal of Consumer Research*, 39(6), 1234-1257.

Schwienbacher, A., & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. *SSRN Electronic Journal* .

Sustaining Behavioural Change: The Power of Positive Emotions

H.P. Samantha Gallage, Nottingham University, UK

Teresa Heath, Nottingham University, UK

Caroline Tynan, Nottingham University, UK

INTRODUCTION

This study explores emotions experienced by consumers who give up excessive drinking and considers how these emotions help consumers to sustain their healthy consumption behaviours. Current studies mostly focus on *changing* risky consumption behaviours (excessive drinking, smoking and gambling), rather than *sustaining* the positive behavioural change, which is a key challenge for consumers (Peattie and Peattie 2009; Scammon et al. 2011). Negative emotional appeals such as guilt and fear have been widely used to discourage these unhealthy consumption behaviours (Antonetti, Baines, and Walker 2015; De Hoog, Stroebe, and de Wit 2007). However, negative emotional appeals can encourage maladaptive responses that could be damaging for healthy behaviour (Hastings, Stead, and Webb 2004) and some authors urge the use of positive emotions such as hope, love, and excitement to *sustain* a behavioural change (Peter and Honea 2012). Yet, we know little about positive emotions experienced by consumers who transit from a risky behaviour to a less risky behaviour (Fry 2014) and how these emotions may help them to sustain this change. As this study demonstrates, these emotions can be fundamental in the process of achieving and sustaining responsible drinking behaviour.

THEORETICAL BACKGROUND

Alcohol has consistently been promoted through fun and excitement (Smith and Foxcroft 2009), which has made excessive drinking common amongst young people in the UK (Hackley et al. 2013; Measham and Brain 2005). Thus, alcohol is embedded in the culture of the UK (Piacentini and Banister 2006) and thereby young people are “invited to binge” (Haydock 2015, 1057). Countering this dominant practice is challenging for individuals because it can lead to their stigmatisation (Piacentini and Banister 2006) or exclusion (Cherrier and Gurrieri 2013). While this was found to cause negative emotions such as tension, shame (Piacentini, Chatzidakis, and Banister 2012), stress and agony (Fry 2014), the positive emotions that emerge while opposing dominant consumption practices have been neglected. Nevertheless, resisting overconsumption can lead to happiness (Cherrier 2009) and life satisfaction (Boujbel and D’Astous 2012). Peter and Honea (2012) also suggested that positive emotions associated with optimism are a key driver for sustaining a pro-social behaviour.

Alcohol consumption as a symbolic act (Szmigin et al. 2011) helps define young drinkers’ self- and social identities, and their behaviour (Fry 2010; Piacentini et al. 2012). In these circumstances, for individuals to alter and sustain responsible alcohol consuming practices they need to change their social roles and social groups (Piacentini et al. 2012) and develop a new identity contrary to the dominant culture (Fry 2014). According to theories of social identity (Tajfel and Turner 1986) and self-identity (Stryker 1968) these new identities require recognition and validation from others. Success or failure in enacting a new identity may cause strong emotional reactions (Stets and Burke 2014). Thus, gaining validation for an identity or meeting one’s identity expectations produces positive emotions and failure to do so produces negative emotions (Turner and Stets 2005). Therefore, in this situation positive emotions emerge when individuals are able to validate their *sober self* (Cast and Burke 2002) or/and when individuals are able to achieve a match between an *ideal*

sober self with the *actual performance of the self* (Turner and Stets 2005). Positive emotions linked to the sober identity strengthens the commitment towards that identity (Stryker 1980), which will aid in sustaining the behavioural change.

METHODOLOGY

We adapted a narrative methodology which is suited to deep exploration of: context-specific consumption (Shankar, Elliott, and Goulding 2001), such as drinking alcohol; turning points in life (Barrios, Piacentini, and Salciuviene 2012); and identity-related concepts (Ricoeur 2002). Data was collected using narrative interviews (Fry 2010; Szmigin et al. 2008) with 25 self-reported ex-binge drinkers who had given up excessive drinking for 6 months or more (Peter and Honea 2012). Taking the view that reality is socially constructed (Hudson and Ozanne 1988), we let participants elaborate on the construction of their emotions (Shankar et al. 2001) when countering the UK heavy-drinking culture. Participants were aged 19-35 and interviews lasted 90-150 minutes. In order to enrich narratives and obtain insights about emotional changes (Tennen, Suls, and Affleck 1991), an event-based online diary was also used. The 25 interviewees were asked to note their alcohol-related experiences and associated emotions, over a period of 8 weeks (Burton and Nesbit 2015). We conducted a thematic analysis of the data (Davis and Francis 2014). After gaining a grasp of the overall shape of the data (Riessman 2008), we coded it using NVivo 11 (Ryan and Bernard 2003; Spiggle 1994). Codes were guided by identity theories, and the emotions literature (Miles and Huberman 1994). Some categories emerged from the data itself (Miles and Huberman 1994). Finally, the themes were discussed and modified by the three researchers until reaching a consensus (Price, Arnould, and Curasi 2000).

ANALYSIS AND DISCUSSION

This section explains emotions experienced by individuals who give up excessive drinking. Participants experienced emotions that are complex and sometimes “bittersweet” (Price et al. 2000, 186). In most cases, happiness and pride were prominent. These emotions were described as enduring or self-fulfilling and enabled participants to overcome negative emotions such as sadness, loneliness and nostalgia. Equally, feelings of hope and relief about their “new”, “better” selves were intertwined with embarrassment, shame and guilt about their past drinking selves. As our participants indicate, the positive emotions experienced helped them to maintain their new sober, or responsible drinking, behaviour.

Self-Fulfilling Happiness as Opposed to Temporary Enjoyment

Most of our participants reported experiencing happiness as a result of quitting excessive alcohol consumption. Mogilner, Aaker, and Kamvar (2012) suggested that happiness can be twofold: on the one hand associated with excitement, elation and enthusiasm; and on the other with calmness, peacefulness and serenity. Our participants’ experiences seem to be of the latter type; for example, Jacob says:

I think I am definitely happy now. Hmmm I feel that I am wasting less time because of being hungover. (...) I guess if you see on social media you see pictures of people that post when they

are on night outs. Then you might think that “ohh my God they are having fun”. But I know that if I really want to, then I could organise something like that easily. So I would say **that looking forward to different things and looking forward to spending time with people you love is better**. Also, whenever I am trying to be **mindful**, try and do some **meditation or something like that** I try and focus on **how my body is feeling** and I know if I drink alcohol my body doesn't **feel healthier** and it **doesn't feel good** as it does.

(Jacob, 22 years old, responsible drinker, *Interview data*)

Jacob's experience of happiness is one of contentment and tranquillity rather than excitement and fun. He compares his current “healthier”, more responsible and mindful self favourably with his previous “hangover” self. This agrees with identity theorists who describe happiness as an outcome of evaluating one's current state in relation to an earlier state or to some reference group (Stets and Trettevik 2016). Although he may feel loss for the fun he is missing with others, Jacob is focused on enjoying new things and the company of loved ones. Jacob's new reflective and mindful persona makes him feel better and more in control, which is instrumental in sustaining his new self, as this diary entry also indicates:

*Day out to socialise with friends and attend a **football match**. Alcohol was involved as **drinking was a social thing** to do before the match began (...) I was part of a large crowd of people who were drinking. I made sure I did not drink ‘too much’ alcohol and stayed within my limits. **I felt calm, happy and in control for the whole situation**.*

(Jacob, 22 years old, responsible drinker, *Diary data 7th week*)

Becoming a responsible drinker is challenging and like Jacob, other participants experienced negative emotions when confronted with what they were missing. However, participants' contentment about their new lives and selves acts as a powerful driver to maintain their behaviour (Peter and Honea 2012) and cope with these negative emotions:

*I have my friends and I see them on **Facebook**, my friends were **going out and having great fun** when I was at home eating lettuce so that made me feel **really, really sad**. I wasn't being sociable. (...) But (...) on the other hand **I see it as better**. I feel a lot **healthier** and a lot **happy**. It's a different feeling.*

(Kim, 23 years old, responsible drinker, *Interview data*)

Similarly, many other participants experienced this self-fulfilling happiness associated with being able to spend time with people they loved (Benjamin 30, Jeremy 28, Gerard, 23), being in control (Alicia 23, Charles 30, Lizzie, 25), saving money and time (Bella 25), not making situations unpleasant (Jeremy 28, Max 35) and living more healthily (Andrew 27, Jeremy 28, Kim 23).

I am Proud because I am a Better Person

Participants' happiness with their new selves was linked to pride, a positive emotion associated with a sense of achievement and self-esteem (Brown and Marshall 2001). According to self-identity theory, validation of an identity produces feelings of competence and increased self-esteem (Cast and Burke 2002). As our participants achieved and confirmed their “responsible drinker” or “sober” identity goals, they experienced pride. This confirmation comes partly from their self-evaluation wherein they compared their drinking-self (and behaviour) with their sober-self (Tracy and Robins 2004). Im-

portantly, however, this confirmation also arises from the responses from significant others, as Kim's account illustrates:

*I think actually everybody now sees me as a **pillar of society** (laughs) if you know what I mean. I know my **grandparents, my parents are so proud of me**. (...) I would say I am a healthy 23 year old who **isn't alcoholic and nobody abuses**. I think they see me now as “**well done**”. I think even my **friends look up to me**. I think my friends are still at the university and I think they think like “Oh wow she is doing well and **she is an adult!**” “Doesn't drink much” (...) sometimes when they are laying in the floor. I am like “it's ok. They will grow up” (laughs) so I think they **see me not as equal anymore***

(Kim, 23 years old, responsible drinker, *Interview data*)

Kim's new, sober self is a “superior” and “successful adult” whom “no one abuses” as opposed to her friends “who are laying in the floor” and need to “grow up”. Similarly, many participants were proud because they have “matured” (Lisa 20, Gerard 23, Miriam 19, Yara 23), have “will-power” (Bella 25, Jacob 22, Susan 25, Yara 23, Jeremy 28), are “confident” (Alicia 23) and “successful” (Carmel 25, Lilly 25).

While feeling proud of their current selves, several participants also felt guilt and regret for their former excessive drinking selves. Interestingly, some were able to find a silver lining (Gilovich and Medvec 1995), resulting from having grown-up with the experience:

*I wouldn't be **the same character and like resilient personality** if I haven't been into so much shit on myself. It definitely made me I think like more of a like **confident and like vocal person**.*

(Carmel, 25 years old, responsible drinker, *Interview data*)

In this way participants can find valuable meaning in their experiences, which helps them to overcome negative emotions associated with their previous drinking selves. Similarly, many participants said they were hopeful about the future because of the life lessons they learnt. These and other participants' enhanced feelings of self-worth or pride seem to be a determinant in sustaining their responsible drinking behaviour even when they could have been tempted to do otherwise:

*[I] went to a wedding of two friends. I felt **comfortable**. People around me were drinking more than I was. **But it didn't bother me**. The glass of wine felt right to toast ...**I felt proud of myself for sticking to the one glass**. (...) They were surprised. I would not abuse the alcohol and nor did I feel that I would want more after drinking just the glass. I felt like I was a **stronger person and a brave person** (...) I have a **healthy life style now unlike others***

(Alicia, 23 years old, responsible drinker, *diary data 3rd week*)

Alicia constructs herself as “heroic” because of her ability to oppose widely shared consumption practices and as “different” due to the healthy lifestyle. Her pride helps her foster “good” behaviour while hindering “wrong” behaviour (Gregory-Smith, Smith, and Winklhofer 2013). Similarly, many participants who were unable to get validation of their new, sober identities from dominant, drinking groups, developed a sense of self-worth and pride through lifestyle and behavioural changes and sustained their responsible consumption.

GENERAL DISCUSSION AND IMPLICATIONS

“Sober identity” validation in the UK can be challenging because individuals are countering a dominant consumption practice i.e. excessive drinking (Fry 2014; Piacentini and Banister 2006). Literature on identity tells us that in such a situation negative emotions could emerge (Stets 2004). In the process of becoming abstainers or responsible drinkers, participants experienced ambivalent emotions about their sober decision (Otnes, Lowrey, and Shrum 1997). However, for most of them positive emotions such as happiness, pride and hope worked as a “repairing strategy” to overcome negative feelings (Zeelenberg and Pieters 2007) emerging from the perceived losses of fun, company or excitement in participants’ lives. That is, participants felt content with their more mature, wiser, respected and healthier selves. Importantly, these positive emotions emerged as a result of individuals’ perceived “superiority” over their previous selves and drinking friends. These positive emotions worked as a defence mechanism to sustain their sobriety or responsible drinking. This supports the argument of Peter and Honea (2012) that positive emotions are key to maintaining pro-social behaviours.

Theoretically, this paper elaborates on the power of positive emotions to *sustain* healthy consumption choices, especially when the choices are contrary to dominant practices. Secondly, explaining emotions in light of identity theories provides a new perspective for consumer researchers to understand the intertwined nature of identity and emotions. This study also provides implications for social marketing practitioners and policy makers interested in maintaining a positive behavioural change. Specifically, we suggest that social marketing campaigns using positive emotions associated with “achiever” or “heroic” sober selves, who are able to defeat the dominant drinking culture, could more effectively maintain healthy behaviours than merely using negative emotions such as fear, fear and sadness.

LIMITATIONS AND FUTURE RESEARCH

These findings can be used to inform future studies examining the sustainability of other healthy consumption choices, such as healthy eating, non-smoking, weight loss, and physical activities. Equally, future studies could explore in greater depth the identity negotiations associated with the emotions that individuals experience while adopting healthy consumption practices. This study was limited to a particular age group in the UK and we relied on self-reported accounts of participants. Further research into a broader population, employing a quantitative approach could provide an interesting extension of evidence.

REFERENCES

- Antonetti, Paolo, Paul Baines, and Lorna Walker (2015), “From elicitation to consumption: assessing the longitudinal effectiveness of negative emotional appeals in social marketing,” *Journal of Marketing Management*, 31(9-10), 940-969.
- Barrios, Andrés, Maria G. Piacentini, and Laura Salciuviene (2012), “‘Your Life When You’ve Got Everything is Different’: Forced Transformations and Consumption Practices,” *Research in Consumer Behavior*, 14(1), 129-149.
- Boujbel, Lilia and Alain d’Astous (2012), “Voluntary simplicity and life satisfaction: Exploring the mediating role of consumption desires,” *Journal of Consumer Behaviour*, 11(6), 487-494.
- Brown, Jonathon D. and Margaret A. Marshall (2001), “Self-esteem and emotion: Some thoughts about feelings,” *Personality and Social Psychology Bulletin*, 27(5), 575-584.
- Burton, Suzan and Paul Nesbit (2015), “Capturing experiences as they happen: diary data collection for social marketing,” *Journal of Social Marketing*, 5(4), 307-323.
- Cast, Alicia D. and Peter J. Burke (2002), “Theory of self-esteem,” *Social Forces*, 80(3), 1041-1068.
- Cherrier, Hélène (2009), “Anti-consumption Discourses and Consumer-resistant Identities,” *Journal of Business Research*, 62(2), 181-190.
- Cherrier, Hélène and Lauren Gurrieri (2013), “Anti-consumption Choices Performed in a Drinking Culture Normative Struggles and Repairs,” *Journal of Macromarketing*, 33(3), 232-244.
- Davis, Teresa and Julie E. Francis. (2014), “The young consumer-citizen: Nationhood and environmentalism in children’s identity narratives,” *Marketing Theory*, 14(4), 417-429.
- De Hoog, Natascha, Wolfgang Stroebe, and John B.F. de Wit (2007), “The impact of vulnerability to and severity of a health risk on processing and acceptance of fear-arousing communications: A meta-analysis,” *Review of General Psychology*, 11(3), 258-285.
- Fry, Marie-Louise (2010), “Countering consumption in a culture of intoxication,” *Journal of Marketing Management*, 26(13-14), 1279-1294.
- Fry, Marie-Louise (2014), “Rethinking social marketing: Towards a sociality of consumption,” *Journal of Social Marketing*, 4(3), 210-222.
- Gilovich, Thomas and Victoria Husted Medvec (1995), “The experience of regret: what, when, and why,” *Psychological Review*, 102(2), 379-395.
- Gregory-Smith, Diana, Andrew Smith, and Heidi Winklhofer (2013), “Emotions and dissonance in ‘ethical’ consumption choices,” *Journal of Marketing Management*, 29(11-12), 1201-1223.
- Hackley, Chris, Andrew Bengry-Howell, Christine Griffin, Willm Mistral, Isabelle Szmigin, and Rungpaka Amy Hackley née Tiwsaku (2013), “Young Adults and ‘binge’ Drinking: A Bakhtinian Analysis,” *Journal of Marketing Management*, 29(7-8), 933-949.
- Hastings, Gerard, Martine Stead, and John Webb (2004), “Fear appeals in social marketing: Strategic and ethical reasons for concern,” *Psychology & Marketing*, 21(11), 961-986.
- Haydock, William (2015), “The consumption, production and regulation of alcohol in the UK: The relevance of the ambivalence of the carnivalesque,” *Sociology*, 50(6) 1056-1071.
- Hudson, Laurel Anderson and Julie L. Ozanne (1988), “Alternative ways of seeking knowledge in consumer research,” *Journal of Consumer Research*, 14(4), 508-521.
- Measham, Fiona and Kevin Brain (2005), “‘Binge’ drinking, British alcohol policy and the new culture of intoxication,” *Crime, media, culture*, 1(3), 262-283.
- Miles, Matthew B. and A. Michael Huberman (1994), *Qualitative data analysis: An expanded sourcebook*. London, Sage.
- Mogilner, Cassie, Jennifer Aaker, and Sepandar D. Kamvar (2012), “How happiness affects choice,” *Journal of Consumer Research*, 39(2), 429-443.
- Otnes, Cele, Tina M. Lowrey, and L. J. Shrum (1997), “Toward an understanding of consumer ambivalence,” *Journal of Consumer Research*, 24(1), 80-93.
- Peattie, Ken and Sue Peattie (2009), “Social marketing: A pathway to consumption reduction?” *Journal of Business Research*, 62(2), 260-268.

- Peter, Paula C. and Heather Honea (2012), "Targeting social messages with emotions of change: The call for optimism," *Journal of Public Policy & Marketing*, 31(2), 269-283.
- Piacentini, Maria G. and Emma N. Banister (2006), "Getting hammered? Students coping with alcohol," *Journal of Consumer Behaviour*, 5(2), 145-156.
- Piacentini, Maria G., Andreas Chatzidakis, and Emma N. Banister (2012), "Making sense of drinking: the role of techniques of neutralisation and counter-neutralisation in negotiating alcohol consumption," *Sociology of Health & Illness*, 34(6), 841-857.
- Price, Linda L., Eric J. Arnould, and Carolyn Folkman Curasi (2000), "Older consumers' disposition of special possessions," *Journal of Consumer Research*, 27(2), 179-201.
- Ricoeur, Paul. (2002). "Narrative time," in ed. Richardson, Brian. *Narrative Dynamics: Essays on time, plot, closure, and frames*, Ohio State University: Columbus, 35-47.
- Riessman, Catherine Kohler (2008), *Narrative Methods for the Human Sciences*, London, Sage.
- Ryan, Gery W. and H. Russell Bernard (2003), "Techniques to identify themes," *Field Methods*, 15(1), 85-109.
- Scammon, Debra L., Punam A. Keller, Pia A. Albinsson, Shalini Bahl, Jesse R. Catlin, Kelly L. Haws, Jeremy Kees, Tracey King, Elizabeth Gelfand Miller, Ann M. Mirabito, Paula C. Peter, and Robert M. Schindler (2011), "Transforming consumer health," *Journal of Public Policy & Marketing*, 30(1), 14-22.
- Shankar, Avi, Richard Elliott, and Christina Goulding (2001), "Understanding consumption: Contributions from a narrative perspective," *Journal of Marketing Management*, 17(3-4), 429-453.
- Smith, Lesley A. and David R. Foxcroft (2009), "The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies," *BMC Public Health*, 9(1), 51-62.
- Spiggle, Susan (1994), "Analysis and interpretation of qualitative data in consumer research," *Journal of Consumer Research*, 21(3), 491-503.
- Stets, Jan E. (2004). "Emotions in identity theory: The effect of status," in *Theory and research on human emotions*. Emerald Group Publishing Limited, 51-76.
- Stets, Jan E. and Peter J. Burke (2014), "Emotions and identity nonverification," *Social Psychology Quarterly*, 77(4), 387-410.
- Stets, Jan E. and Ryan Trettevik (2016), "Happiness and Identities," *Social Science Research*, 58, pp. 1-13.
- Stryker, Sheldon (1980), *Symbolic Interactionism: A Social Structural Version*, Menlo Park, CA: Benjamin Cummings.
- Stryker, Sheldon (1968), "Identity Salience and Role Performance," *Journal of Marriage and the Family*, 4 (November), 558-64.
- Szmigin, Isabelle, Andrew Bengry-Howell, Christine Griffin, Chris Hackley, and Willm Mistral (2011), "Social marketing, individual responsibility and the "culture of intoxication"," *European Journal of Marketing*, 45 (5), 759-779.
- Szmigin, Isabelle, Christine Griffin, Willm Mistral, Andrew Bengry-Howell, Louise Weale, and Chris Hackley (2008), "Re-framing 'binge drinking' as calculated hedonism: Empirical evidence from the UK," *International Journal of Drug Policy*, 19(5), 359-366.
- Tajfel, Henri and John C. Turner. (1986), "The Social Identity Theory of Intergroup Behavior," in ed. Worchel S, Austin W. *Psychology of intergroup relations*, Chicago: Nelson-Hall, 7-24.
- Tennen, Howard, Jerry Suls, and Glenn Affleck (1991), "Personality and daily experience: The promise and the challenge," *Journal of Personality*, 59(3), 313-337.
- Tracy, Jessica L. and Richard W. Robins (2004), "Putting the Self into Self-Conscious Emotions: A Theoretical Model," *Psychological Inquiry*, 15(2), 103-125.
- Turner, Jonathan H. and Jan E. Stets (2005), *The sociology of emotions*, Cambridge. Cambridge University Press.
- Zeelenberg, Marcel and Rik Pieters (2007), "A theory of regret regulation 1.0," *Journal of Consumer Psychology*, 17(1), 3-18.

“Mirror Mirror on the Wall, Who is Real of Them All?” – The Role of Augmented Self, Expertise and Personalisation in the Experience with Augmented Reality Mirror

Ana Javornik, Newcastle University, UK

Marta Pizzetti, Università della Svizzera italiana, Switzerland

INTRODUCTION

Augmented reality (AR) sets itself apart from other interactive technologies in that it overlays physical environment with virtual annotations in real-time, meaning that they react to the user's movements as if really existing in the physical environment. In the heterogeneous class of AR devices and applications (Scholz and Smith 2016), AR mirrors with front-facing cameras are especially on the rise as they represent the most advanced version of virtual try-on in terms of real-time fit. As if seeing herself in the mirror, the user views her image on the screen, which appears modified with virtual representations of products (Javornik 2016). Such technology represents an elegant solution for trying on more products in comparison to physical testers or products. Due to the immediacy of how the virtual products appear and disappear from one's image, the consumer can explore more choices with minimum effort (Kim and Forsythe 2008). Given that the AR try-on directly modifies one's image in the mirror, it is important to understand how consumers perceive such augmented images, how they relate to the products that constitute such augmentation and, finally, what the resulting behavioural intentions are.

The present research aims to fill this knowledge gap by investigating the effect of AR try-on on the level of self, the product and the behavioural intentions. Two experimental designs compare different forms of AR in order to investigate the effects of such technology on the different levels of the experience (i.e. the self, the product and the intentions), but also to shed light on the most effective way of using AR.

THEORETICAL FRAMEWORK

Digital and virtual technologies were shown to have an effect on the self (Schau and Gilly 2003; Siddiqui and Turley 2006; Sheth and Solomon 2014). Following the idea of “extended self” (Belk 1988; Belk 2013) and “malleable self” (Aaker 1999), Jin (2012, 2161) proposed the concept “virtual self” which refers to “the technology-mediated self simulated in virtual environments”. When creating virtual avatars, users in her study felt a stronger self-connection with those avatars that represented their ideal self than with the avatars that represented their actual self (Jin 2012). What happens when the users see such an enhanced version of the self not only on the screen, but superimposed on their own image in a mirror? Does the consumer create a closer connection to the augmented image when she feels that such augmentation represents an enhanced or improved self?

Unlike in virtual reality, in AR augmentation happens in real-time; the virtual annotations are overlaid directly onto the face; and the fusion of the self and the image is much more realistic (Azuma et al. 2001). With virtual try-on mirrors, the virtual elements are embedded seamlessly as part of the mirrored image and thus appear as a realistic part of the self. Given such superimposition, we expect that the *virtual augmentation of the self in the AR mirror* and the *perception of such virtual augmentation* allow for an emergence of an *augmented self* that we define as *a modified perception of the self that is based on an augmented representation*.

However, we expect that the augmented self can appear only under specific conditions. First, following the line of research that examines the relationship part-whole in consumer behavior literature (Labroo, Dahr and Schwarz 2008), it should be easier for consumers to appreciate the virtual products when they appear in the context

of a holistic augmented image (where multiple virtual annotations appear in unison) in contrast to seeing a partial augmentation (where only one part of the image is overlaid with virtual augmentation). Both Gestalt theory (Schiffman 2001) and conceptual fluency (Lee and Labroo 2004) underline the importance of the additional cues and context that allow a user to process and relate to a particular part. In the context of AR, a product would be perceived more as a part of the “augmented self” when additional augmentation cues are offered. It would mean that a holistic augmentation, which superimposes elements on the whole image, has a stronger effect on the perception of the self, compared to a tool that superimposes virtual annotations only over a small part of the image. More formally:

Hypothesis 1: Holistic (vs. partial) augmentation of the self significantly impacts the perception of the self.

The second condition for such enhanced self-perception relates to the personalization of the augmentation. The literature on personalization established that creating a product increases the perception of uniqueness, but also allows the consumer to better express her desires compared to standardized, mass-produced products (Franke et al. 2009). We can then expect that, when a consumer can personalize the augmentation, meaning that she can modify the elements superimposed on the mirrored image, she can find a look that better matches the desired image, resulting in a greater perception of augmented self. However, the level of subjective knowledge or expertise is crucial in the process: previous studies have shown that those with higher level of expertise prefer to have more options to customize the look (Randall et al. 2007; Moreau et al. 2011; Javornik et al. 2017). Thus, we might expect that AR would be more impactful in terms of increasing self-perceptions when the users are able to personalise it.

Hypothesis 2: Personalising holistic augmentation (vs. not personalising) leads to a more positive perception of self when the consumers are knowledgeable about the products that constitute the augmentation.

Another important issue is how the real products are perceived in this process. As the virtual enhancement is a visual representation of actual products, we hypothesize that when a positive perception of the enhanced self is established, this perception will relate not only to the mirrored augmented image of the self, but would also transfer to the products, as the augmentation is effectively a result of the virtual products. The augmented self is an outcome of virtual simulation of products and thus the self-perception that results from viewing the (holistic) augmented self would be associated with those products. Peck and Shu (2009) show that mental imagery can generate a sense of ownership over a product even if the product is not available to touch. Moreover, literature on psychological ownership suggests a positive relation between psychological ownership and behavioural intentions (Jussila et al. 2015).

We thus postulate that when an AR mirror displays a simulation of how such products would look on one's face and when such a simulation increases one's self-perception, this would lead to greater psychological ownership of the products, which would further impact the purchase intentions.

Hypothesis 3: Effects of holistic (vs. partial) augmentation on the intentions to purchase the visualized products are mediated by self-perception and then psychological ownership (H3a), especially when the augmentation is personalized (H3b).

METHODOLOGY

We conducted two experimental lab studies with a make-up virtual try-on. The application was created especially for the aim of this research in collaboration with an agency specializing in AR. As make-up is predominantly a female product category, the participants were female only. They were under- and post-graduate students recruited from a British university pool, between 18 and 29 years old and they received a small monetary incentive.

In both experiments, respondents completed a questionnaire, answering questions before and after the task. Their task was to find a lipstick (Study 1) or a full make-up look (Study 2) that they liked best and they thought fitted them the most. After the task, the self-perception, psychological ownership (6 items from Fuchs et al. (2010)) and purchase intention (2 items from Li and Meshkova (2013)) were assessed. Self-esteem was used as a proxy for self-perception, given that self-esteem is conceptualized as one of the main dimensions of the self concept (Sirgy 1982). Self-esteem was measured with 6 items from Heatherton and Polivy (1991) and assessed before (T1) and after (T2) the task in order to verify potential differences between groups prior to the experiment (T1) and its variation after. All the measurement items were on a 7-Likert scale and Cronbach alphas are reported in Table 1.

STUDY 1

Study 1 tested H1 and H3a in a single factor between-subject design (AR: holistic vs. partial) that involved 51 participants, randomly assigned to the conditions.

AR was manipulated by simulating more (vs. less) superimposed objects on the face of the participant. Specifically, in the holistic condition a complete AR make-up look (set in advance with mascara, foundation, eyeshadow, blush and eyeliner) was virtually overlaid on participants' face while choosing the lipstick, which was also virtually overlaid. Participants in the partial condition had their faces overlaid only with virtual lipstick with no other virtual make-up available.

Findings

The participants in the two groups did not have different self-esteem at T1, but a significant difference was found at T2 with participants reporting higher self-esteem for holistic AR. Moreover, in the holistic augmentation the participants experienced greater psychological ownership compared to those who tried only the lipstick, although purchase intentions did not differ. Means, standard deviations and ANOVA indexes are reported in Table 1.

In order to maintain the same condition, the participants in the holistic augmentation group needed to be exposed to the same look. We tried to design the look to be neutral (i.e. avoiding excessive features). Nevertheless, the suitability of a full make-up can still vary depending on the facial features and personal taste (e.g. the foundation could appear more or less fitting depending on the skin tone). We accounted for the different attitudes towards the make-up look superimposed by asking users to rate the make-up look (without the lipstick) on a Likert scale from 1 (do not like at all) to 7 (like very much). As 6% of the participants did not like the look, we excluded them from the analyses, as the dislike could have potentially affect their experience.

Within this subset of participants (N=48), the analyses revealed significantly higher self-esteem (T2), psychological ownership and purchase intention for the holistic condition. Moreover, a bootstrapping mediation analysis with 5,000 resamples (Model 6; Hayes, 2012) showed that self-esteem at T2 and psychological ownership mediated the relationship between AR and intention to purchase.

The results provided preliminary evidence for the effect of AR on the perception of the self. Specifically, they suggest that a holistic augmentation provides a more powerful experience in terms of positive self-perception in comparison to a partial augmentation. The higher self-esteem is associated with psychological ownership, which mediates the effects on the intention to purchase. The mediation showed significant indirect effects, indicating a fully mediated relationship (Hayes 2009; Zhao et al. 2010).

We now further explored if the augmented self differed across various types of holistic augmentation, also because the suitability of the full make-up appeared crucial for the experience.

STUDY 2

A 2 (holistic AR: personalised vs. not-personalised) x 2 (make-up expertise: high vs. low) between-subjects design was conducted involving 97 participants. In all the conditions, AR was holistic, meaning that a complete look was superimposed (i.e. the look included mascara, foundation, eyeshadow, blush and eyeliner), but the holistic AR experience differed between conditions to allow greater (vs. lower) look personalisation. Specifically, in the personalised condition, the participants created their own looks by deciding within a wide range of available virtual lipstick, foundation, eyeshadow, eyeliner, mascara and blush. In the non-personalised condition, the participants could select among 13 pre-designed looks that were set in advances by the researchers. They included make-up from the same categories that were available in the personalised condition. These pre-defined looks were composed in a manner that they offered a variety of colours, strength of effect (subtle vs. strong look) and a combination of products. Make-up artists and brands like Charlotte Tilbury and Rimmel offer virtual try-on of signature looks, thus we deemed the approach reflected a realistic practice. We also measured participants' subjective knowledge in order to take into account how much they perceived themselves to be experts about this product category. It was assessed with 9 items on a 7-point Likert scale (adapted from Flynn and Goldsmith (1999)). The participants were divided into the groups of high and low subjective knowledge by median split (median = 4.44).

Findings

Self-esteem at T1 did not differ across the four conditions, while a significant interaction effect was found at T2: expert participants in the personalised condition reported the highest scores of self-esteem ($F = 5.696, p < .05$). However, we did not find a significant effect of the two factors on psychological ownership and purchase intentions.

We now examined only the experts' responses (N=50). Although we did not find a variation in terms of psychological ownership and purchase intention across the two holistic AR conditions, we found that the relationship between AR and purchase intention is fully mediated by self-esteem (T2) and psychological ownership as in Study 1.

The results of Study 2 thus offer an additional support to the findings of Study 1, confirming the mediating role of self-esteem and psychological ownership between AR and intention to purchase - when the AR user possessed a high expertise (supporting H3b). Moreover, the self-esteem is higher for expert users when they personalised the make-up as opposed to those expert users that didn't (supporting H2).

Table 1: Means and standard deviations, ANOVA and mediation indexes for Study 1 and 2

Study 1									
	Total sample (N=51)		Subsample: those who like the look (N=48)		Scale reliability	Mediation (N= 48)			
	Partial	Holistic	Partial	Holistic		Path	b	sig	
Self-esteem T1	4.72(1.08)	5.15(.97)	4.72(1.08)	5.17(.91)	α =.902	AR → self-esteem T2	.78	p <.05	
	F = 2.204 p >.05		F = 2.424 p > .05			Self-esteem T2 → Psychological Ownership	.35	p <.05	
Self-esteem T2	4.75(1.34)	5.43(1.02)	4.75(1.34)	5.53(.91)	α =.949	Psychological ownership → purchase intention	3.19	p <.01	
	F = 4.243 p <.05		F = 7.332 p <.05			AR → Purchase intention	.34	p >.05	
Psychological ownership	4.51 (1.24)	5.17(.99)	4.51 (1.24)	5.17(1.01)	α =.898	AR → Self-esteem T2 → Psy. Ownership → Purchase intention	.09	p <.05	
	F = 4.502 p <.05		F = 4.059 p <.05			.02 <95%CI <.30			
Purchase intention	5.50(1.01)	5.75(1.28)	5.50(1.01)	6.09(.67)	α =.764				
F = .595 p >.05		F = 5.531 p <.05							
Study 2									
	Not-personalized (N=44)		Personalized (N=53)		Scale reliability	Mediation (experts only, N=50)			
	Expert	Non-expert	Expert	Non-expert		Path	b	sig	
Self-esteem T1 (total sample N=97)	4.53(1.47)	4.67(1.30)	5.31(.86)	4.73(.88)	α =.908	AR → self-esteem T2	.83	p <.05	
	Main effect AR F=3.316 p >.05; Main effect expertise F=.870 p >.05; Interaction F = 2.339 p >.05					Self-esteem T2 → Psychological Ownership	.35	p <.05	
Self-esteem T2 (total sample N=97)	4.84(1.54)	4.93(1.45)	5.67(.86)	4.71 (.93)	α =.926	Psychological ownership → purchase intention	.57	p <.001	
	Main effect AR F=1.555 p >.05; Main effect expertise F= 3.063 p >.05; Interaction F = 4.525 p <.05					AR → Purchase intention	-.14	p >.05	
Psychological ownership (total sample)	4.75(1.57)	4.73(1.11)	5.49(1.27)	4.92(1.26)	α =.898	AR → Self-esteem T2 → Psy. Ownership → Purchase intention	.16	p <.05	
	Main effect AR F=1.061 p >.05; Main effect expertise F=3.038 p >.05; Interaction F = 1.254 p >.05								

GENERAL DISCUSSION

The two experiments provide evidence that when the AR tool superimposes a holistic, instead of partial, augmentation and consequently creates an impression of a more complete simulation, this strongly affects how consumers perceive themselves (their self-esteem increases) and the product (they experience a stronger psychological ownership of a product). Such a change in the self perception offers a preliminary support for the idea that using AR allows for the emergence of the augmented self. Consequently, a relationship is established also with the products that were visualized as part of such

augmented self. Positive appreciation of such augmented representation is, importantly, indispensable to this phenomenon. In Study 1 the effects were significant only if consumers liked the holistic look.

Furthermore, Study 2 showed that a holistic augmentation was particularly effective for the emergence of the augmented self when it allowed the consumer to personalise the experience. Such personalisation increased self-esteem compared to the holistic AR where the looks were pre-defined. However, the role of expertise in personalisation of AR looks appeared crucial for understanding the effects of augmented self on psychological ownership and purchase inten-

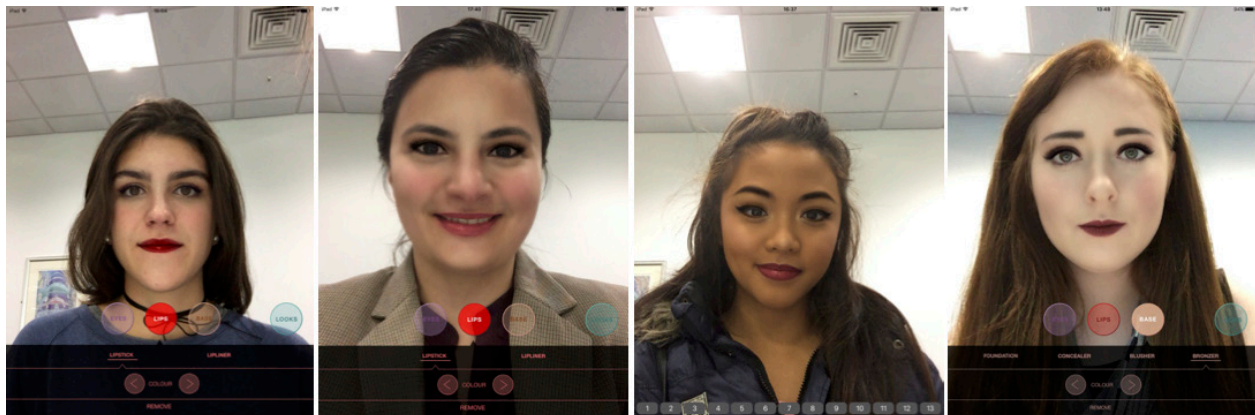


Figure 1: Participants from the two studies:

- 1) trying only the lipstick in partial augmentation condition in Study 1 (extreme left),
- 2) trying the lipstick while generic holistic make-up is also visualized on the face in holistic augmentation condition in Study 1 (middle left);
- 3) choosing between 13 pre-designed looks in Study 2 (middle right);
- 4) customizing a complete look in Study 2 (extreme right)

tions. Study 2 reveals that the augmented self emerges only when customers are already knowledgeable about make-up, but is hindered by low expertise. Customizing a complete AR make-up look might appear too challenging for someone who knows little about this product category. Non-expert customers do not experience the emergence of the augmented self and consequently personalized AR does not increase their intentions to purchase.

CONCLUSION

This study contributes to the understanding of the "self" in virtual try-on with AR, highlighting the relevance of providing a holistic experience for augmented self. This offers useful insights for marketers into consumer experience with AR mirrors. However, extensive further research is required. Would a recommendation system integrated as part of the mirror (or advice by shop assistant) overcome the barrier that a lack of expertise represents? Also, going beyond this product category, what are further characteristics of augmented self in other contexts where augmentation is related to the whole body, a personality trait or a specific skill? Consumer research should follow up the technological developments with a clearer understanding of "augmented self".

Acknowledgements

This research received UCL Knowledge Exchange and Enterprise Funding from EPSRC Impact Acceleration Account (EP/K503745/1) and funding from KITE centre at Newcastle University Business School. The authors would like to thank Prof Anthony Steed and Prof Yvonne Rogers from UCL for their support of the project and Dr Ana Moutinho, Maria Jose Garcia Sopo, Dr Russell Freeman and Jonathan Chippindale from company Holition Ltd for their invaluable help with the design of AR apps.

REFERENCES

- Aaker, Jennifer L. (1999), "The Malleable Self: The Role of Self-Expression in Persuasion," *Journal of Marketing Research (JMR)*, 36(1), 45–57.
- Azuma, Ronald, Reinhold Behringer, Simon Julier, and Blair Macintyre (2001), "Recent Advances in Augmented Reality," *IEEE Computer Graphics and Applications*, 21(6), 34–47.
- Banister, En and Mk Hogg (2004), "Negative Symbolic Consumption and Consumers' Drive for Self-Esteem: The Case of the Fashion Industry.," *European Journal of Marketing*, 38(7), 850–68.
- Belk, R W (2013), "Extended Self in a Digital World," *Journal of Consumer Research*, 40(3), 477–500.
- Belk, Russell W. (1988), "Possessions and the Extended Slef," *Journal of Consumer Research*, 15(2), 139–68.
- Franke, Nikolaus, Peter Keinz, and Christoph J Steger (2009), "Testing the Value of Customization: When Do Customers Really Prefer Products Tailored to Their Preferences?," *Journal of Marketing*, 73(5), 103–21,
- Fuchs, Christoph, Emanuela Prandelli, and Martin Schreier (2010), "The Psychological Effects of Empowerment Strategies on Consumers' Product Demand," *Journal of Marketing*, 74(1), 65–79.
- Gao, Leilei, S Christian Wheeler, and Baba Shiv (2009), "The 'Shaken Self': Product Choices as a Means of Restoring Self-View Confidence," *Journal of Consumer Research*, 36(1), 29–38, <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=41224314&site=ehost-live>.
- Hayes, Andrew F (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," in *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford Press, 1–39.
- Hayes, Andrew F. (2009), "Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium," *Communication Monographs*, 76(4), 408–20.
- Heatherton, T F and J Polivy (1991), "Development and Validation of a Scale for Measuring State Self-Esteem." *Journal of Personality and Social Psychology*, 60(6), 895–910.
- Javornik, Ana (2016), "'It's an Illusion, but It Looks Real!' Consumer Affective, Cognitive and Behavioral Responses to Augmented Reality Applications," *Journal of Marketing Management*, 32(9–10), 987–1011.
- Javornik, Ana, Yvonne Rogers, Delia Gander, and Ana Moutinho (2017), "MagicFace : Stepping into Character through an Augmented Reality Mirror," in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems '17*, Denver, Colorado: ACM.
- Jin, Seung A Annie (2012), "The Virtual Malleable Self and the Virtual Identity Discrepancy Model: Investigative Frameworks for Virtual Possible Selves and Others in Avatar-Based Identity Construction and Social Interaction," *Computers in Human Behavior*, 28(6), 2160–68.
- Jussila, Iiro, Anssi Tarkiainen, Marko Sarstedt, and Joseph F Hair (2015), "Individual Psychological Ownership: Concepts, Evidence, and Implications for Research in Marketing," *Journal of Marketing Theory and Practice*, 23(2), 121–39.
- Kim, Jiyeon and Sandra Forsythe (2008), "Adoption of Virtual Try-on Technology for Online Apparel Shopping," *Journal of Interactive Marketing*, 22(2), 45–59.
- Labroo, Aparna A, Ravi Dhar, and Norbert Schwarz (2008), "Of Frog Wines and Frowning Watches: Semantic Priming, Perceptual Fluency, and Brand Evaluation," *Journal of Consumer Research*, 34(6), 819–31.
- Lee, Angela Y. and Aparna A. Labroo (2004), "The Effect of Conceptual and Perceptual Fluency on Brand Evaluation," *Journal of Marketing Research*, 41, 151–65.
- Li, Ting and Zornitsa Meshkova (2013), "Examining the Impact of Rich Media on Consumer Willingness to Pay in Online Stores," *Electronic Commerce Research and Applications*, 12(6), 449–61.
- Moreau, C. Page, Leff Bonney, and Kelly B Herd (2011), "It's the Thought (and the Effort) That Counts: How Customizing for Others Differs from Customizing for Oneself," *Journal of Marketing*, 75(5), 120–33.
- Peck, Joann and Suzanne B. Shu (2009), "The Effect of Mere Touch on Perceived Ownership," *Journal of Consumer Research*, 36(3), 434–47.
- Randall, Taylor, Christian Terwiesch, and Karl T. Ulrich (2007), "User Design of Customized Products," *Marketing Science*, 26(2), 268–80.
- Schau, H. J., & Gilly, M. C (2003), "We Are What We Post? Self-Presentation in Personal Web Space.," *Journal of Consumer Research*, 30(3), 385–404.
- Scholz, Joachim and Andrew N. Smith (2016), "Augmented Reality: Designing Immersive Experiences That Maximize Consumer Engagement," *Business Horizons*, 59(2), 149–61.
- Sheth, Jagdish N. and Michael R. Solomon (2014), "Extending the Extended Self in a Digital World," *The Journal of Marketing Theory and Practice*, 22(2), 123–32.

Siddiqui, Shakeel and D Turley (2006), "Extending the Self in a Virtual World," *Advances in Consumer Research*, 33, 647-48.
Sirgy, Joseph (1986), "Self-Concept in Consumer Behavior : A Critical Review," *Journal of Consumer Research*, 9(3), 287.

Zhao, Xinshu, John G. Lynch Jr., and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37(2), 197-206.

Not Every Talk Follows A Walk: The Importance of Considering SR Investors Over General Population When Analyzing SRI Behavior.

Fatima Yaqub Khan, Minerva School at KGI, USA
Sadia Yaqub Khan, The College of Saint Rose, USA

ABSTRACT

This study develops and validates segments of SR-investors of building-society based on varying SRI-selection motives. Additionally, it explores if similar segments appear when general-population is segmented on same basis. Findings support heterogeneity among SR-investors and highlight the significance of studying actual SR-investors over general population when exploring SRI.

INTRODUCTION

According to early investment theories, investment has always been linked with making money and yet the concept of socially responsible investment (SRI), investment that offers both financial and social returns, has been on the rise. One main difference between conventional investment and SRI is that in conventional investment the main return is financial return, whereas in SRI financial return is complemented by non-financial (Social, Environmental and Ethical-SEE) returns (Heimann et al., 2013; Brill and Reder 1993; Nilsson, 2009). Though, early investment theories identified SRI as an investment behavior practiced by only a small number of immature investors (Sampson, 2000), the past 10-15 years have witnessed a significant growth in SRI (Adam and Shauki, 2014; Glac, 2009; Heimann et al., 2013; Hofmann et al., 2008; Nilsson, 2009; Renneboog et al., 2008; Social Investment Forum, 2014), highlighting the emergence and progression of a new breed of investors; the socially responsible investors (SR-investor) (Cheah et al., 2011; Hallerbach et al., 2004; Hofmann et al., 2008; Khan and Khan, 2015; Nilsson, 2008; Nilsson, 2009; Rivoli, 1995; Sandberg and Nilsson, 2015).

Though it is widely acknowledged by academics and practitioners that SRI is an investment with dual motives, except for a few studies (e.g. Barreda-Tarrazona et al, 2011; Khan and Khan, 2015; Mackenzie and Lewis, 1999; Nilsson, 2009; Nilsson et al, 2014; Sandberg and Nilsson, 2015) majority of the past research has treated SR investors as a homogeneous group of investors preoccupied with only SEE issues, thereby largely neglecting the financial-motivation aspect of SRI (Cheah et al., 2011; Nilsson, 2009). Interestingly, research indicates that companies performing well on the environmental aspects also show better financial returns in comparison to the ones having comparatively worse environmental records (US-SIF, 2014; Derwall et al., 2005). It is also argued that “the better performing ethical funds attract not just ethical-investors but more general or conventional investors as well” (Michelson et al., 2004, p. 2). This understanding highlights the fact that both financial and non-financial motives are important when exploring SRI (Lewis and Mackenzie, 2000; Nilsson, 2008; Woodward, 2000; Pérez-Gladish et al., 2012). Scholars like Cheah (2011) and Nilsson (2009) argue that the two different aspects of SRI offerings – financial return and/or social return- are expected to motivate each SR investor differently. However, as mentioned above, except for only a few studies (such as Derwall et al., 2011; Barreda-Tarrazona et al, 2011; Khan and Khan, 2015; Mackenzie and Lewis, 1999; Nilsson, 2009; Nilsson et al, 2014; Sandberg and Nilsson, 2015), the literature largely neglected this difference in investors’ motivations, viewing all SR-investors as a homogeneous group. Also, the results of studies analyzing the interplay between SR-investors’ social (SEE) and financial motivations (such as, Barreda-Tarrazona et al, 2011; Mackenzie and Lewis, 1999; Nilsson, 2009; Nilsson et al, 2014), and classifying them in

terms of the balance between these two motives, have mixed findings (Derwall et al., 2011) and it remains unclear as to what degree the SR-investors are ready to give-up financial returns for a social payoff (Sandberg and Nilsson, 2015). Additionally, the studies that have attempted to classify SR investors in terms of the balance each SR investor seeks or accepts between financial return and social return motives (Mackenzie and Lewis, 1999; Lewis and Mackenzie, 2000; Nilsson, 2009; Sandberg and Nilsson, 2015; Dorfleitner and Utz, 2014; Wins and Zwegel, 2015), has mainly explored SR investors of mutual funds and/or used data from general public. Given that the motivational diversity among SR-investors is important to understand SRI fully (Nilsson, 2009), it is reasonable to argue that an examination of SR investors who choose other forms of financial institutions besides mutual funds, could bring more insight into the SRI literature and reduce the ambiguity regarding heterogeneity/homogeneity among SR investors. Additionally, given that the past research has used general public when exploring SRI, it is important to understand if the general public can present SR investors.

To address the first knowledge gap, it is necessary to empirically explore if SR investors (other than the ones choosing mutual funds) are a homogeneous group or if they can be classified into diverse groups based on the differing level of significance these investors place on social-return and financial-return aspects of SRI. Therefore, the first research goal of this study is to empirically explore heterogeneity/homogeneity among SR-investors of a building society. Building societies are financial institutions that are “partly or wholly exempt from bank license requirements, and therefore regulated under separate rules.” (Satyanarayana, et al., 2015. Pp. 337), thus making them unique, yet important in the UK financial market. Therefore, an understanding of homogeneity/heterogeneity among SR-investors of building societies, in terms of the balance they pursue between financial and non-financial motives, could help to better understand SR-investors, and help to resolve some of the uncertainty created by the mixed findings provided by similar studies in the past.

The following question is then addressed so as to fill the second gap: can general population be used when studying SRI? Most of the past research has used general population when exploring SRI (for example see Adam and Shauki, 2014; Nilsson, 2008, Nilsson, 2009, Pérez-Gladish et al., 2012). Although SRI has gained much acceptance, it is still seen as niche (Nilsson, 2009). Therefore, it is reasonable to argue that using the general population who would self-report as to whether one is involved in SRI or not, carries a high risk of a social desirability bias (SDB). Consequently, the second research goal of this paper addresses this issue by exploring if the general population when classified, in terms of the financial and the social return aspects of SRI (if they were to choose SRI), result in similar groups as those of SR-investors of building society. This is done to see if similar segmentation, as that of SR investors of building society, is generated when using data from general public or not, so as to understand if the general public is a good representative of SR investors or not.

METHODS

The findings within this paper are part of a larger project concerning an in depth analysis of SR investors. To fully understand SR investors, and to address the two research gaps presented earlier

in this manuscript, two data sets were collected; one from Ecology Building Society (EBS) (n=298) investors (SR investors), and other from general Cardiff population (N=100). Data was collected regarding attitudes, values and beliefs, along with the significance of financial return and social return when opting for SRI. Items measuring these variables were used from past research. For the first dataset (SR-investors of EBS) multistage sampling was adopted. Multi-stage sampling is a probability sampling technique where one uses a combination of different sampling technique so as to identify the technique that suits the study the best. At this stage, both stratified sampling and simple random sampling technique was combined. First EBS customers were divided into two groups (strata): the active member group and the non-active member group. The active member group comprised of individuals who were active online [EBS had their active emails and these customers were also participating in EBS activities virtually]. The second stratum was that of non-active members [these members were not active virtually/online]. Given that the questionnaire used in this study was online, SR investor sample, through simple random sampling, was generated only from one stratum: the active member group. The survey link was sent out to the entire online database of Ecological Building Society (n=1250). The survey link was kept active for 8 week during which a total of 298 investors completed the survey, giving a response rate of 24%. For the second dataset non-probability convenience sampling technique was used. The data was collected via paper based questionnaires, using self-administer method, from the general public. The questionnaire included questions regarding importance of financial return and importance of social return. However as the data was gathered from the general population, it was assumed, based on past research (Nilsson,

2009; Nilsson et al., 2014), that not everyone would be a SR investor, hence the questions were reworded slightly to say “if you invest in an SR organization...” rather than having a more affirmative statement about SR investment (Nilsson 2009, Sandberg and Nilsson, 2015). A total of 100 questionnaires were filled over a period of 4 weeks.

To assess the heterogeneity/homogeneity among the investors, two-step cluster analyses were performed on each set of data separately with significance of financial return and social return as being the clustering variable. All the segments that emerged through the two-step cluster analysis, from both the data sets, were further analyzed using analysis of variance.

RESULTS

The two-step cluster analysis, using Bayesian Information Criterion (BIC) and log-likelihood distances, revealed heterogeneity among SR investors as well as indicating the fact that the general population is not a good representative of SR investors.

Uncovering the Investor Clusters

Figure 1 Displays the results of two-step cluster analysis for the two datasets.

First Dataset (SR-Investors)

For the first dataset a three cluster solution was obtained through the two-step cluster method. The results were validated by split sampling technique as recommended by Hair et al., (2008) and Malhotra et al., (2012).

The three clusters of SR investors identified are:

1. *Financial Return Driven Investors [FR Driven] (smallest cluster)*

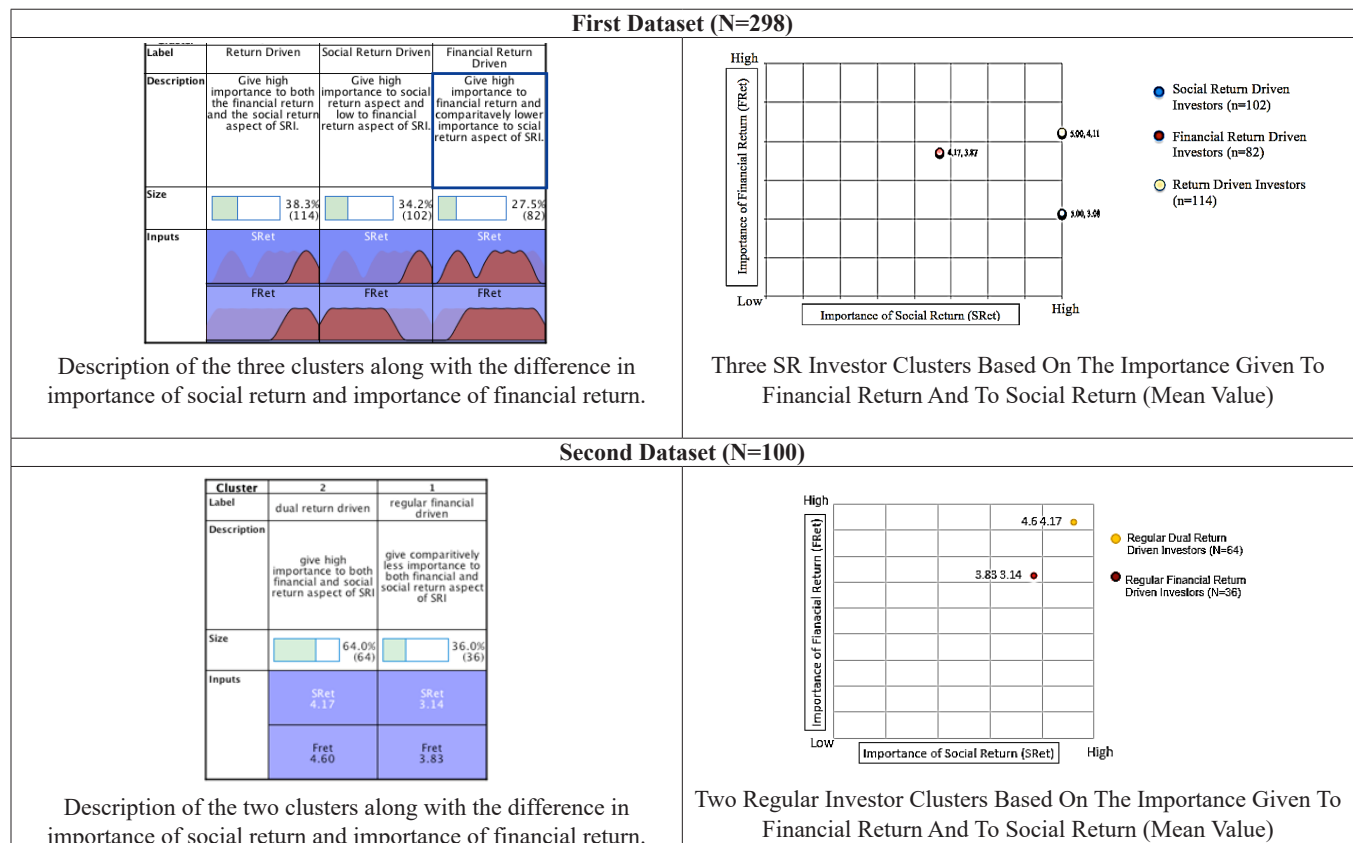


Figure 1: Results of Two-Step Cluster Analysis

Representing 28% of the sample (n = 82), this cluster scored lowest on importance of social return (mean = 4.03, SD = .505) and gave relatively high importance to the financial return (mean= 3.77, SD = .528).

2. *Social Return Driven Investors [SR Driven] (second largest cluster)*

Representing 34% of sample (N = 102), this cluster gave least importance to financial return (mean = 2.88, SD = .523) and the most to social return (mean = 4.97, SD = .127) when investing. Thus, justifying the name Social Return Driven (SR Driven) Investors.

3. *Dual Return Driven Investors [DR driven] (largest cluster)*

The third cluster comprised of 38% of the first dataset (N = 114). This cluster gave high importance to both social return (mean = 4.99, SD = .066) and financial return (mean = 4.09, SD = .260) when investing in SRI.

Second Dataset (Regular Investors)

For the second dataset, a two cluster solution was obtained through the two-step cluster method. The results were validated by split sampling technique as recommended by Hair et al., (2008) and Malhotra et al., (2012).

These two clusters are:

1. *Regular Financial Return Driven Investors [Regular FR Driven] (smallest cluster)*

This cluster comprised of 36% of sample (N = 36). Investors in this cluster gave more importance to financial return (mean = 3.83, SD = .359) as compared to social return (mean = 3.14, SD = .529) when investing.

2. *Regular Dual Return Driven Investors [Regular DR Driven] (largest cluster)*

The second cluster that appeared represented 64% (N=64) of the regular investor. If this cluster was to invest in SRI, they would value both social return (mean = 4.17, SD = .473) and financial return (mean = 4.60, SD = .41) aspect of SRI, similar to dual return driven cluster of SR-investors.

Variation among the Five Clusters

The fact that two instead of three clusters appeared when regular investors were classified with respect to the importance they place on financial return and social return aspects of SRI, if they were to invest in SRI, highlights the difference between SR investors and regular investors. To further examine the differences between and among these five clusters (SR driven investors, FR driven investors and DR driven investors, regular FR driven investors and regular DR driven investors) one-way ANOVA was performed. Results indicate that the five clusters differ significantly with respect to both the financial return [F (4,393) = 183.664, p = 0.000] and the social return [F (4,393) = 297.059, p = 0.000] aspects of SRI. Table 1 presents the pairwise difference among the clusters obtained through Tukey's HSD.

Variation among the Clusters in Terms of the Importance of Financial Return

From table 1 it can be seen that among the SR investor groups, the FR driven cluster (mean=3.77, SE=.528) gave more importance to the financial return aspect of SRI as compared to the SR driven cluster (mean= 2.88, SD=.523). Whereas the DR driven cluster (mean= 4.09, SD=.260) valued the financial return aspect of SRI more than both the SR driven and the FR driven clusters. Furthermore, among the SR investor and regular investor clusters, the DR

Table 1: Multiple Comparison for Clustering Variables

Clusters	Mean	Standard Error	Sig.
Importance of Financial Return			
Financial Return Driven > Social Return Driven	.886**	.066	.000
Dual Return Driven > Social Return Driven	1.205**	.060	.000
Dual Return Driven > Financial Return Driven	.319**	.064	.000
Dual Return Driven > Regular FR-Driven	.254*	.082	.018
Regular FR-Driven > Social Return Driven	.951**	.083	.000
Regular Dual return Driven > Financial Return Driven	1.719**	.069	.000
Regular Dual return Driven > Social Return Driven	.833**	.072	.000
Regular Dual return Driven > Dual Return Driven	.514**	.067	.000
Regular Dual return Driven > Regular FR-Driven	.768**	.090	.000
Importance of Social Return			
Social Return Driven > Financial Return Driven	.935**	.051	.000
Dual Return Driven > Financial Return Driven	.961**	.066	.000
Social Return Driven > Regular FR-Driven	1.827**	.067	.000
Social Return Driven > Regular Dual return Driven	.794**	.055	.000
Dual Return Driven > Regular FR-Driven	1.852**	.041	.000
Dual Return Driven > Regular Dual return Driven	.819**	.054	.000
Financial Return Driven > Regular FR-Driven	.892**	.069	.000
Regular Dual return Driven > Regular FR-Driven	1.033**	.072	.000

**Significant at the 0.001 level

*significant at the 0.05 level

driven cluster valued financial return aspect of SRI more than the regular FR driven cluster (mean=3.83, SD=.359). Also, the regular FR driven cluster valued financial return aspect more than the SR driven cluster. Whereas for the regular DR driven cluster (mean= 4.60, SD=.410) the financial return aspect of SRI was more important than it was for any of the three of the SR investors clusters: FR driven, SR driven and DR driven investors.

Differences among the Clusters in Terms of the Importance of Social Return

As displayed in table 1, among the SR investor clusters, both the SR driven (mean= 4.97, SD=.127) and the DR driven clusters (mean=4.99, SD=.066) valued the social return aspect of SRI more than the investors making up the FR driven cluster (mean=4.03, SD=.505). Additionally, both the SR driven cluster and the DR driven cluster valued the social return aspect of SRI more than both the regular FR driven cluster (mean=4.17, SD=.473) and the regular DR driven cluster (mean=4.17, SD=.473). Whereas, for the FR driven

cluster, social return aspect of SRI was more important as compared to how important it was for the regular FR driven cluster. This difference is important, as although the financial driven cluster of regular investors looked similar to FR driven cluster of SR investors, these two are significantly different from each other. Lastly, the regular DR driven investor cluster valued the social return aspect of SRI more than the regular FR driven cluster.

FINDINGS

There are two main findings of this study. Firstly, within the SR investors three unique clusters emerged, thus echoing heterogeneity among SR investors. Though the results from past research, majority of which explored investors of mutual funds, had mixed findings, this study, while exploring SR-investors of building society, supports the understanding that individuals who chose SRI are not all the same, rather SR investors could be classified into three unique segments each acquiring different combination of financial return and social return aspects of SRI. Thereby supporting and validating past research (e.g. Nilsson, 2009; Sandberg and Nilsson, 2015).

Secondly, the fact that similar groups, as that of SR investors, did not appear when regular investors were segmented, based on the same clustering variable used for clustering SR investors, indicates the uniqueness of studying SR investors. Though the two clusters of regular investors (regular DR driven and regular FR driven investors) seemed similar to two clusters of SR investors (DR driven and FR driven investors), results of ANOVA revealed significant differences among these clusters. Results from one-way ANOVA also show substantial difference between the three SR investor clusters and two regular investor clusters, with respect to importance given to the financial return and the social return aspects of SRI. This understanding of the difference between clusters of SR investors and the clusters of regular investors highlights the importance of studying SR investors as a unique class of investors. One reason for this difference could be due to the fact that general population still place financial return at the heart of investment and that SRI being a niche cannot be represented by studying the general public (Nilsson, 2009). Additionally, the fact that regular DR driven cluster valued the financial return aspect of SRI more than any of the three SR investors clusters, indicates that though the regular investors claim to value social return aspect of SRI if they are to become SR investors, yet they value the financial return aspect of their investment the most. These findings reflect the effect of SDB as the individuals in this segment state that they value social return aspect of SRI, yet the high significance of financial return aspect speaks otherwise. These regular Dual Return driven investors value financial return even more than the regular FR driven investors, thus echoing the high significance of financial gain these individuals desire from their investment.

In a nutshell, this study not only indicates heterogeneity among SR investors, but also highlights the significance of studying actual SR investors rather than the general public. Thus, augmenting the uniqueness of the first dataset used in this study (SR-investors of EBS) and strengthens the argument that SR investors are different from regular investors.

CONCLUSIONS

This paper focuses on understanding and exploring SRI. We contribute towards a more comprehensive understanding of SRI by producing and validating three unique clusters of SR investors of a building society. Thereby, not only giving clarity to past SRI research, which has mainly explored mutual fund investors, but also by exploring SR investors of a yet to be explored investment platform:

that of a building society. SR investment firms can utilize these findings to develop customized strategies focused on catering to segment specific needs so as to achieve higher customer loyalty and satisfaction. Additionally, policy-makers pursuing sustainability can benefit from these findings by determining which motivations to promote in order to sway people towards sustainable investment. We further contribute by exploring SRI behavior of the general population and highlighting the significance of studying actual SR investors over the general public. It is important to highlight that for majority investors financial return is important part of their investment decision, thus SR investment firms should promote their financial position along with social position so as to attract more investors.

Though, this paper brings more understanding of investment behavior, the following limitations must be kept in mind: firstly, the analysis uses only one building society and in that only investors who were active online. Further research should seek to broaden the approach by involving both active online and inactive online investors and possibly from more than one building society. Second, the study only uses qualitative approach. Future research could also interview SR investors in order to understand them fully. Despite these limitations this study with its novel findings is a step towards fully understanding the interesting phenomenon of SRI. Future research can explore these SR segments by exploring, for example, difference in value orientations for each segment.

REFERENCE:

- Adam, A. A., and Shauki, Elvia R., (2014), Socially Responsible Investment in Malaysia: Behavioral Framework in Evaluating Investors' Decision Making Process, *Journal of Cleaner Production*, 224-240
- Barreda-Tarrazona, I., Matallin-Sáez, J.C. and Balaguer-Franch, R. (2011), Measuring investors' socially responsible preferences in mutual funds. *Journal of Business Ethics*, 103(2): 305-330.
- Brill, J. A., and Reeder, A. (1993). *Investing from the Heart - The Guide to Socially Responsible Investments and Money Management*. New York: Crown Publishers.
- Cheah, E. T., Jamali, D., Johnson, J. E., & Sung, M. C. (2011). Drivers of corporate social responsibility attitudes: The demography of socially responsible investors. *British Journal of Management*, 22(2), 305-323.
- Derwall, J., Guenster, N., Bauer, R. and Koedijk, K. (2005), The eco-efficiency premium puzzle, *Financial Analysts Journal*, 61(2), 51-63.
- Derwall, J., Koedijk, K. and Horst, J.T. (2011), A tale of values-driven and profit-seeking social investors, *Journal of Banking and Finance*, 35(8), 2137-2147.
- Dorfleitner, G., and Utz, S. (2014), Profiling German-speaking socially responsible investors, *Qualitative Research in Financial Markets*, 6(2), 118-156.
- Glac, Katherina (2009), Understanding socially responsible investing: The effect of decision frames and trade-off options, *Journal of Business Ethics*, 87 (Supplement 1), 41-55.
- Hair, J. F., Bush, R. P., and Ortinau, D. J. (2008). *Marketing research*. McGraw-Hill Higher Education. HAIR, J. F., ANDERSON, R. E., TATHAM, R. L. & BLACK, W. C. 1998. *Multivariate data analysis 5th ed.*, Saddle River, New Jersey; Prentice Hall, Inc.
- Hallerbach, W., Ning, H., Soppe, A. and Spronk, J. (2004), A framework for managing a portfolio of socially responsible investments, *European Journal of Operational Research*, 153(2), 517-29.

- Heimann, M., Giroo, V., Bonnefon, J.-F., and Legrenzi, P. (2013), Decision Makers use Norms, not Cost-Benefit Analysis, when Choosing to Conceal or Reveal Unfair Rewards. *PloS one*, In press.
- Hofmann, E., Hoelzl, E. and Kirchler, E. (2008), A comparison of models describing the impact of moral decision making on investment decisions, *Journal of Business Ethics*, 82(1), 171-187.
- Khan, Fatima Yaqub and Khan, Sadia Yaqub (2015), "Classification and Profiling of Socially Responsible (SR) Investors: A Value-Oriented Perspective." *AMA Educators Proceedings* Volume 26: August 2015. pp. 845. ISBN: 978-1-5108-1586-5.
- Lewis, A. and Mackenzie, C. (2000a), Morals, money, ethical investing and economic psychology, *Human Relations*, 53 (2), 179-91.
- Mackenzie, C. and Lewis, A. (1999), Morals and markets: The case of ethical investing, *Business Ethics Quarterly* 9(3): 439-452
- Malhotra, Nk, Birks Df and Wills P (2012) *Marketing Research: An Applied Approach* (4th edn.). London: FT/Pearson
- Michelson, G., Wailes, N., van-der-Lann, S. and Frost, G., (2004), Ethical investment processes and outcomes, *Journal of Business Ethics*, 52(1), 1-10.
- Nilsson, J., Jansson, J., Isberg, S. and Nordvall, A.-C. (2014), Customer satisfaction with socially responsible investment initiatives: The influence of perceived financial and non-financial quality, *Journal of Financial Services Marketing*, 19(4): 265-276.
- Nilsson, J. (2008) Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior. *Journal of Business Ethics* 83(2): 307-325.
- Nilsson, J. (2009), Segmenting socially responsible mutual fund investors: The influence of financial return and social responsibility, *International Journal of Bank Marketing*, 27(1): 5-31.
- Pérez-Gladish, Blanca, Karen Benson and Robert Faff. (2012), Profiling socially responsible investors: Australian evidence, *Australian Journal of Management*. 37(2) 189-209
- Renneboog, L., Ter Horst, J., and Zhang, C. (2008), Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance*, 32(9), 1723-1742.
- Rivoli, P. (1995), Ethical aspects of investor behavior, *Journal of Business Ethics*, 14(4), 267-77.
- Sampson, A., (2000), *Big Superfunds under Pressure to make Ethics part of their Bottom Line*. Sydney Morning Herald. [22 August 2000]
- Sandberg, J., and Nilsson, J. (2015), Do ethical investors want purity or effectiveness & quest; An exploratory study on the ethical preferences of mutual fund investors, *Journal of Financial Services Marketing*, 20(1), 34-45.
- Satyanarayana, I., Sidhu, N. B. C., & Swamy, P. L. (2015). Comparative Investment Analysis Of Mutual Funds & ULIPS. *International Journal of Management Research and Reviews*, 5(6), 328.
- Social Investment Forum: 2014, *Socially Responsible Investing (SRI) Facts*. [Internet]. Available from: <http://www.socialinvest.org/resources/sriguide/srifacts.cfm> [Accessed: 5th March 2016]
- USSIF (2014), 2014 Report on Socially Responsible Investing Trends in the United States, *Social Investment Forum*, www.ussif.org
- Wins, Anett and Bernhard Zwergel, (2015), Private ethical fund investors across countries and time: a survey-based review, *Qualitative Research in Financial Markets*, 7(4), 379 - 411
- Woodward, T. (2000), *A review of the nature and significance of ethical investment in the United Kingdom*.

Why Don't Parents Walk Their Talk?

Exploring Parental Deviant Food Socialization Behaviors within the Family

Tanyatip Kharuhayothin, University of Manchester, UK

Ben Kerrane, Lancaster University, UK

ABSTRACT

This study, drawing on neutralization theory, explores how parents neutralize their feelings of guilt when performing deviant food socialization practices (e.g. offering unhealthy food to their children). The findings highlight how neutralization techniques help lessen parents' self-blame through performing negative displays of parenthood.

INTRODUCTION

Why do parents socialize their children in ways that they know they shouldn't be doing? Parents sometimes find it difficult to behave in accordance with the ideals of *good parenting*, particularly in the context of food socialization. Parents are considered to be the most powerful socialization agents for children (Dotson and Hyatt 2005; Hunter-Jones 2014; Moschis and Churchill 1978) with parents playing a pervasive role in shaping children's consumption patterns (Kerrane, Bettany, and Hogg 2014), especially food consumption habits (Nicklas et al. 2001). Given the global concern surrounding childhood obesity¹ (WHO 2017) and recent calls for research to explore the role parents play in forming healthy family food socialization practices (Grier and Moore 2012), it is timely to explore parental food socialization behaviors that may, eventually, contribute to obesity amongst children (Ayadi and Bree 2010).

In this paper, we explore the *deviant* food socialization behaviors of a sample of parents, as food preparers, in the United Kingdom from October 2015 to June 2016, using multiple stages of qualitative data collection - existential phenomenological interviews, photo-elicitation exercises, and accompanied grocery shopping trips. We draw on the theoretical tenants of neutralization theory and the techniques of neutralization to gain a better understanding of *how parents 'neutralize' their deviant food behaviors*, and show *how such deviant food behaviors can work to develop food habits*.

The findings, thus, extend our understanding of the attitude-behavior gap through exploring the performance of deviant behaviours of parents within the context of food socialization/consumption, as called for in previous studies (Grier and Moore 2012; Hoy and Childers 2012; Moschis and Cox 1989) and the implications of such parental deviance (offering unhealthy food to their children) are discussed, with parents violating the norms of 'good' parenting. This is one of the first studies to apply neutralization theory to family food consumption. Our potential contribution responds to the call for extending the use of neutralization theory to other deviant consumption behaviors, rather than ethical consumption alone (Chatzidakis, Hibbert, and Smith 2007; Harris and Daunt 2011; Strutton, Vitell, and Pelton 1994).

Attitude-behavior gap, deviant consumer behavior, and neutralization literature

The 'attitude-behavior' gap has been extensively studied in consumer behavior, particularly in relation to ethical consumption (Carrigan and Attalla 2001; Elliot and Jankel-Elliot 2003; Harrison et al. 2005). It is proposed that the attitudes of individuals are determined by personal values, moral norms, and internal ethics (Carrington, Neville, and Whitwell 2010; Shaw and Shui 2002). Thus,

the attitude-behavior gap may occur in behavior that deviates from social norms. It is noted that such gaps remain poorly understood and are under-researched, especially in the field of consumption (Belk et al. 2005; Connolly and Shaw 2006; Carrington et al. 2010).

The majority of studies in the consumption literature often link the attitude-behavior gap with organic or fair-trade products (Brunner 2014; Hempel and Hamm 2016) their food purchase behaviour and their personal characteristics. The purpose is to investigate the differences in attitudes and willingness-to-pay values between consumers who consider the organic production of food (very or those associated with environmental concern (Atkinson and Kim 2014). Prior studies exploring the attitude-behavior gap among parents have shown the existence of attitude-behavior inconsistencies among parents in providing food to their children (Hughner and Maher 2006; Gram 2014). However, what is yet known is how parents alleviate their feelings of guilt associated with such discrepancies or 'paradoxical' behavior (Hoy and Childers 2012, 569).

Behavior is considered to be 'deviant' when it deviates or does not adhere to social norms (Moschis and Cox 1989). Although socially acceptable behaviors are considered norms, such behaviors may not be formally administered by law within society (Dootson et al. 2016). Thus, consumers often see deviant consumer behavior as logical from their own perspectives (Harris and Daunt 2011). Studies in consumer behavior suggest that much less is known about the rationalizations associated with performing deviant acts of consumption, despite the fact that such behavior is thought to be common (Fullerton and Punj 1993, 2004; Harris and Daunt 2011).

Neutralization theory is commonly used in the sociology of deviance (Maruna and Copes 2005; Minor 1981) with Sykes and Matza (1957) outlining a range of neutralization techniques in their seminal study of juvenile delinquency. Five neutralization techniques are identified; (1) denial of responsibility, (2) denial of injury, (3) denial of victim, (4) condemning the condemners and (5) appeal to higher loyalties (see Sykes and Matza (1957) for a comprehensive review of each technique).

Existing consumer studies have applied neutralization theory contexts including *shoplifting* (Strutton et al. 1994), *consumer fraud* (Rosenbaum and Kuntze 2003), *ethical consumption* (Chatzidakis et al. 2007; Strutton et al. 1997), *alcohol and cigarette consumption*, and *cannabis use* (Peretti-Watel et al. 2003; Piacentini, Chatzidakis, and Banister 2012). However, neutralization theory has not been adequately studied, remains under-theorised, and has received limited attention in consumer behavior research (Brunner 2014; Chatzidakis et al. 2007; Piacentini et al. 2012; Strutton et al. 1994). It is also noted that the studies of wider forms of deviant consumer behaviors are lacking and the understanding of consumers for justifying their norm-contradicting behaviors should be extended to a range of consumer activities (Chatzidakis et al. 2007; Harris and Daunt 2011). Moschis and Cox (1989) highlight that *adopting a socialization approach in the study of deviant consumer behavior is imminently sensible* given that the acquisition of deviant behaviors (such as unhealthy eating practices) could be as a direct result of the consumer socialization process.

¹ The WHO acknowledges childhood obesity as today's greatest health concern with over 42 million children worldwide under the age of five classified as obese (WHO 2017).

METHOD

Thirty parents, who self-identified as the primary food preparer in their family, participated in this study. Informants were recruited through social media, nurseries and primary schools (places where children were present). Parents of younger children were recruited because they exert the greatest influence on children when they were born up until adolescence (Moore and Moschis 1980). Multiple stages of data collection occurred, drawing on a photo-elicitation task, an existential-phenomenological interview, and an accompanied grocery-shopping trip. First, participants were asked to take photos of the food inside their kitchen cabinets, refrigerator, and the meals they prepared for their children during a one-week period. Such an approach to data collection has been employed within studies of consumption (Fournier 1998; Harman and Cappellini 2014, 2015). Next, participants were asked to talk about the photos they took at the beginning of an in-depth interview². The descriptive information from the photos was used to identify any attitude-behavior gaps among the parents (Elliott and Jankel-Elliott 2003). Each interview lasted between one and two hours, with the interview exploring topics such as how the food preparers make sure that their children eat healthy food and in what situations (if any) they allowed their children treats, capturing the justifications behind such actions. The interviews were conducted at the home of each participant, or at a convenient location of their choice. Participants then took part in an accompanied grocery-shopping trip or an observational interview (Belk et al. 2012), which lasted between thirty minutes to one hour. Multiple methods of qualitative data collection were utilized to shed greater light on how consumers perform deviant acts and, in turn, to understand how they rationalize such actions (Gruber and Schlegelmilch 2014). The interviews were audio recorded, and procedures taken to ensure the ethical credibility of the research project. Transcripts were transcribed verbatim, coded, and analyzed using Interpretative Phenomenological Analysis (IPA).

FINDINGS

The findings offer an in-depth understanding of 'deviant' behavior practiced by parents and show how techniques of neutralization can be successfully applied to food socialization practices within the family, as called for by earlier research (Chatzidakis et al. 2007; Harris and Daunt 2011). Five neutralization techniques were found within our data, although, as reported by others (Brunner 2014; Chatzidakis et al. 2007; Piacentini et al. 2012), certain techniques were more prominent. We find that 'denial of responsibility' and 'denial of injury' have been employed the most, while 'denial of victim' has been employed the least. Thus, the elicited family stories associated with four dominant neutralization techniques (denial of responsibility, denial of injury, condemning the condemners, and appeal to higher loyalty) will be discussed in turn. Illustrative quotes from the participants are offered in table 1.

Parents Feel They Have Limited Control Over Their Deviant Food Consumption Practices

Parents *denied their responsibility* because they felt that there were many forces beyond their control in terms of their children's food intake, resulting in their children consuming unhealthy food (Sykes and Matza 1957) ("*It's not my fault, I had no other choice*"). Most parents mentioned that when their children attends a friend's party or house, or even when they are at school, children would be given sweets and other 'unhealthy' food products. These are situa-

tions in which parents feel that they "can't avoid" unhealthy food practices/consumption, and where they "don't know what is given and have no control over it".

Many participants identified themselves as being time-poor parents. Time-pressure is another constraint contemporary parents face in raising their family (Copelton 2007), especially given the rise in dual-income families. Participants often employed this technique when providing ready meals for their children. As such, they often denied that there was anything wrong in giving ready meals to their children, justifying such practices on the basis of being time poor.

Parents feel that giving children some 'treats' does not do any real harm

With *denial of injury* parents did not deny their deviant behaviors (i.e. they recognised that they did offer unhealthy food to children *at times*), but they felt that their behavior did not really cause any great harm to their children (Sykes and Matza 1957) ("*what's the big deal?*"). Parents reported that their children would get some treats for special occasions, such as birthdays or on designated treat days. Although acknowledging their actions, the participants felt that this was in no way harmful because they were only engaging in such deviant behaviors *occasionally* (i.e. on designated treat days alone). Participants mentioned that their children would have their treat days every week, most often at the weekend.

Kate, for example, mentioned that 'finger food' at birthday parties was not healthy. But, she is fine with her children eating such food (as (a) this is not a frequent occurrence; and (b) such food consumption occasionally falls outside her control, noting the relationship with the earlier neutralization technique). This signifies that she tends to identify herself as a 'good' parent through providing more healthy food than unhealthy foods for her daughter. Such a notion is considered a way to display good parenting as parents are judged by the way that they follow social norms in providing healthy food for the family (Harman and Cappellini, 2014).

Other Parents and Other Children are Performing the Same Deviant Food Behaviors

For *condemning the condemners* ("*everyone else does it*"), parents attempt to shift attention away from their deviant acts towards the acts of those who condemn their deviant behaviors (e.g. other parents or other children) (Sykes and Matza 1957). Individuals rationalize their actions by asserting that others are doing worse and yet they are not caught (De Bock and Van Kenhove 2011). Parents mentioned that other parents would allow children to have sweets on special occasions. For example, Isabella remarked that giving children treats is what "other parents always do". In addition, Joy's opinion (see table 1) provides a good example of how parents condemn other parents (i.e. those other parents have done worse). Moreover, parents also highlight that other children are eating food, which is considerably worse (healthy eating wise) than they provide.

Children follow their Friends and Parents Allow them To

With *appeal to higher loyalty* parents neutralize their deviant behaviors by signaling that what they did was for the good of their family, prioritizing their bond to the subculture or inner social group rather than to society as a whole (Chatzidakis et al. 2007; Sykes and Matza 1957). Parents consider consuming finger food, sweets, and sugary drinks at parties or at social gatherings as normal and socially expected among other parents and other children within their personal networks.

Parents commented that it would be difficult to tell their children what to eat at such gatherings because their children see other children eating such unhealthy foods. Here, parents justify such un-

² The photographs from the photo diaries were used to helping stimulate discussion during the in-depth interviews, as utilised by others (Elliott and Jankel-Elliott 2003; Harman and Cappellini 2014, 2015).

Table 1: Neutralization techniques in the context of parental deviant food socialization behavior

Technique of neutralization	Illustrative quote(s)
<p>1. Denial of Responsibility: <i>Parents feel they have limited control over deviant food consumption practices</i></p>	<p>IAN: You know there are always <i>little slips and things</i> where they get treats and they have chocolate biscuits or they go to their friend’s house and then they <i>eat rubbish</i> when they are round at their friend’s house. <i>You can’t stop all of it from happening.</i></p> <p>JANE: <i>That’s the worst thing ever. It’s very difficult to stop your children having sweets.</i> Yesterday my son went to a party, so he was given sweets. That’s really difficult. How can I say you can’t have that? So my daughter also got sweets from another party. So if somebody has a birthday at school often they [sweets] get given out when they come out of school.</p> <p>NATASHA: I use those <i>pre-cooked food once or twice a week</i>. Because it’s convenient. So, at the moment I’m especially busy because my daughter is about to go to secondary school. So, as well as after school’s activities, we are looking at senior schools. So, <i>we have no time in the evening. So, when I’m time pressured, it helps.</i></p>
<p>2. Denial of Injury: <i>Parents feel that giving children some ‘treats’ does not do any real harm</i></p>	<p>JANE: Yesterday was my son’s sweet day, so we go to the shops after school. He gets 70p and he can go and select some sweets and he knows that is once a week treat. And then occasionally he gets pocket money at the weekend. He might go and buy a chocolate bar or something like that. So <i>it’s fine occasionally.</i></p> <p>REBECCA: When the <i>Advent Calendar last Christmas</i>, they get lots of biscuits and chocolate and things at all these Christmas events and he’s kind of, every day, “Where’s chocolate?” And you would be like no not now. And then he’d throw a tantrum. So <i>special occasions</i>, so like there was <i>Halloween</i> the other day and he had some chocolate because he went Trick or Treating with his cousins and <i>that’s fine</i>. But just <i>save it for a party.</i></p> <p>WENDY: When we are out, I just <i>turn blind and let her enjoy her life and have whatever she wants</i>. When we are out, she sometimes drinks coke or lemonade or eats cakes. Of course, she doesn’t have cake all the time. So, <i>occasionally I’d say that’s okay.</i></p>
<p>3. Condemning the Condemners: <i>Other parents and other children are performing the same deviant food behaviors</i></p>	<p>JOY: How I do it is quite highly rationed. But <i>my sister-in-law, she is worse than me</i>. She lets them have sweets twice a week. And for Halloween this year, she got this tiny little glow sticks that you can buy online. It’s very tiny like cocktail sticks. So, apparently, it’s really popular. She’s also gotten Haribo for them. <i>You see when everybody does it.</i></p> <p>IZABELLA: For the birthday parties, all parents are thinking that they should prepare something very sophisticated. Often than not, the treats would be cakes and they are full of sugar on the top of them. <i>Everybody is doing this.</i></p> <p>KATE: We try to encourage her. <i>She probably could eat more fruits and veg than she does I think all the kids could ((Laughs)).</i> So, she seems to understand and <i>she’s not too bad eater neither comparing to some kids.</i></p>
<p>4. Appeal to Higher Loyalty: <i>Children follows their friends and parents allow them to</i></p>	<p>NATASHA: Going somewhere like McDonald’s is not unheard of. And he’s a small child and his friends do. So, it adds a social element to it. <i>He shouldn’t feel that he couldn’t go there.</i> I would go there because <i>he should be able to experience it and chat with his friends about it, like it’s a normal thing to do.</i></p> <p>FRAN: I don’t want to be a Victorian parent but I also don’t – if I go a bit kind of, you must have this, that and the other. <i>Sometimes their friends come and oh, I’m not allowed this and that. I don’t want them to have that sort of feeling associated with food.</i></p> <p>SANDRA: It’s ok because sometimes <i>they will see other kids eat something else that they might want to try.</i> We used to live close to McDonald and they saw other kids went. So, they asked ‘Can we go to McDonald?’</p>

healthy food consumption as they want their children to ‘fit in’, and not to be ostracized by their peers should they be denied unhealthy foods. Parents also commented that the reason their children want to go to McDonald’s is because they have seen other children going, and the parents did not want their children to feel like ‘the odd one out’ in denying them such visits.

DISCUSSION

Stories of ‘deviant’ parental food socialization practices demonstrate a clear gap between parents’ attitudes of *performing good parenting* (adhering to the social norm of providing healthy food to their children) and the actual performance of ‘deviant’ parental acts. Parents tend to identify themselves as ‘good parents’ by adhering to norms of society in providing healthy food to their children, with parents feeling ‘on display’ through the food they provide to their children (Harman and Cappellini 2014, 2015). However, because of a range of factors (e.g. limited income, perceptions of being time ‘poor’) parents engage in ‘deviant’ food socialization behaviors in providing less than healthy food to their children, and draw on neutralization techniques to justify doing so to protect their negative self-image (Chatzidakis et al. 2007; Copelton 2007). The findings, yet, suggest that parents sometimes perform deviant acts as they are in the best interests of their children (i.e. I allow unhealthy food because my children likes that food; my children will be socially excluded by their friends if I do not allow them to eat such food). Techniques of neutralization provide insight into how parents neutralize

their feelings of guilt when undertaking ‘deviant’ food socialization practices *without changing their intended attitude.*

Although this study used a relatively homogenous sample, it contributes to our understanding of parental deviant food behaviors and shows that the theory of neutralization can be applied to various perspectives of deviant consumer behavior as previously calls for research encourage (Chatzidakis et al. 2007; Harris and Daunt 2011). To the best of our knowledge, this is the first study that explores parental deviant acts in the context of food-socialization. It extends our knowledge of parental attitude-behavior gaps, as also called for by existing research (Grier and Moore 2012; Hoy and Childers 2012).

This paper offers opportunities for policymakers to counter the possibility of repeated parental deviant food behaviors (i.e. having *treat* days every week), such as encouraging parents to provide fruits to children as *normal* weekly treat. Also, marketers could use such knowledge to implement strategies to tackle childhood obesity or to promote products/services that could prevent parents from situations where deviant food behavior is likely to occur.

REFERENCES

Atkinson, L., and Kim, Y. (2014), “‘I Drink It Anyway and I Know I Shouldn’t’: Understanding Green Consumers’ Positive Evaluations of Norm-violating Non-green Products and Misleading Green Advertising,” *Environmental Communication: A Journal of Nature and Culture*, 9(June), 1–21.

- Ayadi, K., and Bree, J. (2010), "An ethnography of the transfer of food learning within the family," *Young Consumers: Insight and Ideas for Responsible Marketers*, 11(1), 67-76.
- Belk, R. W., Devinney, T., and Eckhardt, G. (2005), "Consumer ethics across cultures," *Consumption Markets & Culture*, 8(3), 275-289.
- Belk, R., Fischer, E., and Kozinets, R. V. (2012), *Qualitative consumer and marketing research*. Sage.
- Brunner, T. A. (2014), "Applying neutralization theory to fair trade buying behaviour," *International Journal of Consumer Studies*, 38(2), 200-206.
- Carrigan, M., and Attalla, A. (2001), "The myth of the ethical consumer - do ethics matter in purchase behaviour?" *Journal of Consumer Marketing*, 18(7), 560-578.
- Carrington, M. J., Neville, B. A., and Whitwell, G. J. (2010), "Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers," *Journal of Business Ethics*, 97(1), 139-158.
- Chatzidakis, A., Hibbert, S., and Smith, A. P. (2007), "Why People Don't Take to the Supermarket: about Fair Trade The Role of Neutralisation," *Journal of Business Ethics*, 74(1), 89-100.
- Connolly, J., and Shaw, D. (2006), "Identifying fair trade in consumption choice," *Journal of strategic marketing*, 14(4), 353-368.
- Copelton, D. A. (2007), "'You are what you eat': nutritional norms, maternal deviance, and neutralization of women's prenatal diets," *Deviant Behavior*, 28(5), 467-494.
- De Bock, T., and Van Kenhove, P. (2011), "Double Standards: The Role of Techniques of Neutralization," *Journal of Business Ethics*, 99(2), 283-296.
- Dootson, P., Johnston, K. A., Beatson, A., and Lings, I. (2016), "Where do consumers draw the line? Factors informing perceptions and justifications of deviant consumer behaviour," *Journal of Marketing Management*, 32(7-8), 750-776.
- Dotson, M. J., and Hyatt, E. M. (2005), "Major influence factors in children's consumer socialization," *Journal of Consumer Marketing*, 22(1), 35-42.
- Elliott, R., and Jankel-Elliott, N. (2003), "Using ethnography in strategic consumer research," *Qualitative market research: An international journal*, 6(4), 215-223.
- Fisher, J. O., and Kremers, S. P. J. (2015), "How parental dietary behavior and food parenting practices affect children's dietary behavior. Interacting sources of influence?" *Appetite*, 89, 246-257.
- Fournier, S. (1998), "Consumer and Their Brands Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24, 343-373.
- Fullerton, R. A., and Punj, G. (1993), "Choosing to misbehave: A structural model of aberrant consumer behaviour," *NA-Advances in Consumer Research Volume 20*.
- Fullerton, R. A., and Punj, G. (2004), "Repercussions of promoting an ideology of consumption: consumer misbehaviour," *Journal of Business Research*, 57(11), 1239-1249.
- Gram, M. (2014), "Buying Food for the Family: Negotiations in Parent/Child Supermarket Shopping: An Observational Study from Denmark and the United States," *Journal of Contemporary Ethnography*, 44(2), 169-195.
- Grier, S. A., and Moore, E. S. (2012), "Tackling the Childhood Obesity Epidemic," *Transformative Consumer Research for Personal and Collective Well-Being*, 303.
- Gruber, V., and Schlegelmilch, B. B. (2014), "How Techniques of Neutralization Legitimize Norm- and Attitude-Inconsistent Consumer Behavior," *Journal of Business Ethics*, 121(1), 29-45.
- Gruber, V., Holweg, C., and Teller, C. (2015), "What a Waste! Exploring the Human Reality of Food Waste from the Store Manager's Perspective," *Journal of Public Policy & Marketing In-Press*, 35(1), 3-25.
- Harman, V., and Cappellini, B. (2014), "Unpacking fun food and children's leisure: Mothers' perspectives on preparing lunchboxes," *Young Consumers*, 15(4), 312-322.
- Harman, V., & Cappellini, B. (2015), "Mothers on display: Lunchboxes, social class and moral accountability," *Sociology*, 49(4), 764-781.
- Harris, L. C., and Daunt, K. L. (2011), "Deviant Customer Behaviour: A Study of Techniques of Neutralisation," *Journal of Marketing Management*, 27(July), 834-853.
- Harrison, R., Newholm, T., and Shaw, D. (2005), Defining the ethical consumer. *The Ethical Consumer*, Sage, London, 1-10.
- Hempel, C., and Hamm, U. (2016), "How important is local food to organic-minded consumers?" *Appetite*, 96, 309-318.
- Hoy, M. G., and Childers, C. C. (2012), "Trends in Food Attitudes and Behaviors Among Adults with 6-11-Year-Old Children," *Journal of Consumer Affairs*, 46(3), 556-572.
- Hughner, R. S., and Maher, J. K. (2006), "Factors that influence parental food purchases for children: Implications for dietary health," *Journal of Marketing Management*, 22(9-10), 929-954.
- Hunter-Jones, P. (2014), "Changing family structures and childhood socialisation: a study of leisure consumption," *Journal of Marketing Management*, 30(15-16), 1533-1553.
- Kerrane, B., Bettany, S. M., and Hogg, M. K. (2014), "Revisiting contemporary issues in family consumption," *Journal of Marketing Management*, 30(15-16), 1527-1532.
- Maruna, S., and Copes, H. (2005), "What have we learned from five decades of neutralization research?" *Crime and justice*, 32, 221-320.
- Minor, W. W. (1981), "Techniques of Neutralization: A Reconceptualization and Empirical Examination," *Journal of Research in Crime and Delinquency*, 18(2), 295-318.
- Moore, Roy L., and Moschis, George P. (1980), "Social interaction and social structural determinants in adolescent consumer socialization," *NA-Advances in Consumer Research Volume 07*.
- Moraes, C., Carrigan, M., and Szmigin, I. (2012), "The coherence of inconsistencies: Attitude - behaviour gaps and new consumption communities The coherence of inconsistencies," *Journal of Marketing Management*, 28(1-2), 103-128.
- Moschis, G. P., and Churchill, G. A. (1978), "Consumer Socialization: A Theoretical and Empirical Analysis," *Journal of Marketing Research*, XV, 599-609.
- Moschis, G. P., and Cox, D. (1989), "Deviant Consumer Behavior," *Advances in Consumer Research*, 16, 732-737.
- Nicklas, T. A., Baranowski, T., Cullen, K. W., and Berenson, G. (2001), "Eating patterns, dietary quality and obesity," *Journal of the American College of Nutrition*, 20(6), 599-608.
- Piacentini, M. G., Chatzidakis, A., and Banister, E. N. (2012), "Making sense of drinking: The role of techniques of neutralisation and counter-neutralisation in negotiating alcohol consumption," *Sociology of Health and Illness*, 34(6), 841-857.

- Peretti-Watel, P., Guagliardo, V., Verger, P., Pruvost, J., Mignon, P., and Obadia, Y. (2003), "Sporting activity and drug use: alcohol, cigarette and cannabis use among elite student athletes," *Addiction*, 98(9), 1249-1256.
- Rosenbaum, M. S., and Kuntze, R. (2003), "The relationship between anomie and unethical retail disposition," *Psychology & Marketing*, 20(12), 1067-1093.
- Scroll, P., and For, D. (2010), "Environmental Education Research," *Environmental Education Research*, 4622(August 2011), 37-41.
- Shaw, D., Shiu, E., and Clarke, I. (2000), "The contribution of ethical obligation and self-identity to the theory of planned behaviour: An exploration of ethical consumers," *Journal of marketing management*, 16(8), 879-894.
- Strutton, D., Vitell, S. J., and Pelton, L. E. (1994), "How consumers may justify inappropriate behavior in market settings: An application on the techniques of neutralization," *Journal of Business Research*, 30(3), 253-260.
- Strutton, D., Pelton, L. E., and Ferrell, O. C. (1997), "Ethical behavior in retail settings: is there a generation gap?" *Journal of Business Ethics*, 16(1), 87-105.
- Sykes, G., and Matza, D. (1957), "Techniques of Neutralization: A Theory of Delinquency," *American Sociological Review*, 22(6), 664-670.
- World Health Organization. (2017), "*Childhood overweight and obesity*," Retrieved 20 January, 2017, from <http://www.who.int/dietphysicalactivity/childhood/en/>

Guilt and Loathing in the Kitchen. Why Sustainable Consumers Waste Food

Karolina Kraus, Bauhaus-University of Weimar, Germany

Julie Emontspool, University of Southern Denmark, Denmark

INTRODUCTION

Sustainable consumption has developed into a rich yet complex research theme. Existing research has debated over the gap existing between consumers' attitude towards sustainability and their behavior (Eckhardt, Belk, and Devinney 2010), over the relative importance of individual or communal actions (Papaoikonomou and Alarcón 2015, Gollnhofer 2017), as well as concerning the plural articulations of sustainable consumption (Pecoraro and Uusitalo 2014).

Yet our understanding of sustainable consumption remains incomplete when it comes to consumers' critical evaluation of sustainability and the realism of its applicability, specifically when it comes to the lowering or avoidance of food waste. Such knowledge is important from an academic angle to better understand consumers' reluctance to lower food waste when it is a central feature of sustainability (Connolly and Prothero 2003). From a public policy angle, understanding why consumers who support sustainability in other domains of their life fail to lower food waste allows to develop communication strategies addressing this specific side of consumer behavior.

This paper therefore asks how and why consumers justify failure to lower their food waste, with a special focus on their critical reflections relative to the role of the individual in addressing sustainability issues. To investigate this question, we focus on consumers' practice of buying and cooking, with special attention given to their practices of food waste disposal (also called disposition), one of the key elements of the "squander sequence", food waste occurring during the consumer decision-making process (Block et al 2016). Such a perspective involves paying close attention to consumers' practices, "a routinized type of behavior" (Reckwitz 2002) that provide insights into the way in which consumers approach issues of food waste in their everyday consumption behavior. A qualitative research design combining observations, diaries and in-depth interviews allows for recording such practices as well as understanding consumers' rationales.

The findings of this study, which identify three types of consumer responses (apathetic, overwhelmed and pragmatist), advance current knowledge relative to the gap existing between consumers' attitude towards sustainability and their behavior (Eckhardt et al. 2010). They further provide indications as to the ways in which consumers' apathy, their feeling of being overwhelmed and pragmatism can be countered by promoting hope for individual agency in sustainability measures.

LITERATURE REVIEW

Consumers' ability to express moral preferences through consumption has been widely studied (Hilton 2004; Hilton and Daunton 2001). Yet while consumers view the adoption of sustainable consumption practices as desirable, many fail to do so in practice (Eckhardt et al. 2010; White, MacDonnell, and Ellard 2012). Among the factors explaining this gap between attitudes and behaviors are consumers' economical rationalization about the excessive cost of ethical consumption, a focus on the institutional dependency of sustainability that limits individual actions, and developmental realism, which claims that unethical practices are unavoidable in successful economies (Eckhardt et al. 2010). Furthermore, individual desire for ethical consumption is hindered by doubts and insecurities (Connolly and Prothero 2008) as well as a licensing effect where consumers allow for non-ethical behavior if they behave ethically in other domains of their life (Khan and Dhar 2006). Furthermore, if consumers

believe in the existence of a fair world order, they are more enthusiastic to consume ethically than when they are disillusioned about the fairness of the world (Luchs et al. 2010; White et al. 2012).

The role of social groups and communities has been promoted, advertising connectedness as solution to difficulties in adopting ethical consumption behaviors (Casey, Lichrou, and O'Malley 2016; Papaoikonomou and Alarcón 2015; Rokka and Moisander 2009). Attempts at encouraging ethical consumption behavior further focus on considering ethical consumption as a tool for positive image-building (Connolly and Prothero 2003; Naderi and Strutton 2013). Communication focused on self-accountability is for instance promoted over the generation of feelings of guilt (Pelozo, White, and Jingzhi 2013). Yet aside from individual factors, existing research increasingly addresses the role of macro-economic and -social structures in shaping consumption behavior (Dolan 2002). Individual agency increasingly becomes seen as a myth aimed at discharging public and private organizations of their responsibilities (Carrington, Zwick, and Neville 2015; Giesler and Veresiu 2014; Holt 2012). While this critical perspective gains traction in marketing research, consumers' viewpoints on this seemingly misguided focus on the individual has not been investigated. Specifically when it comes to the increasing plurality of ethical consumption behaviors, how consumers manage these different trends becomes challenging. Existing studies demonstrate that consumers combine different ethical consumption practices (Pecoraro and Uusitalo 2014), where some behaviors, such as buying local products are preferred to reducing meat consumption (Niva et al. 2014). Further understanding is needed about consumers' criticality towards and potential dismissal of specific ethical consumption practices despite their beliefs in the need for ethical consumption.

The case of product disposal is particularly understudied despite the centrality of recycling and waste problems in sustainability (Connolly and Prothero 2003; Guillard and Roux 2014). Existing research has shown that while reduction and reuse link to individual-level environmental values and knowledge, recycling is more closely linked to adherence to societal norms (Barr 2007). Further, different logistics co-exist for recycling household waste, which means that sustainability is not solely a question of motivation, but also of logistics (Monnot, Reniou, and Rouquet 2014). We study these logistics specifically when it comes to the case of food waste. Awareness about issues of food waste has been shown to lower wasteful behavior (Principato, Secondi, and Pratesi 2015; Whitehair, Shanklin, and Brannon 2013), yet the role of criticality towards individual action and responsibility requires additional research, which the following sections detail.

METHODOLOGY

This paper relies on qualitative interpretive data, emerging from the combination of three data collection methods: in-depth interviews, observations and diaries. Firstly, food disposal diaries were kept for one month by the respondents to record their habits in discarding food (Hackley 2003; Smith-Sullivan 2008). In order to facilitate data collection, the respondents were encouraged to take pictures of the discarded food using their mobile phones. They then sent the pictures, along with information relative to the reason for discarding the product to the first author, who registered the data. Secondly, the first author collected observational data during joint shopping and cooking with the respondents. These observations took place in the respondents' usual shops and their kitchens, in order to remain as

close as possible to their habitual context (Marvasti 2014). Thirdly, the insights from the diaries and the observations were discussed during in-depth interviews, to understand consumers' discourses about food waste. Semi-structured interview guides with open-ended questions served as basis for interviewing (Ayres 2008).

In order to favor depth of insights over population representativeness, we chose to concentrate in depth on a small sample of respondents (Carfagna et al. 2014; de Ruyter and Scholl 1998). 10 consumers participated in the study, aged 20-29 years, which is appropriate as young consumers represent the highest shares of food wasters (Principato et al. 2015; Rosenbauer 2011). Purposive sampling allowed to reach an equilibrated distribution in terms of gender and age within the segment (Hackley 2003). All respondents possessed high educational level, which reflects the usual customer type aware of and sensitive to sustainability issues (Olli, Grendstad, and Wollebaek 2001). Data collection took place in Germany, a country

where sustainable food consumption has been actively promoted and supported (Thøgersen 2010). All respondents were therefore knowledgeable about sustainable consumption and had the possibility of adopting it. The interviews were fully recorded and transcribed. Hermeneutical comparison between data and literature allowed for data interpretation (Thompson 1997), which involved both individual and comparative analysis of the respondents' statement (Maxwell and Chmiel 2014).

FINDINGS

Data analysis generated three types of responses to food waste and its avoidance. These responses differ on the basis of the level of relative activity, the former (apathetic) response reflecting a lower self-drive than the two following responses. In the following, we highlight specific expressions and words from the interviews that support the response type. Full excerpts are gathered in table 1.

Table 1 – Rationalizing food waste

Type of “wasting” response	Illustrative quotes
<p>Apathetic</p>	<p>Refusal to think about sustainability “sustainability, it’s nothing I am occupying myself with every day or often. It’s an important topic, but nothing I am confronting myself with extremely” (Lukas) “I didn’t really think that much about this topic so far.” (Jan)</p> <p>Avoiding conscious effort “when it works that it all comes from this region, then this is nice, but I think you don’t need to force it at all cost” (Jan)</p> <p>Resistance to fashionability “Climate change? Well I think that actually everyone is right now joining this trend [...] everyone is suddenly green and offers vegan and green products [...] I think you can also exaggerate it” (Jan)</p> <p>Fatalism “when it’s expired, then it would be for sure food waste for me, because if I would have taken care about the date and it wouldn’t have expired if I would have eaten it.” (Daniel)</p>
<p>Overwhelmed</p>	<p>Information overload “you are literally overloaded, you – I mean us in the industrial countries – hardly can protect yourself from all this information” (Tobias) “when you know too much then you worry too much about different things and I think in some cases this is not very good” (Laura) “There is so much to question that I am not able to question everything and I cannot know everything and I think that’s stupid” (Anna)</p> <p>Guilt management “For example I threw away my cheese, even though I knew: ‘oh now you have to eat it, because it gets dry, and then you leave and don’t eat it’ and then after a week you check it and think: ‘oh now it molds, hm what a pity, now I throw it away’. [...] That’s actually a bit of a fraud, so you don’t have to have a bad conscience.” (Katharina) “you start to kind of suppress this, that’s what I do I think. Because the moment you occupy yourself a lot with this, you recognize that there is so much and then you just behave like ‘ok I don’t know anything” (Anna)</p> <p>Feeling insignificant “In my opinion, all this is not avoidable. The whole climate change, I don’t think you can still save this. [...] I just think this is unstoppable in any kind of way.” (Laura) “you feel like a mini ant in a huge mass. [...] You just feel so small in our industry and the whole. [...] There is so much wasted that you just feel very small. You have the feeling that you could do something right, but you cannot really change something” (Katharina)</p>
<p>Pragmatic</p>	<p>Individual responsibility “you’re not interested in what you’re eating, you also do not appreciate food and then it doesn’t hurt, when you throw something away.” (Julia) “you can just make sure for yourself that you to some extent live in the right way and that you can arrange this with your conscience.” (Julia) “you do not only feel better personally, but you also do your bit for society.” (Christian)</p> <p>The impossibility of perfection “I maybe also already give a nudge towards this, by talking to others about it, maybe not that someone directly changes the next day, but that he takes a bit more care” (Christian) “you can’t be 100% consequent...only if you try, the way towards this or at least 60-70% I think is awesome” (Christian)</p>

Apathetic: Rejecting Sustainability Efforts Through Indifference

The first type of response reflects apathy, customers being aware of sustainability questions as well as appropriate behaviors but not engaging in it. The respondents refer to sustainability as something they “do not confront themselves with” (Lukas), they do not “think that much about the topic” (Jan). As a consequence, apathetic consumers consider food waste as an unfortunate outcome of their lack of attention, but not something that could have been avoided consciously: “when it’s expired then it would be for sure food waste for me, because if I would have taken care about the date and it wouldn’t have expired I could have eaten it.” (Daniel). By refusing to let sustainability questionings come to the fore, customers diminish the importance of this trend, banalising it through the expressions such as “everyone is joining this trend right now” (Jan). While the respondents at times reflect about their wasteful consumption, they do not want to “exaggerate it” (Jan). Apathetic customer responses thereby focus on resisting the “trendy” or fashionable factor of ethical consumption more than its underlying principles. The focus lies on signaling indifference, by diminishing the relevance of adopting sustainable consumption practices.

When sustainability and reduction of food waste becomes a standard discourse, customers are thus saturated, they approach sustainability as one trend among others, which they want to remain indifferent to, in order to not exaggerate.

Overwhelmed: Consciously Allowing for Food Waste to Reduce Guilt

The second type of response reflects customers’ awareness of sustainability’s importance, but also their feeling of being overwhelmed by the task. The respondents refer to information “overload” (Tobias), the fact that they “cannot know everything” (Anna), which curbs their initiatives in reducing food waste, paralyzing them: “when you know too much then you worry too much” (Laura). They highlight the small effect that their individual actions would accomplish, displaying fatalism in claiming that “this (climate change) is unstoppable anyway” (Laura). They admit that at times, they commit “fraud” (Anna), knowingly letting products perish in order to have an excuse for throwing them away instead of eating them. Customers suppress their feeling of guilt in this type of response and choose to waste food at times in order to be relieved of the perceived pressure. Their perception of lacking importance and power to address climate change hinders them from accepting the extent of their individual contribution, resulting in maintenance of wasteful practices.

This second type of customer response highlights the sense of incapacity resulting from information overload concerning sustainable consumption behavior. This perceived incapacity leads to conscious food waste of a type where customers wait for products to perish to a level where throwing away remains the only option. They thereby try to suppress their sense of guilt, minimizing their own influence.

Pragmatist: Maintaining Idealism While Limiting Initiatives

The third type of response refers to customers’ pragmatism, where idealism is tempered by fact-checking concerning the relative efficiency of sustainable behavior as well as the realities of everyday life. The respondents profess rationality, highlighting their numerous actions for reducing food waste, to “do your bit for society” (Christian). They support maintaining high food prices, as otherwise “it doesn’t hurt when you throw something away” (Julia). Despite a relatively low income, these respondents display a strong support for

a responsible way of consuming, such as buying organic, seasonal or local products. Yet simultaneously, they limit their initiatives for lowering food waste, acknowledging that “you can’t be 100% consequent” (Christian). While they hope to convince others, they concentrate on their own behavior, in order to “arrange this with your conscience” (Julia). By focusing on pragmatism, customers thereby moderate their idealism in reducing food waste, supporting small individual steps in order to eventually attain a sustainable lifestyle.

The third type of customer response reflects the balance customers aim to strike between idealism and the practicalities of everyday life, acknowledging the time-consuming character of consciously avoiding food waste.

CONCLUDING DISCUSSION

This study contributes to existing research by providing insights into consumers’ rationales relative to food waste, more specifically their considerations when it comes to their failure to avoid such waste. It demonstrates that even consumers who are aware and concerned about sustainability, as illustrated in the overwhelmed and pragmatist types of responses, develop rationales that for them justify wasting food. Among others, consumers exonerate themselves from wasteful behavior by acknowledging the difficulty of behaving sustainably on all fronts, as illustrated in pragmatist types of responses.

These additional insights contribute to existing research about sustainability and consumption by providing further information concerning the gap between consumers’ attitudes towards sustainability and behavior. In contrast to the rather rational argument found in previous studies (Eckhardt et al. 2010), the present findings paint a picture of young consumer abandoning efforts, explaining this decision by relativization, pragmatism and lost hope. While reducing food waste should be one of the most central practices in sustainable consumption behavior (Connolly and Prothero 2003), the studied consumers fail specifically to reduce food waste. These insights also add to existing research differentiating between deliberate and unintentional food waste behavior (Block et al 2016) by showing that while consumers may be aware of their wasteful behavior, they feel unable to address it, a state of mind going beyond the previously described licensing effect where consumers balance virtuous and less virtuous behaviors (Khan and Dhar 2006, Block et al 2016).

The paper provides practical insights concerning strategies for supporting sustainable consumption that goes against some existing findings. While existing research has repeatedly argued that raising also young consumers’ awareness to the food waste problematic can lower food waste (Principato et al. 2015; Whitehair et al. 2013), our findings point to the limits of such a strategy. The respondents feel conversely paralyzed by the excess information. Knowing precisely how to behave sustainably inhibits them from reducing food waste.

Such a finding is in line with existing research highlighting that consumers’ pessimism regarding their future well-being facilitates sustainability (Kaida and Kaida 2016). However, this doesn’t seem to be the case regarding food waste reduction. The respondents’ responses, such as feeling apathy, disbelief, guilt and being overwhelmed reflect a rather negative outlook on environmental matters. The outcomes therefore support existing assumptions that younger people tend to numb when they are confronted with information about environmental problems too unpreparedly and too extensively (Hicks and Bord 2001). In addition to experiencing doubts and insecurities (Connolly and Prothero 2008), consumers feel less empowered, they lose hope. The only improvement of wasteful food consumption practices seems to be connected with the generation of hope. Existing research about the role of hope in connection to

consumer agency is brought to a new level through our contribution (Courville and Piper 2004). The pragmatist consumer response indeed allows for potential reductions in food waste through supporting hope. Apathetic consumers in contrast may remain less responsive to messages of hope. The hope of overwhelmed responders could in contrast be rekindled, highlighting that individual action does play a role. Therefore, food consumption practices seem to be rather changed by influencers like hope than information about environmental problems, hence increased knowledge.

Limitations

Given that the methodological choice for this study was to investigate a limited number of participants in depth, the study could benefit from a broader, if less deep, exploration of consumers' discourses about food waste that includes a larger number of participants. Also, the data point to a small predominance of male customers adopting the apathetic response rather than the two other types of responses. Given the potential gender differences in sustainable consumption attitudes (Brough et al. 2016), it would be relevant to quantitatively assess this issue, in order to identify potential correlations between food wasting behavior and gender.

REFERENCES

- Ayres, Lioness (2008), "Semi-Structured Interview: The Sage Encyclopedia of Qualitative Research Methods", in *The Sage Encyclopedia of Qualitative Research Methods* (Vol. 1&2), ed. Lisa M. Given, Thousand Oaks, Calif. : SAGE, 810-811
- Barr, Stewart (2007), "Factors Influencing Environmental Attitudes and Behaviors - A U.K. Case Study of Household Waste Management", *Environment and Behavior*, 39 (4), 435-73.
- Block, Lauren G., Punam A. Keller, Beth Vallen, Sara Williamson, Mia M. Birau, Amir Grinstein, Kelly L. Haws, Monica C. LaBarge, Cait Lambertson, Elizabeth S. Moore, Emily M. Moscato, Rebecca Walker Reczek, and Andrea Heintz Tangari (2016), "The Squander Sequence: Understanding Food Waste at Each Stage of the Consumer Decision-Making Process", *Journal of Public Policy & Marketing*, 35 (2), 292-304.
- Brough, Aaron R., James E.B. Wilkie, Jingjing Ma, Mathew S. Isaac, and David Gal (2016), "Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption", *Journal of Consumer Research*, 43 (4), 567-82.
- Carfagna, Lindsey B., Emilie A. Dubois, Connor Fitzmaurice, Monique Y. Ouimette, Juliet B. Schor, Margaret Willis, and Thomas Laidley (2014), "An Emerging Eco-Habitus: The Reconfiguration of High Cultural Capital Practices among Ethical Consumers", *Journal of Consumer Culture*, 14 (2), 158-78.
- Carrington, Michal Jemma, Detlev Zwick, and Benjamin Neville (2015), "The Ideology of the Ethical Consumption Gap", *Marketing Theory*, 16 (1), 21-38.
- Casey, Katherine, Maria Lichrou, and Lisa O'Malley (2016), "Unveiling Everyday Reflexivity Tactics in a Sustainable Community", *Journal of Macromarketing*, doi: <https://doi-org.proxy1-bib.sdu.dk/10.1177/0276146716674051>
- Connolly, John and Andrea Prothero (2003), "Sustainable Consumption: Consumption, Consumers and the Commodity Discourse", *Consumption Markets & Culture*, 6 (4), 275-91.
- Connolly, John and Andrea Prothero (2008), "Green Consumption Life-Politics, Risk and Contradictions", *Journal of Consumer Culture*, 8 (1), 117-45.
- Courville, Sasha and Nicola Piper (2004), "Harnessing Hope through NGO Activism", *The Annals of the American Academy of Political and Social Science*, 592 (1), 39-61.
- de Ruyter, Ko and Norbert Scholl (1998), "Positioning Qualitative Market Research: Reflections from Theory and Practice", *Qualitative Market Research: An International Journal*, 1 (1), 7-14.
- Dolan, Paddy (2002), "The Sustainability of "Sustainable Consumption", *Journal of Macromarketing*, 22 (2), 170-81.
- Eckhardt, Giana M., Russell Belk, and Timothy M. Devinney (2010), "Why Don't Consumers Consume Ethically?", *Journal of Consumer Behaviour*, 9 (6), 426-36.
- Giesler, Markus and Ela Veresiu (2014), "Creating the Responsible Consumer: Moralistic Governance Regimes and Consumer Subjectivity", *Journal of Consumer Research*, 41 (3), 840-57.
- Gollnhofer, Johanna F. (2017), "The Legitimation of a Sustainable Practice Through Dialectical Adaptation in the Marketplace", *Journal of Public Policy & Marketing*, 36 (1), 156-68.
- Guillard, Valérie and Dominique Roux (2014), "Macromarketing Issues on the Sidewalk: How 'Gleaners' and 'Disposers' (Re) Create a Sustainable Economy", *Journal of Macromarketing*, 34 (3), 291-312.
- Hackley, Chris (2003), *Doing Research Projects in Marketing, Management and Consumer Research*, London: Routledge.
- Hicks, David and Andy Bord (2001), "Learning about Global Issues: Why most educators only make things worse", *Environmental Education Research*, 7 (4), 412-25.
- Hilton, Matthew (2004), "The Legacy of Luxury Moralities of Consumption since the 18th Century", *Journal of Consumer Culture*, 4 (1), 101-23.
- Hilton, Matthew and Martin Daunton (2001), "Material Politics: An Introduction", in *The Politics of Consumption: Material Culture and Citizenship in Europe and America*, ed. Martin Daunton and Matthew Hilton, London, GB: Berg Publishers, 1-32.
- Holt, Douglas B. (2012), "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets", *The ANNALS of the American Academy of Political and Social Science*, 644 (1), 236-55.
- Kaida, Naoko and Kosuke Kaida (2016), "Facilitating Pro-environmental Behavior: The Role of Pessimism and Anthropocentric Environmental Values", *Social Indicators Research*, 126 (3), 1243-60.
- Khan, Uzma and Ravi Dhar (2006), "Licensing Effect in Consumer Choice", *Journal of Marketing Research*, 43 (May), 259-66.
- Luchs, Michael G., Rebecca Walker Naylor, Julie R. Irwin, and Rajagopal Raghunathan (2010), "The Sustainability Liability: Potential Negative Effects of Ethicality on Product Preference", *Journal of Marketing*, 74 (5), 18-31.
- Marvasti, Amir B. (2014), "Analysing Observations", in *The SAGE Handbook of Qualitative Data Analysis*, ed. Uwe Flick, London: SAGE Publications Ltd., 354-76.
- Maxwell, Joseph A. and Margaret Chmiel (2014), "Generalization in and from Qualitative Analysis", in *The Sage Handbook of Qualitative Data Analysis*, ed. Uwe Flick, London: SAGE Publications Ltd., 540-54.
- Monnot, Elisa, Fanny Reniou, and Aurelien Rouquet (2014), "Recycling Household Waste: A Classification of the Logistics Used by Consumers," *Recherche et Applications en Marketing* (English Edition), 29 (3), 75-97.

- Naderi, Iman and David Strutton (2013), "I Support Sustainability but Only When Doing So Reflects Fabulously on Me: Can Green Narcissists Be Cultivated?", *Journal of Macromarketing*, 35 (1), 70-83.
- Niva, Mari, Johanna Mäkelä, Nina Kahma, and Unni Kjærnes (2014), "Eating Sustainably? Practices and Background Factors of Ecological Food Consumption in Four Nordic Countries", *Journal of Consumer Policy*, 37 (4), 465-84.
- Olli, Eero, Gunnar Grendstad, and Dag Wollebaek (2001), "Correlates of Environmental Behaviors: Bringing Back Social Context", *Environment and Behavior*, 33 (2), 181-208.
- Papaioikonomou, Eleni and Amado Alarcón (2015), "Revisiting Consumer Empowerment: An Exploration of Ethical Consumption Communities", *Journal of Macromarketing*, 37 (1), 40-56.
- Pecoraro, Maria Grazia and Outi Uusitalo (2014), "Conflicting Values of Ethical Consumption in Diverse Worlds – a Cultural Approach", *Journal of Consumer Culture*, 14 (1), 45-65.
- Pelozo, John, Katherine White, and Shang Jingzhi (2013), "Good and Guilt-Free: The Role of Self-Accountability in Influencing Preferences for Products with Ethical Attributes", *Journal of Marketing*, 77 (1), 104-19.
- Principato, Ludovica, Luca Secondi, and Carlo Alberto Pratesi (2015), "Reducing food waste: an investigation on the behavior of Italian youths", *British Food Journal*, 117 (2), 731-48.
- Reckwitz, A. (2002), "Toward a Theory of Social Practices a Development in Culturalist Theorizing", *European Journal of Social Theory*, 5 (2), 243-63.
- Rokka, Joonas and Johanna Moisander (2009), "Environmental Dialogue in Online Communities: Negotiating Ecological Citizenship among Global Travellers", *International Journal of Consumer Studies*, 33 (2), 199-205.
- Rosenbauer, Jörg (2011), "Das Wegwerfen Von Lebensmitteln - Einstellungen Und Verhaltensmuster. Quantitative Studie in Deutschen Privathausalten", Report: Confresco Frischhalteprodukte Europa.
- Smith-Sullivan, Kendall (2008), "Diaries and Journals: The Sage Encyclopedia of Qualitative Research Methods", in *The Sage Encyclopedia of Qualitative Research Methods* (Vol. 1&2), ed. Lisa M. Givens, Thousand Oaks, Calif.: SAGE, 213-215
- Thompson, Craig J. (1997), "Interpreting Consumers: A Hermeneutical Framework for Deriving Marketing Insights from the Texts of Consumers' Consumption Stories", *Journal of Marketing Research*, 34 (4), 438-55.
- Thøgersen, John (2010), "Country Differences in Sustainable Consumption: The Case of Organic Food", *Journal of Macromarketing*, 30 (2), 171-85.
- White, Katherine, Rhiannon MacDonnell, and John H. Ellard (2012), "Belief in a Just World: Consumer Intentions and Behaviors toward Ethical Products", *Journal of Marketing*, 76 (1), 103-18.
- Whitehair, Kelly J., Carol W. Shanklin, and Laura A. Brannon (2013), "Written Messages Improve Edible Food waste Behaviors in a University Dining Facility", *Journal of the Academy of Nutrition and Dietetics*, 113 (1), 63-69.

The Art of Solo Dining: A Rhythmanalysis of Restaurant Spaces

Ai-Ling Lai, University of Leicester, UK

Ming Lim, University of Liverpool, UK

INTRODUCTION

All urban spaces are informed by specific rhythms related to the activities, practices and rituals of residents and inhabitants. Commercial eating establishments such as restaurants and cafes are no exception: they are replete with multifarious and divergent rhythms (Edensor 2010, Finkelstein 2013) that reveal an uneven social playing field (May and Thrift 2007). In this paper, we demonstrate how restaurants are inscribed with 'heteronormative rhythms' that privilege the dining experience of couples and families (see Valentine 1993, Browne 2007) while marginalizing that of the solo diner.

Commercial dining establishments are performatively constituted (Browne 2007, Valentine 1993; Finkelstein 1989): that is, they are spatially, temporally and culturally laid out to endorse, promote and sustain certain sets of heterosexual practices (e.g. dating, courting rituals, family outings) as normative. While these studies reveal the anguish and fear associated with the dining experiences of lesbian couples, the experience of *dining alone* in an overtly heteronormative environment is little understood. According to Ratner and Hamilton (2015), dining out is considered to be a hedonic social pursuit, the pleasure of which is derived from being in the company of another (Warde and Martens 2000, Finkelstein 2013). Solo diners are not only 'out of place' (Bell and Valentine 1997; Johnson and Ekstrom 2009); they are considerably 'out of sync'. The lack of a dining partner conjures a pitiful note, an arrhythmia in an otherwise convivial ensemble.

Drawing on Henri Lefebvre's theory and method of rhythmanalysis (2004), we consider how heteronormative rhythms shape the spatio-temporal experiences of solo diners and the strategies employed by these consumers to manage commercial protocols. The questions that drive our study are, therefore, first: to what extent do solo diners synchronise, resist and/or recalibrate their 'deviant rhythms' in relation to the 'dominant rhythm(s)' of a society where coupledom and families are still overwhelmingly normalized? Second (and more generally for our aim to advance consumer research, theory and culture), what room is there, if any, for creative improvisation in the consumption of space and time in the act of solo dining?

RHYTHMANALYSING COMMERCIALISED DINING SPACES

While rhythmanalysis has recently received considerable attention among geographers and sociologists interested in the rhythms of the market (e.g. Borch et al 2015, Cronin 2008, Kärrholm 2009), it remains largely overlooked in consumer research and marketing. With the exception of McEachern et al (2012) and Warnaby (2013), consumer researchers have instead concentrated on developing an 'understanding of consumption *in* and *of* place' (Chatzidakis et al 2013, Goode and Anderson 2015, de Burgh-Woodman 2012, Maclaran and Brown 2005) culminating in what O'Guinn et al (2015) has called the topological turn in consumer research. The privileging of space in consumer research echoes May and Thrift's (2007: 2) concern that 'social theory is moving towards a creeping and just as debilitating spatial imperialism,' which perpetuates a dualistic thinking about

time and space. As Edensor (2010) suggests, rhythmanalysis has the potential to bridge the dualism between time and space by considering the mutual entanglement of spatio-temporal practices as one that are folded through embodied rhythms. As Lefebvre famously proclaimed, 'every rhythm implies the relation of time with a space, a localised time, or if one wishes, a temporalized space' (1996: 230).

Theoretical Framing

Lefebvre's theory of rhythmanalysis has been extensively studied in diverse fields for its insights into urban life, space and time. He envisaged nothing less than the founding of a new form of knowledge through the study of bodily, natural, urban and spatial rhythms (Elden 2004, Lefebvre 2004). Crucially, Lefebvre (2004) emphasises the centrality of the body as a metronome, which allows the rhythm-analyst to 'grasp' and 'be grasped' by the rhythms of everyday life. By listening to the body, the rhythm-analyst is able to appreciate external rhythms (Borch et al 2015) and thus becomes attuned to the social pulses that animate everyday spaces. Key notions of Lefebvrian analysis are eurythmia, arrhythmia and isorhythmia (Lefebvre 2004). Eurythmia occurs when one's body is healthfully in tune with the natural rhythms of sleep, rest, play and work. Isorhythmia refers to the adjustment and adaptation of one's inner rhythms with those of public/private spaces. Arrhythmia is the often jarring collusion of mechanical, capitalistic time with the cosmic rhythms that govern our planet.

According to Kärrholm (2009), urban spaces are polyrhythmic: they are pervaded through and through by heterogeneous temporalities and rhythms where *linear time* (i.e. a product of modern capitalism that institutionalise clock time with working time, school time etc.) intersect with *cyclical time* (i.e. cosmic time such as day, night, the seasons). Kärrholm observes how market rhythms achieve synchronicity by turning polyrhythmic urbanscapes into isorhythmic retailscapes. In other words, urban rhythms are isolated and redirected to coincide with the rhythms of shopping (e.g. retail opening time, scheduled mealtimes etc.). Urban eating establishments thus play a crucial role in perpetuating this isorhythmic landscape. This fact is evidenced in Finkelstein's (2013) observation of the service encounter in restaurants, where patrons are funnelled into occupying specific 'territories' that befit their social importance:

'The power of the waiter has also been described in terms of choreography and space management (Erickson 2007); at their discretion, they allocate territory and prescribe the amount of movement of individuals inside the restaurant. The diner is directed to a table by the waiter, and not all tables provide the same experience; some are noisier than others, they are nearer to the kitchen, or toilets, or front door and passageways, and this can impinge on the dining experience. The waiter's body language frame their diner's experience and create a sense of intimacy as when the waiter introduces themselves and offers to help... Alternatively, the waiter can be remote, formal, or even distracted, and this conveys the message that the diner is not very important' (p.103)

While Finkelstein does not allude to the sorting of patrons along heterogendered lines, she does make special note of how the experience of dining out is organised to reflect heterosocial companionableness and structures of what constitutes conviviality (Finkelstein

1 The notion of heteronormative rhythm is derived from Rich's (1980) concept of '*compulsory heteronormativity*', an ideological framework that institutionalises heterosexuality as a 'natural' sexual preference. Such a framework legitimises the heterosexual couples and families as a 'normative' and ideal form of intimacy.

1989). Dining establishments are spatially (e.g. table-for-two/large table, candlelight, set meals for two/more) and temporally (e.g. the sequencing of a three course meal) co-ordinated to encourage sociability.

Lefebvre and Dining Out

For those with company, dining out can be an experience of eurythmia, where the bodies of patrons harmonise with the rhythms of the (restaurant) space. For the solitary patron, however, this happy state of affairs is often disrupted. Dining out alone is an act of social transgression that brings about *arrhythmia* - a pathological situation where there is a disruption to normative rhythms (Lefebvre 2004). Dining etiquette, dress code and gestures are perpetually enacted to police diners into a moral order in line with the heteronormative framework (Valentine 1993). After all, dining out is a mannered event (Finkelstein 1989), where there is an embodied knowing of how one should behave, how one should conduct oneself publically etc. Such embodied knowing is taken as 'natural', which according to Lefebvre (2004) is cultivated through repeated rhythms that over time 'break into' habits. He calls this dressage. However, Lefebvre is careful to assert that an analysis of the rhythm of dressage does not preclude the possibility of an improvised rhythm.

METHOD

The findings presented in this paper are derived from a larger project exploring single consumer's experience of the marketplace. Using referral sampling, 19 participants were recruited to participate in an in-depth interview exploring their experience of singleness and solo dining. Despite obvious advantages, interviews privilege 'talk' and textual data that disengage the researchers and the participants from their spatio-temporal contexts. We therefore supplement our interview data with 'walking' observation (Middleton 2011), a method that engages the body as a metronome (Lefebvre 2004). Through 'walking', we are able to establish an 'embodied engagement' with the participants by sharing in their 'rhythm of movement', 'multi-sensorial experiences' and 'visual field' (Lee and Ingold 2006: 80). Using a combination of observation, photography, offsite and in-situ interviews, we captured the intricacies of spatial practices and social interactions. Of the 19 participants, 8 agreed to participate in the 'walk', generating a wealth of data which include 57 hours of observation, 309 photographs and approximately 300 pages of transcribed in-situ interviews.

FINDINGS

In this paper, we discuss two prominent time-space tactics our participants employ when dining out alone: (1) negotiating mobility and (2) managing visibility.

Negotiating Mobility

Our participants consistently express a feeling of awkwardness when requesting a 'table for one'. Their expressions speak to an unwritten code that construes solo dining as a transgressive act (Finkelstein 1989; Johnson and Ekstrom 2009). One of them, Arjun, explains:

"The table is designed for two, minimum. There's no such thing as a table for one, really. Restaurateurs want you to be in a couple. It's all marketing isn't it? It's like an unwritten rule. When I go into a restaurant by myself I am always very apologetic about it. I'd be, 'I'm sorry, but it's going to have to be a table for one, I was due to meet somebody who's cancelled.' I'd be constantly trying to explain myself. I shouldn't really need to

do that. I should be able to say, 'table for one' - no questions." (Arjun, Off Site Interview)

For Arjun, dining establishments are spatially co-ordinated to reflect a 'social norm' that privileges the heterosexual couple (Valentine 1993, Browne 2007). To cope with this rhythm of heteronormativity, Arjun employs an 'apologetic tactic' as a pre-emptive gesture. Such a gesture is rooted in his embodied knowing - or dressage (Lefebvre 2004) - of having trespassed into a heteronormative domain. By feigning a cancellation of a fictitious partner, Arjun is able to calibrate his 'awkward' presence and reposition himself as a 'legitimate' diner.

In a similar vein, another participant, Will, reflects on how his experience of negotiating an entry into an Italian chain of restaurants (Zizzi) makes him feel 'out of place':

"People don't come to Zizzi to eat. They come here to socialize... It is a sleek operation. I wouldn't really feel I have the freedom to move about. In a place like this, I would just have some lunch and go. I feel a bit out of place. It's not a single friendly place. It has an air of formality about it. It's got very straight lines. You have to fit into a strict protocol or else you stand out. You have got to wait to be seated. You can't just wander in and sit down anywhere." (Will, In-Situ Interview)

Zizzi falls into Finkelstein's (1989) category of a parodic restaurant, a space engineered to prioritise 'socializing' over gastronomical experiences. For Will, Zizzi is a highly regulated operation, which is reflected in its spatial linearity. This organisation of space into 'straight lines' reflects the spatialisation of 'linear time' (Lefebvre 2004), in which patrons' mobility are regulated in accordance to a routinised set of protocol. In this context, the waiting staff assumes an authoritative position as a 'gatekeeper' who is capable of manipulating the patron's occupation of 'space' and 'time' (ibid. 2004). This generates an asymmetrical power relation that renders Zizzi an isorhythmic (sleek) space (Finkelstein 2013; Lefebvre 2004).

For Will, Zizzi's regimented protocol does not only 'fix' him to his place (seat), it paces his dining experience into a sequential tempo - where he is expected to 'wait to be seated', and be 'waited on' -throughout his three course meals. In an attempt to manoeuvre such a strict regime, Will resorts to speed up his dining time ('lunch and go'). For Will, 'waiting' constitutes a rhythm of subordination (Adam 1990), which exposes him to the heteronormative gaze. For our participants, managing visibility within the spaces of restaurants is paramount.

The interview took place at an off-peak period for the restaurant. It was nearly empty when we entered. When we asked if we could choose our seats, the waitress politely brushed aside our request, saying: 'you can sit anywhere *other than the larger tables*'.

Managing Visibility

Solo dining conjures a heightened sense of visibility, which our participants consider to be alienating (Browne 2007). As such, they attempt to calibrate their bodily rhythms in a way that does not disrupt the heteronormative rhythm. In particular, they negotiate spatial positioning (where to sit) and temporal pacing (duration of stay) to manage their conspicuousness. As Arjun explained:

My preference would be to sit around the edges at the back (Café Rouge). Where we are now is the prime seat because you get a view of the whole restaurant. You get a view of the people coming in; you can catch the eye of the waiter. You get a sense of the space. You don't feel confined or crowded. I can just

Table 1: Findings

Themes	Descriptions	Participant Data
Negotiating Mobility	From negotiating entry to negotiating exit, our participants find themselves having to assert their mobility. In particular, we observe the extent to which participants are (1) free/inhibited to come and go (2) made to stop (wait) and (3) able to control the pace of their dining experience.	
	Freedom/Inhibition to Come and Go	I think there's a likelihood of being turned away at San Carlos. I can see San Carlos just reluctantly giving you a table, but on a Friday or Saturday night, I can see them saying, "We're full," even though there's, like, actual tables there. "Oh, they're booked." So I can see them do that, but I think I would find San Carlo more intimidating than Bistro Pierre. In comparison I think San Carlos would be more difficult, because the tables are even bigger as well. You know, it's a little bit, ugh, no. But it just seems like a real, kind of, snobby place, where it's just couples only. (Arjun, In Depth Interview) I think the fact that it's a fast food place means that it's—I don't know. Somehow it makes it simpler to just come in and just—it's like the whole concept of YO! Sushi. You're going in there and the food's readily available, so you're not hanging around. I think it's just a different dining experience. I don't know. It somehow feels more acceptable (of solo dining)...it is a quick eating establishment (Priya, In situ interview)
	Made to Wait	I think in city centre Leicester there's pretty much the same format. The emphasis is going in, sitting down, being waited on. Er, there's not many places where you go in and you can stand up and eat at a bar where there's a flow of people. City centre Leicester or even city centre Nottingham I'd feel a little bit odd going into a restaurant on my own. Um, I don't know, I, I do honestly think (pause) it's so, I think it must be so unusual and I think I'd, I think I'd feel I was a bit too conspicuous (Ingrid, In Depth Interview)
	Freedom to Pace One's Dining Experience	Wagamama have this seating in the middle where they tend to sit single people. But they primarily, and you can see that other single people are sat around the table. I requested to be sat on the edge near the window. . It's just I wanted to be near the window so I could view other things. I think the tables around the window were catered for more than one person. But they seem to frown upon my request. I felt like I needed to rush and hurry up and leave. I feel like I'm different because I'm being treated differently just because I'm there as a single person rather than (someone with company). I feel like maybe if there was a couple that went in there or maybe it was a group of people they wouldn't have been questioned. I could've been in and out of there within 15 minutes and there could be a couple sat in front of me for about an hour, but yet I was still frowned upon. I think it's like I just want to be treated equally. So if you walk in a couple, you walk in as a group, you're asked where you want to sit. I think a single person should have the same rights (Priya, In Depth Interview).
		I think this place (Yo! Sushi) kind of promotes people coming alone and eating, because especially the conveyer belt idea, it's more like a bar where you can definitely come alone. Or do something yourself and just stand at the bar while finishing your drink. So, under no pressure to please someone or look at someone, you can just eat and mind your own business. So it's an activity that you indulge in, but also you don't need anybody else. (Ela, In Situ Interview)
Managing Visibility	All the participants in this study express concerns over the heightened visibility associated with solo dining, which renders them exposed and vulnerable. Participants devise a myriad of spatial and temporal tactics to manage their visibility in restaurant spaces. Most notably, the managing of visibility involves (1) choosing a strategic location and (2) evading or confronting the heteronormative gaze	I think it would be like 'oh look she is a single woman. Has she been ditched? Is she desperate? Is she looking?' When you walk in on your own people do stop and stare and it is that whole, why don't you just leave me alone to read my book and have my glass of wine and let me be instead of staring. You can feel that, and they might not even be looking but you are paranoid (Javinder, In depth Interview)
	Choosing a Strategic Location	I will sit along the back wall on the nice long seat. I would quite like to sit by the window and look out the window and just see the world go by. Obviously if I am here by myself I need some distraction and something to look at. It's quite a nice street place. Here, I can look at the entire restaurant, look at all the decoration and everyone else here, look at all the staffs. I want to be the person who is looking out at everyone else rather than having them looking at me. I think if I was by myself, I would probably sit either side of the corners (by the wall or by the window). I wouldn't sit in the middle, it's very conspicuous. I will look a bit out of place. By the side wall, it's better because it's kind of like I merge into the wall. (Will, In Situ Interview)
	Evading the Heteronormative Look	I do like people watching though and another thing I've just thought as well if I was on my own I'd probably bring something. A book... not a book, a magazine or look on your phone or something so it looks like you're doing something else so you're not just sat here like this. You've got something else, a paper or a magazine or something to occupy yourself a bit so you're not catching people's eyes. It looks like... you know avoiding eye contact. Say if I don't have a book or a phone I'd still be looking at the menu, I'd be like this (<i>head down, facing away from the crowd, avoiding body language</i>), I'd still be reading (Aisha, In Situ Interview)
	Confronting the Heteronormative Look: Gameplay	I would generally prefer sitting outside. It really depends. Sometimes I will purposely do it just to make others feel uncomfortable. (Laughter) I'm like, "Feel like that. You should," whatever. Yes, that's just pure pleasure that I will get out of making somebody else uncomfortable. (Ela, In Situ Interview)

blend into the corners. I suppose I've got the control... It would be my worst nightmare because then I could have like a million eyes behind me. (Arjun, In-Situ Interview)

On arrival at Café Rouge, Arjun and I were greeted by a waitress who invited us to 'sit wherever we want(ed)'. Without hesitation, Arjun headed directly to the rear of the restaurant, occupying a corner-seat, facing the front and away from the window. Arjun considered this to be a 'prime seat' (See Figure 1) as it enables him to take command of his visual field (which encompasses the entire restaurant). For Arjun, the corner allows him to 'blend into' the spatial recesses (Bachelard 1994), thus concealing his presence. By occupying an interstitial space, Arjun can assume the role of an observer and 'lose himself in the crowd' without compromising his position. Ironically, it is within the confined space of the corner that Arjun gains a 'sense of space' since he is not 'crowded' by the invasive 'look' of others. He is highly attuned to the ebb and flow of patrons entering/leaving the restaurant and this sensitises him to orient his bodily gestures (e.g. eye contact, posture) in accordance to the level of exposure he feels comfortable with (Lefebvre 2004). For example, he can 'catch the eye of the waiter' should he wish to be attended to (Finkelstein 2013). Or retreat into the corner when he desires privacy.

However, being seated in the middle or occupying a seat that faces away from the crowd constitutes a 'nightmarish' experience

for Arjun. His exposure conjures a vulnerable sense of arrhythmia (Lefebvre 2004) that is corporeally felt ('millions of eyes' closing in on him).

While most participants tend to evade and/or manage this heteronormative gaze, yet another participant, Simon, chooses to engage in a creative game play that signifies an improvisation of routine:

I'd be happy to go anywhere on my own. I think there're once or twice when I've gone to a place and ask for a "Table for one?" The truth is table for one means it's those grotty little ones by the window. I've got this thing where I can flip negatives into positives and I often play to them. I often play the game, which is looking at who is the most attractive waitress. (Simon, Off-site Interview)

Unlike most of our other participants, Simon is accustomed to patronising a restaurant on his own. While he is conversant with the unpleasantness of the 'grotty little table by the window', Simon possesses an embodied competence that is adept at improvising on an undesirable situation (Lefebvre 2004). In a subversive game of 'spotting the most attractive waitress', Simon reverses the heteronormative gaze that shift the power dynamics between him and the waitress (see Crang 1994). By subjecting the waitress to a 'male gaze' (Mulvey 1975), Simon simultaneously exposes the hypocrisy and 'constructedness' of the heteronormative gaze.



Top Left: The corner seat identified by Arjun as the 'prime seat'

Bottom Left and Top Right: The expansive visual field encompassing the entire restaurant, as viewed from the 'Prime Seat' (Top Left). This vantage point safeguards the 'invisibility' of the observer while exposing the visibility of other patrons/staff.

Bottom Right: Aisha 'shrinks into' the seat occupying a tiny corner on a long bench.

Figure 1: Corner as a prime location

CONCLUSION

Our stated aims for this study were to gain insight into how solo diners mitigate marketplace exclusion and social arrhythmia (Lefebvre 2004) and to probe the ways in which these consumers negotiate mainstream rhythms of the marketplace. Our findings show that solo dining consumers exercise considerable ingenuity and a certain technical skill in both aligning with, yet subtly subverting, the rhythms of the marketplace. Using rhythmanalysis, our paper demonstrates that a spatio-temporal analysis opens up new knowledge into how solo diners negotiate heteronormative rhythms in eating establishments that, to date, continue to privilege couples and families.

Remarkably, our participants are highly attuned to their 'transgressions' into heteronormative spaces. Their feelings of what Lefebvre calls 'arrhythmia' is grounded in an embodied knowing, of being 'out of sync' with the rhythms of heteronormativity they encounter in dining establishments. As reported by our participants, their occupation of a table intended for two/more is often considered by restaurateurs as 'wasting space'— so much so that they are often isolated by being moved away to the periphery of the main space, away from the conviviality of crowds (Valentine 1993, Finkelstein 1989). One could say that such orchestration is deeply symbolic: solo diners are simply not 'part of the action'.

Even more interesting is our finding that our participants are seemingly complicit in the established isorhythmic practices (Kärholm, 2009) of restaurants they dine at. They actively employ spatial positioning strategies (negotiating strategic seating) and temporal pacing (eating quickly/slowly) to help them circumvent and 'blend into' the heteronormative environment. Contrary to what one might expect, however, we argue that such tactics are far from disempowering. Rather, our participants are enacting what De Certeau (1998: 37) calls the practical 'making do' of everyday life. Occupying a marginalised position, solo diners found themselves making use of interstitial spaces and improvising with both physical objects (chairs, tables) as well as with their eyes, bodies and space itself. The corner (Bachelard 1994), for example, provides a temporary refuge that allows them to 'manoeuvre' within the field of vision of those in a position of power (De Certeau 1998). In this way, solo diners are capable of improvising on the heteronormative rhythms that are imposed on them; while subverting these rhythms, however, our participants show a keen awareness of how they can simultaneously protect and exploit their visibility.

Future research may well question what restaurants can do to optimize the solo diner's consumption experience, to elevate it from 'normal' or 'merely satisfying' to 'delightful' and beyond. While the number of restaurants for solo diners has recently shown signs of increasing, more research is needed to explore how the culture of urban dining can evolve beyond the heteronormative model that privileges the dining experience of couples, groups and families. In line with socio-demographic trends across the globe and the continued increase in the number, mobility and purchasing power of solo travellers and single professionals, it seems only logical that their consumption experiences should be radically thought through by restaurants. In the meantime, we hope our research has extended knowledge of the extent to which the solo diner has to accommodate the spatio-temporal (rhythmic) protocols within restaurants – and, indeed, the social order itself - in order to have the consumption experience she/he desires.

REFERENCES

- Adam, Barbara (1990). *Time and Social Theory*, Polity Press: Cambridge.
- Bachelard, Gaston (1994). *The Poetics of Space*, Beacon Press: Boston.
- Bell, David and Valentine, Gill (1997). *Consuming Geographies: We Are Where We Eat*, Routledge: London and New York.
- Borsch, Christian, Hansen, Kristian Bondo and Lange, Ann-Christiana (2015). Markets, Bodies, and Rhythm: A Rhythmanalysis of Financial Markets From Open-Outcry Trading to High Frequency Trading, *Environment and Planning D*, 33(6): 1080-1097.
- Browne, Kath (2007). (Re)Making the Other, Heterosexualising Everyday Space, *Environment and Planning A*, 39(4):996-1014.
- Chatzidakis, Andreas, McEachern, Morven and Warnaby, Gary (2013). Virtual Special Issue: The Concept of Place in Marketing Theory and Research, *Marketing Theory*, 13(1):1-4.
- Crang, Philip (1994). It's Showtime: On the Workplace Geographies of Display in a Restaurant in Southeast England. *Environment and Planning D*, 12 (6): 675-704.
- Cronin, Anne (2008). Calculative Spaces: Cities, Market Relations, and The Commercial Vitalism of the Outdoor Advertising Industry. *Environment and Planning A*. 40 (11): 2734-2750.
- De Certeau, Michel (1988), *The Practice of Everyday Life*, University of California Press: Berkeley and Los Angeles.
- de Burgh-Woodman, Helene (2012), "Cars For Sale! an Ethnography of the Collusion of Space and Consumption in Power and Agency Struggles", in NA - Advances in Consumer Research Volume 40, eds. Zeynep Gürhan-Canli, Cele Otnes, and Rui (Juliet) Zhu, Duluth, MN : *Association for Consumer Research*, Pages: 496-501.
- Edensor, Tim (2010). *Geographies of Rhythm: Nature, Place, Mobilities and Bodies*, New York: Routledge.
- Elden, Stuart (2004), Rhythmanalysis: An Introduction, in Henri Lefebvre (ed.) *Rhythmanalysis: Space, Time and Everyday Life*, Bloomsbury: London and New York.
- Finkelstein Joanne (2013), *Fashioning Appetite: Restaurants and The Making of Modern Identity*, New York: I.B. Tauris.
- Finkelstein, Joanne (1989). *Dining Out: A Sociology of Modern Manners*, New York University Press: New York.
- Goode, Amy and Anderson, Stephanie (2015). It's like somebody else's pub: Understanding conflict in third place, in Kristin Diehl and Carolyn Yoon (eds.), *NA Advances in Consumer Research*, Association for Consumer Research, Vol. 43: 346-351.
- Johnson, Inger and Ekstrom, Marianne Pipping (2009). Gender perspectives on the solo diner as restaurant customer, in Herbert Meiselman (ed.) *Meals in Science and Practice: Interdisciplinary Research and Business Applications*, Woodhead Publishing: Cambridge.
- Kärholm, Mattias (2009). To The Rhythm of Shopping: On Synchronisation in urban landscapes of consumption. *Social and Cultural Geography*, 10(4): 431-440.
- Lee, Jo and Ingold, Tim (2006). Fieldwork on Foot: Perceiving, Routing, Socialising. In Simon Coleman and Peter Collins (eds.) *Locating the Field: Space, Place and Context in Anthropology*. Oxford and New York: Berg: 67-85.
- Lefebvre, Henri (1996). *Writings on Cities*, Eleonore Kofman and Elizabeth Lebas (trans.), Oxford: Basil Blackwell.
- Lefebvre, Henri (1991). *The Production of Space*, Donald Nicolson-Smith (trans.), Malden: Blackwell.
- Lefebvre, Henri (2004). *Rhythmanalysis: Space, Time and Everyday Life*, Stuart Elden and Gerald Moore (trans.), Bloomsbury: London and New York.

- Maclaran, Pauline and Brown, Stephen (2005). The Center Cannot Hold: Consuming the Utopian Marketplace. *Journal of Consumer Research* 32(9): 311-323.
- May, Jon and Thrift, Nigel (2007), *Timespace: Geographies of Temporality*, New York and London: Routledge.
- McEachern, Morven, Warnaby, Gary and Cheetham, Fiona (2012). Producing & Consuming Public Space: A Rhythmanalysis of the Urban Park. In Zeynep Gürhan-Canli, Cele Otnes, and Rui (Juliet) Zhu (eds.), *NA Advances in Consumer Research*, Vancouver: 873-874.
- Middleton, Jennie (2011). Walking in the City: The Geographies of Everyday Pedestrian Practices. *Geography Compass* 5(2): 90-105.
- Mulvey, L. (1975). Visual Pleasure and Narrative Cinema. *Screen* 16(3): 6-18.
- O'Guinn, Thomas, Tanner, Robin and Maeng, Ahreum (2015). Turning to Space: Social Density, Social Class, and the Value of Things in Stores. *Journal of Consumer Research* 42(5): 196-213.
- Ratner, Rebecca and Hamilton, Rebecca (2015), Inhibited From Bowling Alone. *Journal of Consumer Research* 42 266-283.
- Valentine, Gill (1993). (Hetero)Sexing Space: Lesbian Perceptions and Experiences of Everyday Spaces. *Environment and Planning D*. **11** 395-413.
- Warde, Alan and Martens, Lydia (2000), *Eating Out: Social Differentiation, Consumption and Pleasure*, Cambridge University Press: Cambridge.
- Warnaby, Gary (2013). Synchronising Retail and Space: Using Urban Squares for Competitive Place Differentiation. *Consumption Markets and Culture* 16(1): 25-44.

Repositioning via Abstraction

Jonathan Lee, University of La Verne, USA

Heungsun Hwang, McGill University, Canada

An Tran, University of La Verne, USA

INTRODUCTION

A brand's *position*, represents the key attribute, benefit, or "image" that it stands for in the minds of consumers, relative to competition (Shimp 2010). Many advertising practitioners regard positioning as the most important factor in establishing a brand in the marketplace (Belch and Belch 2015). When a brand's current position is weak or not deemed ideal relative to competitors, it requires repositioning and we refer to it as *the strategic process that is motivated by a perceived discrepancy between a brand's current and intended position*. While the cumulative knowledge in positioning strategy and perceptual mapping is rich, theory-based repositioning principles received little attention. We extend Pham and Muthukrishnan (2002) and present an abstraction-based conceptual and empirical framework that argues that, depending on the diagnosis at different levels of abstraction, repositioning strategy can be easily guided by determining the optimal level of abstraction. In this study, we (1) present a framework of abstraction-based repositioning strategy grounded in construal level theory, (2) adopt a simultaneous two-way clustering method based on multiple correspondence analysis that enables managers to account for the heterogeneity in consumer perceptions, and (3) illustrate our approach using online automobile consumer panel data.

CONCEPTUAL FRAMEWORK

Construal Levels and their Influence on Consumers' Judgment

Academics and practitioners recognize a number of positioning/repositioning strategies and tactics that are grounded in attitude theory/models and their associated attitude change approaches. These traditional approaches to the repositioning problem tend to focus on brand attributes/features (e.g., warranty, price). Applying a multi-attribute model perspective, there are three general ways to change consumer attitudes: change beliefs (attributes), change attribute importance, or change ideal points (Blackwell, Miniard, and Engel 2001; Lutz 1975). This strategy is most effective when there is no other clear identity or image for the brand in consumers' minds, assuming that the strong attribute matters to consumers. When, however, the attribute-based approach fails, we may consider repositioning based on the higher levels of abstraction at which consumers perceive the offering differently. Considerable research has established that consumers construe objects and events at different levels of abstraction. These differential levels of abstraction in construal has significant influence on how consumers evaluate objects, and consequently, on consumers' behavior (Trope and Liberman 2003).

Research on construal level theory (CLT) demonstrates that people's mental representations of psychologically distant objects and events are more high-level, simple and abstract, while mental representations of the same objects and events when they are psychologically closer are more low-level, detailed and concrete (e.g. Trope and Liberman 2003; Trope, Liberman and Wakslak 2007; Forster, Friedman and Liberman 2004; Forster 2009). For example, "grocery shopping" will be represented as "walking to the local grocery store to buy milk" when it is construed on a low-level. High-level construals are schematic, decontextualized, abstract representations that include superordinate, central, desirability features, or the *reason* for

which events happen. For example, "taking a class" is represented as "gaining knowledge" on a high level of construal. On the other hand, low-level construals are more concrete, unstructured, contextualized representations that include subordinate, peripheral, feasibility features, or the *means* by which events occur (Lieberman and Trope 1998). In our context, repositioning based on abstraction means that a brand's position in consumers' minds varies on the abstraction spectrum, from the high abstraction position that communicates the *values/goals* that consumers deem important by buying a brand's offering, to the low level, concrete position that communicates the physical features or attributes that consumers get from an offering. Consistent with findings from the CLT literature, brand's positions at differential levels of construal or abstraction could result in diverging evaluations of the same object/event. This leads to changing preference as abstraction in thinking increases. Individuals in an abstract mindset assign more weight to central, primary factors when evaluating a brand, while individuals in a concrete mindset to peripheral, secondary ones. Judgments resulting from high-level, abstract construals, relative to ones from low level, concrete construals, have been shown, among others, to focus more on the positive attributes of objects and events (Eyal et al. 2004; Herzog, Hansen and Wänke 2007), to be more stable across situations (Wakslak et al. 2008; Nussbaum, Trope and Liberman 2003), to be more aligned with long-term goals (Freitas, Gollwitzer and Trope 2004; Fujita et al. 2006).

Besides leading to diverging evaluations of the same object or event, levels of construal have also been shown to influence the way individuals think and behave in general. For example, abstract, high-level construals, relative to concrete, low-level construals, have been shown to increase dispositional (vs. situational) attributions (Henderson et al. 2006), to increase promotion-focused (vs. prevention-focused) concerns (Pennington and Roese 2003), and to enhance self-control (Fujita et al. 2006). The differences in the effects of high versus low levels of construal are partly because abstract, high-level construals are based on the gist of events and on the values of the perceiver, while concrete, low-level construals are based on secondary features of events and the judgment context (Wakslak and Trope 2009). As high-level construals, relative to low-level construals, are based on the gist of events and the values of the perceiver, they are more likely to remain unchanged as psychological distance increases (Lieberman and Forster 2009), and across different judgment contexts. This body of work suggests that abstract positioning that communicates the values/goals that consumers deem important by using a brand rather than the attributes of the brand's offering could be more effective because, among other benefits, consumers' perception of a brand is more likely to be stable.

METHOD

Model Estimation by Simultaneous Two-way Clustering of MCA

The main objective of our empirical model is to obtain a positioning map that also accounts for the heterogeneity in consumer perceptions by identifying *joint* clusters, each consisting of a distinct subset of consumers and variable categories. A comprehensive view of repositioning through a joint mapping of consumers and attribute categories at each abstraction level adds row-dimension projections.

Thus, repositioning strategy can be evaluated based on consumer demographic/psychographic characteristics in addition to attribute-level changes. This can be achieved via a simultaneous two-way clustering of MCA (multiple correspondence analysis) that combines MCA and k -means into a single framework (DeSarbo, Grewal and Scott 2008; Hwang and Dillon 2010). In the next section, we present the estimation results based on the methods in Hwang and Dillon (2010).

Once we obtain a heterogeneous positioning of brands at different levels of abstraction for a distinct subset of consumers and attribute categories, a summary statistic that measures the strength of association with those attributes within a specific cluster is required to diagnose the desirability of a brand's current position. For brand i and attribute j belonging to cluster k , the strength of association between brands and attributes in a d -dimensional map, defined here as *Association Index* (AI), is calculated based on the Euclidian distance:

$$(1) \quad AI(i, j) = 1 - \frac{D(i, j)}{\sum_{j'=1}^j D(i, j')}, \quad \text{where } D(i, j) = \sqrt{\sum_{u=1}^d (f_{i_k}(u^i) - f_{j_k}(u^j))^2},$$

where $f_{i_k}(u^i)$ denotes the d -dimensional coordinates of i in cluster k . As shown in Table 1, for any brand i , the row indices across attributes sum to 1. To facilitate the comparison among brands, we standardize the AIs across all brands in cluster k by subtracting the average column index and dividing by the standard deviation. This standardized measure is hereafter referred to as the *Relative Association Index* (RAI). The RAIs computed at each level of abstraction not

only provide a measure of brand-attribute association strength, but they also help determine the ideal level of abstraction.

Empirical Illustration

We illustrate the proposed repositioning approach by abstraction using family sedan automobile online panel data. A national sample ($n=732$) from an online consumer panel completed the survey dealing with preferences and attitudes towards mid-sized sedans. The proposed model is estimated using pick j/N choice data, where N is the number of alternatives considering that rank order and ratings data in the present setting may have some limitations. Most notable to our context, positivity bias is common when all items in a single instrument are perceived to be desirable and important (Beatty et al. 1985). The survey asked participants to select the three ($j=3$) sedan models that they most prefer, the three product features that they consider most important in their purchase decision for a new sedan, and the three most important personal values. The 13 brands are chosen to reflect the middle of the sedan market, which exclude luxury and small economy models. The 12 product features are chosen to be consistent with reports published by *Consumer Reports* and *J.D. Power and Associates* and the 10 values items are adapted from *The List of Values* (Kahle 1983) and other established measures (Mitchell 1983; Rokeach 1973). As previously defined, the *Relative Association Indices* (RAI) can be evaluated by column (i.e., how strongly consumers perceive that each model reflects a particular feature/value relative to other models – a relative comparison across brands) or by row (how strongly consumers perceive that each feature/benefit/value fits a particular model – a relative comparison of features/values for one specific model). Once the current positioning

Table 1: Relative Association Indices from the 2-Way Clustering of MCA

Segment 1 (42.49%)	Safety Features	Fuel Efficiency	Reliability	Social Recognition	Sense of Accomplishment	Healthy Lifestyle	Self-Fulfillment	
Subaru Legacy	1.743	-1.495	-1.680	-1.648	-1.043	1.154	1.754	
Toyota Camry	-.566	.440	.636	.543	1.365	-1.207	-.490	
Nissan Altima	-.094	-.319	.636	.451	-.920	.415	-.426	
Volkswagen Passat	-.392	.175	.582	.862	.408	-.879	-.693	
Honda Accord	-.690	1.199	-.172	-.208	.191	.517	-.145	
Standard Deviation	.040	.026	.019	.097	.032	.049	.078	
Segment 2 (23.36%)	GPS	Interior Design	Luxury Features	Exterior Design	Sound System	Warranty	Fun & Excitement	Good Relationships
Mitsubishi Galant	-1.045	1.135	1.098	.362	-.026	-1.056	-.328	.328
Hyundai Sonata	.948	-.381	-.239	-1.131	-.987	.933	-.795	.795
Mazda 6	.097	-.753	-.859	.769	1.013	.123	1.123	-1.123
Standard Deviation	.045	.035	.031	.007	.039	.027	.019	.019
Segment 3 (34.15%)	Performance	Price	Roominess	Security	Self-Respect	Comfortable Life	Sense of Belonging	
Buick LaCross	.174	-.215	.323	1.376	-1.061	1.062	-.794	
Chevrolet Malibu	-.738	.738	-.702	-1.234	-.304	-1.187	1.246	
Chrysler Sebring	-.072	.212	-.588	.238	-.517	.196	-.039	
Mercury Grand Marquis	-.369	.449	-.645	-.278	-.537	-.321	.466	
Ford Taurus	-.872	.723	-.275	-.900	.821	-.946	.613	
Standard Deviation	.098	.131	.035	.066	.052	.083	.156	

map and RAIs are diagnosed, managers can determine the most appropriate repositioning level.

Low vs. High Abstraction Positioning

Figure 1 shows the association of key product attributes and preferred models (e.g., warranty with the *Hyundai Sonata*) and the competitive relationship between brands (e.g., *Chevrolet Malibu* and *Ford Taurus*). Based on the estimation of a simultaneous two-way clustering of MCA model, we obtain three segments with the centroids denoted as S1-S3. The individual object scores are plotted in small dots to show the final classification outcome. For S1, it is no surprise that the *Honda Accord*, *Nissan Altima*, and *Toyota Camry* are rated comparable in terms of specific features, most notably reliability. The association with safety and fuel efficiency support manufacturers’ long-standing product claims and promotional campaigns. We find a bit fuzzy classification of *Subaru Legacy* but with strong association to performance and *Volkswagen Passat* also joins this group of vehicles, possibly suggesting that *Volkswagen’s* recent efforts to associate their *Passat* with these market leaders may be working. Recent reviews of the *Passat* by Edmunds.com report significant improvement and movement towards the Japanese brands.

A few model-specific findings in Table 1 include that (i) safety is the strong feature associated with the *Subaru Legacy* compared to other models (RAI=1.743), (ii) three models (*Camry*, *Altima*, *Passat*) are comparable in terms of reliability, and (iii) the *Honda Ac-*

cord is the most fuel efficient model in Segment 1 (RAI=1.199). The latter finding is consistent with *Honda’s* environmental efforts (use of recycled materials in car production, popular hybrid models) and recent TV commercials (“*Honda* has been a fuel economy leader for the past 30 years”). These brands are highly competitive and comparable that it will be a challenge for any one brand to rise above the others in the pack.

Value positions are layered over the low-abstraction positioning map in Figure 1. It is clear that most of the models in Segment 1 have stronger association with high abstraction values such as social recognition, a sense of accomplishment, healthy lifestyle, and self-fulfillment. It is easy to see how self-fulfillment and a sense of accomplishment which reflect high life satisfaction and self-esteem, a success-directed orientation, and psychological well-being (Gurel-Atay et al. 2010; Kahle 1983) are associated with these reliable and high image brands. Specific distinctions include: (i) driving a *Camry* affords “a sense of accomplishment” (RAI =1.365); and (ii) the *Altima* and *Passat* are strongly associated with social recognition. It suggests that those models are better off by implementing an alternative positioning strategy based on values instead of product features.

Segment 2 is the smallest segment with only three models: *Hyundai Sonata*, *Mazda 6*, and *Mitsubishi Galant*. Interestingly, this segment is linked with 6 brand features. It was not expected to find the associations in terms of luxury and design, however, it

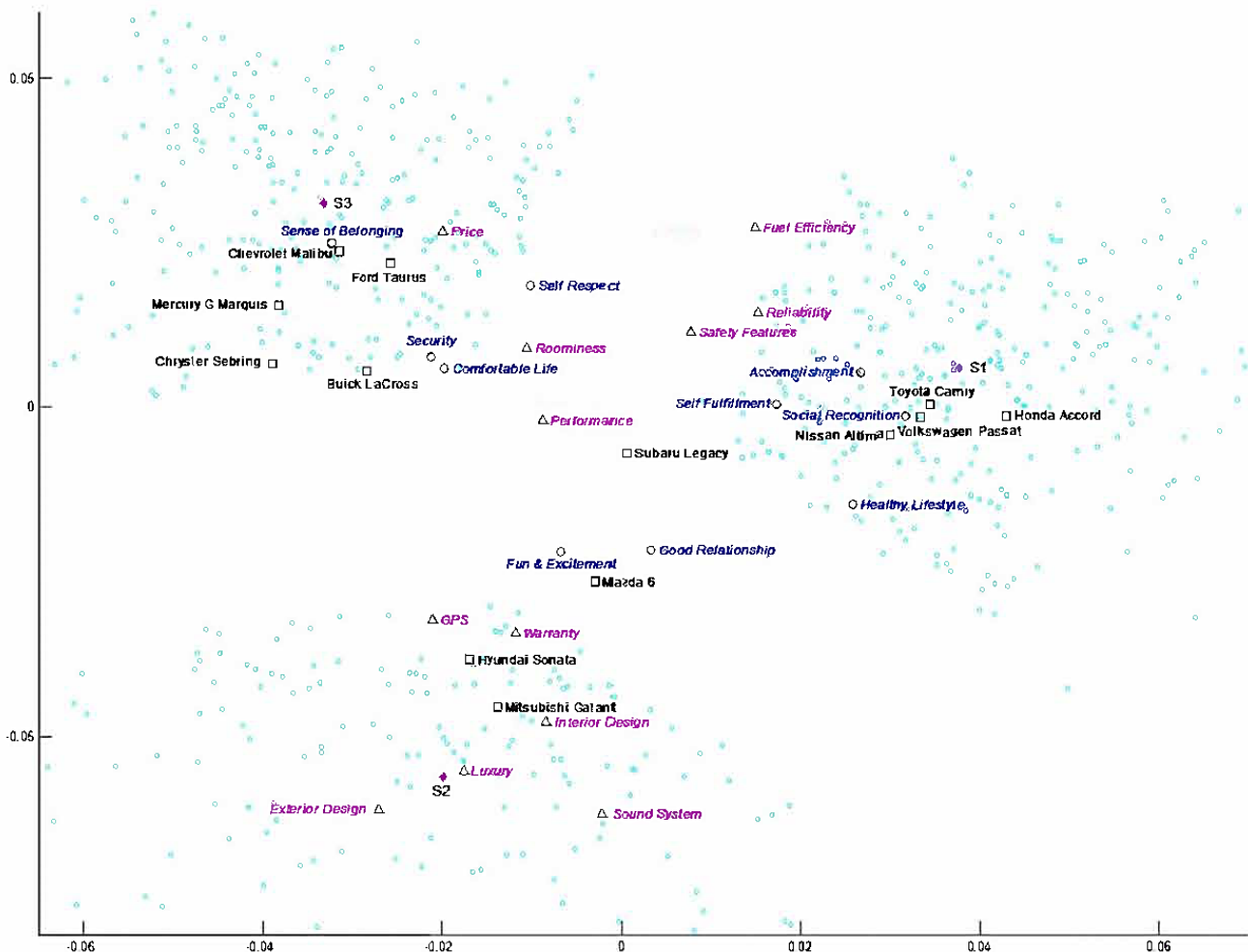


Figure 1: Low vs. High Abstraction Positioning by Segment

suggests that recent “luxury and design at a value price” campaigns are effective. In recent years, *Hyundai* is perhaps most known for its extended warranties. In addition, *J.D. Power*’s rankings now put *Hyundai* above *Nissan*, and consumers’ quality perceptions are starting to catch up with reality (Hirsch 2010). Examination of the RAIs indicates: (i) the *Galant* is most linked with luxury (RAI=1.098) and interior design (RAI=1.135), (ii) the *Sonata* is most closely attached to warranty and GPS, and (iii) the *Mazda 6*’s strongest traits are exterior design and sound system (RAI=.735).

Not all models are suited for high-abstraction positioning. We can clearly see that the *Sonata* and *Galant* are uniquely positioned with a number of specific product features. In fact, the results emphasize the need for recognizing the optimal level of abstraction in positioning. The *Mazda 6*, however, is well positioned very close to “fun and excitement” (RAI=1.123), which they pursued consistently with “Zoom, Zoom” and other fun-related themes.

In Segment 3, the major U.S. models (*Buick LaCross*, *Chevrolet Malibu*, *Chrysler Sebring*, and *Ford Taurus*) are weakly associated with performance, roominess, and price. American car brands are traditionally known for their interior roominess, and their positions also confirm that these manufacturers provide large/powerful engines, typically at a lower price than foreign imports. Note that results for price may in part reflect our decision to sample only models within a limited price range, and the aggressive price incentives offered by the American brands to lure drivers into their showrooms.

As was the case in Segment 1, the American brands of Segment 3 show the stronger connection to high abstraction values. This may explain the moderate level of success from many of their campaigns and promotional efforts, which are feature-driven (e.g., *Chrysler/Dodge*’s long-running *Hemi* engine campaign) with little attempt to connect vehicles to higher order benefits or values. These American models have relatively high average RAIs for self-respect, a comfortable life, and a sense of belonging. When brands are examined separately (by row), the *Buick LaCross* (RAI=1.062) is strongly attached to “security” and “a comfortable life”. Three brands lean towards “a sense of belonging”, reflective of a strong family-orientation with more dependency tendencies. The *Taurus* reflects self-respect (RAI=.821) more than the other models, which is encouraging since self-respect is the most “popular” value in America, and those who rate it as most important are diverse, sharing few distinguishable characteristics (Gurel-Atay et al. 2010; Kahle 1983).

DISCUSSION

We present and illustrate an abstraction-based positioning framework that allows managers to treat repositioning strategy not only at the product attribute level, but also at higher abstraction levels. We explain that, consistent with the findings from construal level theory, brand’s positions at differential levels of abstraction will affect consumers’ evaluation and choice of the brand’s offering. While the concept of *abstract positioning* may not be new, we try to incorporate abstraction in a comprehensive conceptual and empirical framework that managers can use to diagnose and develop a brand’s repositioning strategy. Marketers need to be aware that just as desired features may change over time, so do benefits and values. The proposed approach offers a simple but flexible guide for managers to achieve the most ideal position by prioritizing features and/or values to properly appeal to target market consumers.

REFERENCES

- Beatty, Sharon S., Lynn R. Kahle, Pamela Homer, and Shekhar Misra (1985), “Alternative Measurement Approaches to Consumer Values: The List of Values and the Rokeach Values Survey,” *Psychology & Marketing*, 2 (3), 181-200.
- Belch, George E. and Michael A. Belch (2015), *Advertising and Promotion: An Integrated Marketing Communications Perspective*, 10th Edition. McGraw-Hill.
- Blackwell, Roger D., Paul W. Miniard, and James F. Engel (2001), *Consumer Behavior*, 9th Edition. Fort Worth, TX: Harcourt College Publishers.
- DeSarbo, Wayne S., Rajdeep Grewal, and Crystal J. Scott (2008), “A Clusterwise Bilinear Multidimensional Scaling Methodology for Simultaneous Segmentation and Positioning Analyses,” *Journal of Marketing Research*, 45 (June), 280-292.
- Eyal, Tal, Nira Liberman, Yaacov Trope and Eva Walther (2004), “The Pros and Cons of Temporally Near and Distant Action,” *Journal of Personality and Social Psychology*, 86 (6), 781–795.
- Forster, Jens (2009), “Cognitive consequences of novelty and familiarity: How mere exposure influences level of construal,” *Journal of Experimental Social Psychology*, 45, 444–447.
- Forster, Jens, Ronald S. Friedman and Nira Liberman (2004), “Temporal Construal Effects on Abstract and Concrete Thinking: Consequences for Insight and Creative Cognition,” *Journal of Personality and Social Psychology*, 87 (2), 177–189.
- Freitas, Antonio L., Peter Gollwitzer and Yaacov Trope (2004), “The influence of abstract and concrete mindsets on anticipating and guiding others’ self-regulatory efforts,” *Journal of Experimental Social Psychology*, 40, 739–752.
- Fujita, Kentaro, Marlone D. Henderson, Juliana Eng, Yaacov Trope and Nira Liberman (2006), “Spatial Distance and Mental Construal of Social Events,” *Psychological Science*, 17 (4), 278-282.
- Gurel-Atay, Eda, Guang-Xin Xie, Johnny Chen, and Lynn Richard Kahle (2010), “Changes in Social Values in the United States: 1976-2007,” *Journal of Advertising Research*, 50 (March), 57-67.
- Henderson, Marlone D., Kentaro Fujita, Yaacov Trope and Nira Liberman (2006), “Transcending the “Here”: The Effect of Spatial Distance on Social Judgment,” *Journal of Personality and Social Psychology*, 91 (5), 845–856.
- Herzog, Stefan M., Jochim Hansen and Michaela Wänke (2007), “Temporal Distance and Ease of Retrieval,” *Journal of Experimental Social Psychology*, 43, 483–488.
- Hirsch, Jerry (2010), “U.S. Carmakers Show Gains in Quality: Ford and Buick are Edging Out Luxury Brands Such as Lexus and Mercedes-Benz,” *Los Angeles Times*, March 18, B(2).
- Hwang, Heungsun and William R. Dillon (2010), “Simultaneous Two-way Clustering of Multiple Correspondence Analysis,” *Multivariate Behavioral Research*, 45, 186-208.
- Kahle, Lynn R. (1983), *Social Values and Social Change: Adaptation to Life in America*, New York: Praeger.
- Liberman, Nira and Jens Forster (2009), “Distancing from experienced self: How global-versus-local perception affects estimation of psychological distance,” *Journal of Personality and Social Psychology*, 97 (2), 203-216.

- Liberman, Nira and Yaacov Trope (1998), "The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal Construal Theory," *Journal of Personality and Social Psychology*, 75 (1), 5-18.
- Lutz, Richard J. (1975), "Changing Brand Attitudes through Modification of Cognitive Structure," *Journal of Consumer Research*, 1 (March), 49-59.
- Mitchell, Arnold (1983), *The Nine American Life Styles*. New York: Warner.
- Nussbaum, Shiri, Yaacov Trope and Nira Liberman, (2003), "Creeping Dispositionism: The Temporal Dynamics of Behavior Prediction," *Journal of Personality and Social Psychology*, 84 (3), 485-497.
- Pham, Michel Tuan, A.V. Muthukrishnan (2002), "Search and Alignment in Judgment Revision: Implications for Brand Positioning," *Journal of Marketing Research*: February 2002, Vol. 39, No. 1, pp. 18-30.
- Pennington, Ginger L and Neal J. Roese (2003), "Regulatory focus and temporal distance," *Journal of Experimental Social Psychology*. 39, (563-576).
- Rokeach, Milton (1973), *The Nature of Human Values*, New York, NY: Free Press.
- Shimp, Terence A. (2010) *Advertising Promotion and Other Aspects of Integrated Marketing Communications* 8th Edition, Cengage Learning. South-Western.
- Trope, Yaacov, and Nira Liberman (2003), "Temporal construal," *Psychological Review*, 110 (3), 403-421.
- Trope, Yaacov, Nira Liberman, and Cheryl Wakslak (2007), "Construal levels and Psychological Distance: Effects on Representation, Prediction, Evaluation and Behavior," *Journal of Consumer Psychology*, 17 (2), 83-95.
- Wakslak, Cheryl, Shiri Nussbaum, Nira Liberman and Yaacov Trope (2008), "Representations of the Self in the Near and Distant Future," *Journal of Personality and Social Psychology*, 95 (4), 757-773.
- Wakslak, Cheryl and Yaacov Trope (2009), "Cognitive consequences of affirming the self: The relationship between self-affirmation and object construal," *Journal of Experimental Social Psychology*. 45, 927-932.

In Pursuit of Happiness: Phenomenological Study of The KonMari Decluttering Method

Hsin-Hsuan Meg Lee, ESCP Europe, UK

ABSTRACT

Examining the phenomenon of KonMari decluttering method, this study explores how objects move through the journey from “possession,” and “organization,” to “dispossession” and the role of happiness in the process. The results suggest personal symbolic classification serves as the primary anchor for consumer happiness rather than the physical objects.

INTRODUCTION

How do consumed objects move through the journey from possession to dispossession? Where do consumers find happiness in this process? Prior research seems to center around the two extreme ends. On one end, happiness can be found in consumption, both in the form of materials and experiences, albeit to a different extent (Nicolao, Irwin, & Goodman, 2009). On the other end, conscious dispossession such as anti-consumption has also proven to influence consumer happiness (Cherrier, 2009). This type of mindful consumer behavior is often thought to be aspired by the reflection of societal overconsumption (Sheth, Sethia, & Srinivas, 2011). The notion of overflowing items in possession has inspired another stream of research on the household organization and the need for tidiness (e.g., Löfgren, 2016). While the process of tidying things up is considered mundane, the domestic order is often linked to consumer tranquility. However, little is known about how these three stages ‘possession,’ ‘organization,’ and ‘dispossession’ work together and how happiness is perceived and influences the decisions during the practices. Focusing on a decluttering approach, KonMari Method (Kondo, 2014), this research aims to yield insights on object-subject relationships beyond what is currently available in the literature. While the prime focus of the method is to organize the domestic mess, it emphasizes on finding the joy sparked by items as the standard to decide whether to possess or discard. This sets a proper context to explore how consumers define happiness in their decision making.

LITERATURE REVIEW

Consumption, Anti-consumption, and Happiness

Materialism is thought to be the primary social drive for modern consumption. In the context, happiness is defined by the abundance and the capability of acquisition (Richins and Dawson, 1992). Investigating the view of “money can buy happiness,” prior studies illustrate that consumption does lead to contentment. It is common for consumers to use object ownership as a mean to satisfy their psychological (Yu, Jing, Su, Zhou & Nguyen, 2016) and functional needs (Bhardwaj, Park & Kim, 2011), reward oneself (Godey et al., 2012), signal social status (Rege, 2008), reduce negative emotions (Kemp and Kopp, 2011), and consequently, increase happiness. However, many have argued that experiential purchase, in fact, induces more happiness than material purchase (Carter & Gilovich, 2010; Dunn, Gilbert & Wilson, 2011; Nicolao, Irwin, Goodman, 2009). In particular, extraordinary experiences tend to result in a higher level of happiness than those ordinary ones (Bhattacharjee & Cassie, 2014). Though the direct relationship between money and happiness is weak, consumption does seem to influence one’s wellbeing.

Parallel to this development, in the past decades, there are several consumer movements against over-consumption. Starting with the notion that excessive consumption makes people unhappy (Lee & Ahn, 2016), consumers may express their resistance toward the

marketplace in various forms, ranging from complaining, boycotting, voluntary simplicity to anti-consumption (Cherrier, 2009). They may engage in these activities driven by intrinsic or extrinsic motivations. Movements such as mindful consumption (Sheth et al., 2011) and collaborative consumption (Albinsson & Perera, 2012) are motivated by concerns for the well-being of the environment. Consumers may find happiness in thinking they are contributing to the greater good. It may also come from the feeling of regaining control of oneself and reduced stress level that is related to the variety and the number of choices offered in the marketplace (Lee & Ahn, 2016).

Symbolic Classification System and Pollution

Owning too many objects and the need to organize have become central in modern consumer life (Cwerner and Metcalfe, 2003). Decluttering has become a widespread practice. It may seem straightforward to remove the items from a collection when an object is losing its value, functional or hedonic. However, consumers often attribute the cause of having “too much” to the overall volume rather than specific objects, which makes it hard to choose what to discard. Also, because of the meaning that the items represent, one may be reluctant to do so. Materiality studies suggest that while objects are non-human entities, consumers may have a psychological and emotional attachment to their possessions. Object-centered thinking views things as having a life and an identity which plays a significant role in the narratives of belonging (e.g., Zwick and Nikhilesh, 2006). This subject-object relation motivates and sustains the ongoing commitment to the labor of possession (Ekerdt & Baker, 2014).

The increasing number of items tends to result in a domestic mess, which is defined as a form of symbolic pollution, that is, items that are misplaced based on a self-identified system. Taking from Douglas (1967) definition of symbolic classification system where everything has its own place, Dion and her colleagues (2014) studied how people manage the mess at home. They found people have their systems defining the proper places and boundaries for objects. Those that are “out of place” are considered untidiness. While messiness is related to positive outcomes such as creativity (Löfgren, 2016), the disorder can create stress and anxiety. It is not the object itself that results in such negative feelings, but rather a disruption in the classification system that the person has created (Dion, Sabri & Guillard, 2014). According to this, knowing where to place an object at home can be both satisfying and endangering consumers’ well-being. While decluttering aims at clearing out the mess, it is also promoted as an act of restoring happiness in the household (Cherrier & Belk, 2015).

KonMari Methods

Marie Kondo, a Japanese organizing consultant, and her best-selling book titled “The Life Changing Magic of Tidying up” (Kondo, 2014) has led a movement of decluttering one’s possessions in pursuit of happiness. It has attracted millions of worldwide followers who consider themselves as KonMari converts (Yourgrau, 2015). There are some unique features to this method that may explain its popularity. Kondo advertises her method as a once in a lifetime experience that by completion, people will never have clutter in the house again. The most critical step is to touch each item and ask oneself if it “sparks joy.” Whether an object induces happiness serves as the sole principle whether one should own the item. Specific organizing tips are followed to help find places for every single object at

home. In her view, items are not just objects but things with their arcs and narratives. For all the items that do not spark joy, Kondo suggests the readers to thank it for having served its purpose before throwing it away. When an item ends its journey, no one else should own it. Thus, the items are not for reselling or recycle, as this would indicate the continued attached (monetary) value from the owner. Studying how consumers applied KonMari methods to organize their possessions, this study investigates how people find happiness in the process of moving objects through possession, organization, and dispossession.

METHODOLOGY

To analyze the role and the definition of happiness in the trajectory of objects, the study follows the descriptive phenomenology research approach to describe the reality of the phenomenon of KonMari. This method allows a substantial representation of the subjective experience of the participants (Mick & Demoss, 1990). In-depth interviews were conducted with 11 female adults between the age of 26 and 47 who self-identified as practicing some forms of KonMari methods. The participants were recruited through convenience and snowball sampling strategies. One critical selection criterion of the participants is that they must have documented their decluttering attempts with pictures, blog articles, diaries or videos. These materials were used to prompt answers and recall their processes. Their experience with the KonMari method ranges from 2 months to 5 years, as the book was first published in Japanese in 2011 and only later translated into different languages around the world. Six of the participants considered themselves as pure KonMari converts who faithfully followed all steps in the method. The rest have given up at a various stage or adjusted it to their preferences. The interview transcripts, the verbal and visual content of the documentaries are analyzed. An initial coding scheme was developed based on the steps identified in the KonMari method as well as the three key stages of possession, organization, and dispossession in the literature. The analysis built on continual comparisons between the data collected from different participants.

ANALYSIS AND INTERPRETATION

It is an interactive process to redefine the place of an object in one's heart and one's house. While the KonMari steps are linear with a rigid procedure, depending on participants' symbolic classification and how flexible it can be, they may experience a different level of challenges.

Personified Objects

In understanding one's true feelings toward an object, Kondo recommends followers to treat it as a person, to thank it for its service, and to feel the intangible bond with the item. Many, even the converts, found it challenging to comprehend. Many participants rejected the idea of attaching narratives to the items, albeit understanding the logic behind it. Some were more familiar with the exercise because it's natural to them: *"I guess it's a cultural thing. My parents always told me to respect the stuff I have, to take care of them and to appreciate their beings. Granted, I don't normally talk to them... or maybe sometimes I do. It's not that weird"* (Mai, 5 years with KonMari). The attached meanings and personalities do not seem to influence the process of dispossession as anticipated. In some cases, it supports the notion of discarding items: *"Well, I said thank you, and that's that. It's a bit sad, but hey, everything has it's time, right? Every story must come to an end. You can't hold on to things forever. I guess I just spent longer time to say goodbye."* (Mari, 5 years with KonMari).

Joy-Sparking Items

Everyone seemed to have their own interpretation and understanding of joy-sparking. Some were clearly struggling in defining happiness or hedonic value in items: *"I just don't get it, I'm sorry, Only God can spark joy, not stuff!"* (Boudoir, 2 months with KonMari). Even without the religious view, this is still challenging for some when concerning functional items, while others can easily justify happiness provided by the objects as it makes their life easier anyhow. On the other hand, happiness has been interpreted by the participants sometimes purely by the appearance, as in how they are pleasing to look at and that makes them happy. In general, happiness often is tied to their places in the symbolic system. As a participant described: *"I found it hard to feel if something sparks joy, because they are just stuff. So I just judge by if I can imagine their place in the house, or a place in my mind, if I will think about it in the future and put a smile on my face, I think then that's it."* (Karlie, 2 years with KonMari).

Possession or Dispossession

The KonMari method suggests participants to only keep an item if it makes them happy. Few participants who are possession-oriented believe this is a positive mindset that helps the process. They argued that the method eliminates the guilt feeling and force them to focus on what to keep. However, most participants found it easier to think about what to discard. Many believed the best part of the practice is to throw away items, even though they felt guilty to toss away usable objects. Many described the process as uplifting and refreshing. Some even suggested it being the "best part" or the "happiest moment" in the whole exercise. Depending on ones' symbolic classification and the ideal volume of items that they wish to have, participants would have their preferred approach in thinking about what to possess or what to abandon. People who have a more definite feeling in deciding what makes them happy were also more comfortable with thinking about what to keep. It seemed that the positive feelings and actions are linked together.

Act of Decluttering and Organizing

The method promises the participants that they would only need to do it once and they would be forever freed from the household mess. Only one participant agreed to the notion entirely. It seemed to be a more common idea that the participants experienced frustration once the system has been established. They appeared to restrict themselves to the classification they had created. The objects themselves became less important, but rather their place in the system was of paramount importance. Most participants had difficulties in keeping up with the restored order, and they consistently found themselves decluttering with the same or other methods, after the first practice. The most noticeable impressions from all participants, however, is the change in their perception about tidying up. It transcended from being a mundane activity to an almost enjoyable experience and triggered happiness in the process. The one-off promise seemed to have created happiness by being an "extraordinary" event in the participants' life. The ones who were self-proclaimed organizing enthusiasts experienced the joy in a different way. They thought getting decluttered is their passion and their way of life, where KonMari is just one of the methods used. It is doing what is part of them made them happy.

CONCLUSION

This research examines how consumers declutter their households and explore the role of happiness in the process. While most consumer research focuses on the two extreme ends of consumption

TABLE 1: Results Summary Table

THEMES	CATEGORIES	DATA INSTANCES
Personified Objects	Non-Personified	“I must confess, I have never thank my payslips or my t-shirt for a job well done. I know she said that we should treat all items as if they have feelings and personalities, but I just can’t resonate with that, why would payslip have feelings? I understand that we need to show appreciation, but I just can’t go that far”
	Personified	“I guess it’s a cultural thing. My parents always told me to respect the stuff I have, to take care of them and to appreciate their beings. Granted, I don’t normally talk to them...or maybe sometimes I do. It’s not that weird”
Joy-Sparking Items	Happiness can’t be found in objects	“I just don’t get it, I’m sorry, Only God can spark joy, not stuff!”
	Happiness found in objects	“Things that are useful and that you use, whether they look lovely or not, they do spark joy. Because they serve a very useful function and help you do things easier/faster/better, that’s a kind of joy isn’t it?”
	Happiness found in symbolic system	“I found it hard to feel if something sparks joy, because they are just stuff. So I just judge by if I can imagine their place in the house, or a place on my mind, if I will think about it in the future and put a smile on my face, I think then that’s it.”
Possession or Dispossession	Possession-oriented	“because it releases you from the guilt of getting rid of things. Plus you’re deciding what to keep, not what to get rid of, and I think this will help you declutter more thoroughly.”
	Dispossession-oriented	“I just really need a fresh, clean start. I do feel guilty throwing things out, but then it also teaches me that I should stop buying craps. I mean it’s not like I’m a hoarder, I just apparently had a tendency of buying random stuff that doesn’t make me happy. Not anymore! So I guess like she [Marie Kondo] said they still serve a purpose, even though I threw them away, they taught me a lesson”
Act of Decluttering and Organizing	Creating experience	“I dreaded to start, though I have heard about it for so long. But the week that I finally put myself through it, I was just so happy. I feel like I’ve done something for myself and now I’m living a happier, less stressful life because of that.”

and anti-consumption, consumers’ daily life constitutes of constant negotiations where they establish boundaries and make choices. In line with the prior study, our results suggest that the object-subject relations seem to be an essential element in defining consumer happiness (Dion, Sabri & Guillard, 2014). The symbolic classification system serves as the primary anchor for consumers’ decision in possession and dispossession, along with the organization of objects. In some cases, material consumption and the objects themselves do bring happiness, especially for those consumers who personify the objects and attach a hedonic value to items. However, this alone is not enough to sustain the object-subject relations. The things must be organized into the symbolic classification system. Only when an item has a place, it is considered serving a purpose and fulfilling its role in enriching the subjects’ life. Consumers are often bounded by the system, and once the objects are in the system, the cause of happiness and unhappiness is attributed to the system rather than the objects themselves. This highlights the importance of maintaining the order of the system. Contrary to the previous belief that organizing can be daunting and tedious, the setup of the KonMari method creates an extraordinary experience that often results in a high level of happiness (Bhattacharjee & Mogilner, 2014). This suggests that the dynamic process of establishing a symbolic system is also critical to the consumer happiness. Other than gaining control and feeling relieved, a sudden shock in the object-subject relation also seems to generate new feelings and revitalize the relationships which move objects through the cycle of possession, origination, and dispossession. This process, to a larger extent, is beneficial for consumer well-being.

REFERENCES

- Albinsson, Pia A., and B. Yasanthi Perera. “Alternative marketplaces in the 21st century: Building community through sharing events.” *Journal of consumer Behaviour* 11, no. 4 (2012): 303-315.
- Bhardwaj, Vertica, Hyejune Park, and Youn-Kyung Kim. “The effect of Indian consumers’ life satisfaction on brand behavior toward a US global brand.” *Journal of International Consumer Marketing* 23, no. 2 (2011): 105-116.
- Bhattacharjee, Amit, and Cassie Mogilner. “Happiness from ordinary and extraordinary experiences.” *Journal of Consumer Research* 41, no. 1 (2014): 1-17.
- Carter, Travis J., and Thomas Gilovich. “The relative relativity of material and experiential purchases.” *Journal of personality and social psychology* 98, no. 1 (2010): 146.
- Cherrier, Helene. “Anti-consumption discourses and consumer-resistant identities.” *Journal of Business Research* 62, no. 2 (2009): 181-190.
- Cherrier, Hélène, and Russell Belk. “Decluttering.” *The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies*. DOI: 10.1002/9781118989463.wbeccs201
- Cwerner, Saulo B., and Alan Metcalfe. “Storage and clutter: discourses and practices of order in the domestic world.” *Journal of Design History* (2003): 229-239.
- Douglas, Mary. *Purity and danger: An analysis of concepts of pollution and taboo*. Routledge, 2003.
- Dunn, Elizabeth W., Daniel T. Gilbert, and Timothy D. Wilson. “If money doesn’t make you happy, then you probably aren’t spending it right.” *Journal of Consumer Psychology* 21, no. 2 (2011): 115-125.

- Ekerdt, David J., and Lindsey A. Baker. "The material convoy after age 50." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 69, no. 3 (2014): 442-450.
- Godey, Bruno, Daniele Pederzoli, Gaetano Aiello, Raffaele Donvito, Priscilla Chan, Hyunjoo Oh, Rahul Singh, Irina I. Skorobogatykh, Junji Tsuchiya, and Bart Weitz. "Brand and country-of-origin effect on consumers' decision to purchase luxury products." *Journal of Business Research* 65, no. 10 (2012): 1461-1470.
- Kemp, Elyria, and Steven W. Kopp. "Emotion regulation consumption: When feeling better is the aim." *Journal of Consumer Behaviour* 10, no. 1 (2011): 1-7.
- Kondo, Marie. *The Life-Changing Magic of Tidying Up: The Japanese Art of Decluttering and Organizing*. Ten Speed Press, 2014.
- Lee, Michael SW, and Christie Seo Youn Ahn. "Anti-consumption, Materialism, and Consumer Well-being." *Journal of Consumer Affairs* 50, no. 1 (2016): 18-47.
- Löfgren, Orvar. "Mess: on domestic overflows." *Consumption Markets & Culture* (2016): 1-6.
- Mick, David Glen, and Michelle DeMoss. "Self-gifts: Phenomenological insights from four contexts." *Journal of Consumer Research* 17, no. 3 (1990): 322-332.
- Nicolao, Leonardo, Julie R. Irwin, and Joseph K. Goodman. "Happiness for sale: do experiential purchases make consumers happier than material purchases?." *Journal of Consumer Research* 36, no. 2 (2009): 188-198.
- Rege, Mari. "Why do people care about social status?." *Journal of Economic Behavior & Organization* 66, no. 2 (2008): 233-242.
- Richins, Marsha L., and Scott Dawson. "A consumer values orientation for materialism and its measurement: Scale development and validation." *Journal of consumer research* 19, no. 3 (1992): 303-316.
- Sheth, Jagdish N., Nirmal K. Sethia, and Shanthi Srinivas. "Mindful consumption: a customer-centric approach to sustainability." *Journal of the Academy of Marketing Science* 39, no. 1 (2011): 21-39.
- Yourgrau, Barry. The origin story of Marie Kondo's decluttering empire. *New Yorker* (2015). <http://www.newyorker.com/books/page-turner/the-origin-story-of-marie-kondos-decluttering-empire>
- Zwick, Detlev, and Nikhilesh Dholakia. "The epistemic consumption object and postsocial consumption: Expanding consumer-object theory in consumer research." *Consumption, Markets and Culture* 9, no. 1 (2006): 17-43.

When the Two of Us Care Too Much for Each Other: Subversive Effects of Altruism in Joint Dyadic Decisions

Hristina Nikolova, Boston College, USA

Sara Dommer, Georgia Tech, USA

Chadwick Miller, Washington State University, USA

Michael Lowe, Georgia Tech, USA

ABSTRACT

We examine how the interplay of partners' interpersonal orientations in a decision-making dyad impacts the joint decision quality. Using both subjective (satisfaction) and objective (deviation of joint decision from partners' individual preferences) measures of decision quality, we show that altruistic/altruistic dyads make worse joint decisions than altruistic/selfish dyads.

STUDY 1

The purpose of Study 1 was to examine how the interplay of decision-making partners' interpersonal orientations impact the quality of their joint decision. In this study, we used (1) post-consumption satisfaction as a measure of perceived decision quality and (2) gender as a proxy for participants' interpersonal orientation. Past research robustly demonstrates gender differences in interpersonal orientations, such that women are more communal and are thus more likely to exhibit an altruistic orientation and incorporate others' preferences in their decision-making. However, men's agentic nature leads them to typically embrace a more selfish orientation, placing greater importance on the self and one's own preferences and goals (e.g., Balkan 1966; Eckel and Grossman 1998).

Method

We recruited 168 undergraduate students from a large southeastern university to participate in Study 1 in exchange for course credit. We paired each participant with a partner, making an effort to ensure we had approximately equal sample sizes across the three dyad types - male/female dyads, male/male dyads, and female/female dyads, which, according to previous literature should serve as a simple but robust proxy for selfish/altruistic, selfish/selfish, and altruistic/altruistic-oriented dyads, respectively.

To ensure ecological validity of the decision-making process, we first asked participants to complete the relationship closeness induction task (RCIT) together in order to familiarize themselves with each other and establish relationship closeness (Sedikides et al. 1999). Next, we presented the dyads with the focal joint decision. Specifically, we gave each dyad 10 movie posters and descriptions taken from IMDB.com of upcoming unreleased films. We asked the dyads to jointly choose which movie trailer they would like to watch together later in the study session.

Once participants made their decision, we asked them to answer several questions about their decision process individually on the paper questionnaire. Specifically, we asked participants to rate how "happy," "satisfied," and "disappointed" they were with the decision-making process on a nine-point scale (1=Not at All, 9=Very). We averaged these items to create an index measure of decision process satisfaction ($\alpha = .68$). Participants also individually rated their agreement on nine-point Likert scales with three statements intended to capture decision regret: "I think there is a better movie trailer on that list that we should have picked," "I feel sorry that we made this movie trailer choice," and "I regret the movie trailer choice we made" ($\alpha=.71$).

Next, participants watched their selected movie trailer together on the iPad. Then they responded to the same three satisfaction items

and feelings of regret that followed the decision task. However, we adapted these items to measure their satisfaction with the consumption experience ($\alpha=.95$) and feelings of regret with the consumption experience ($\alpha=.84$). We refer to these measures as post-consumption satisfaction and regret and their represent our focal measures of joint decision optimality in this study. Additionally, we asked participants to individually respond to items regarding the "ownership" of the decision making process. Specifically, we asked participants which partner in the dyad was most "responsible" for the movie decision, who "contributed" more to the decision, and whose "preferences" were more reflected in the movie choice using nine-point scales (1=definitely my partner, 9=definitely myself; $\alpha = .85$). The study concluded with demographic questions.

Analysis and Results

We excluded two dyads who failed to indicate their gender, and one dyad which included an individual who was a clear outlier in age (42 years old, $M=20.5$). Thus, the final usable sample consisted of 81 dyads, or 162 individuals.

Manipulation check

First, we note that in line with prior research, gender was a statistically significant proxy for selfish/altruistic orientation, as males reported significantly higher ownership of the decision ($M_{males}=5.38$) than females ($M_{females}=4.85$; $F(1, 158)=6.53, p=.012$). Partner's gender was also a significant predictor of ownership, such that having a male partner reduced one's ownership of the decision ($M_{male\ partner}=4.88$ vs. $M_{female\ partner}=5.35$; $F(1, 158)=5.00, p=.027$). The interaction, however, was not significant ($F(1, 161) = .091, p=.76$). Given the success of this manipulation we refer to dyads by their interpersonal orientation - selfish/selfish, selfish/altruistic, altruistic/altruistic.

Joint decision optimality

In this study, we measured decision optimality using post-consumption satisfaction and regret. Using a one-way ANOVA we found a significant effect of dyad type on post-consumption satisfaction ($F(2, 161)=4.94, p=.008$). This effect is primarily driven by the fact that altruistic/altruistic dyads had significantly lower post-consumption satisfaction ($M_{altruistic/altruistic} = 6.80$) compared to both selfish/altruistic dyads ($M_{selfish/altruistic}=7.79$; $p=.005$) and selfish/selfish dyads ($M_{selfish/selfish}=7.71$; $p=.01$). There was no difference between selfish/altruistic and selfish/selfish dyads ($p = .83$). Importantly, there was no difference in the satisfaction of the altruistic and selfish partners in a mixed-orientation dyad ($M_{altruistic}=7.77, M_{selfish}=7.81$; $F(1,55)=.016, p=.90$).

Similarly, the effect of dyad type on post-consumption regret was also significant ($F(2, 161)=5.00, p=.008$) and also driven by significantly higher regret among altruistic/altruistic dyads ($M_{altruistic/altruistic}=2.76$) relative to selfish/altruistic dyads ($M_{selfish/altruistic}=2.12$; $p=.030$) and selfish/selfish dyads ($M_{selfish/selfish}=1.85$; $p=.002$).

Additional analysis

We first found that there was no effect of dyad composition on decision process satisfaction ($F(2, 161)=1.32, p=.27$) and only a marginal difference in regret prior to consumption ($F(2, 161)=2.55,$

$p=.081$). Participants felt relatively positive about their decisions prior to consumption, regardless of dyad type ($M_{\text{altruistic/altruistic}}=7.50$, $M_{\text{selfish/altruistic}}=7.29$, $M_{\text{selfish/selfish}}=7.83$), suggesting that the joint consumption experience (rather than the decision-making process) drives the differences among the three types of dyads on post-consumption satisfaction and regret.

Discussion

Study 1 demonstrates that the interpersonal orientations composition of dyads alters the quality of the joint dyadic decision (captured by post-consumption satisfaction and regret in this study). When deciding together altruistic/altruistic dyads were less satisfied and reported higher regret post-consumption than either selfish/altruistic dyads or selfish/selfish dyads.

While our manipulation check results are in line with prior research that suggests that women are generally more altruistic than men (Eckel and Grossman 1998), a limitation of this study is that the indirect assessments of consumers' selfish or altruistic motivations leaves open the possibility of a variety of alternative explanations based on gender. To account for these alternative explanations, we manipulate participants' interpersonal orientations in study 2.

Another limitation of study 1 is that our measure of decision quality—post-consumption satisfaction and regret—was subjective. Therefore, in study 2, we objectively measure the quality of the joint decision by collecting individual preferences information prior to the study and comparing the deviation of the final joint decision to the individual preferences of the two decision-making partners.

STUDY 2

Method

Pre-study preferences

We recruited 384 participants at a large northwestern university to participate in study 2. Several weeks prior to the study we asked participants to rank and rate seven music videos. This allowed us to establish participants' true, independent preferences prior to any manipulations or meeting their partner.

Procedure

When participants arrived for the study, we randomly paired them with a partner in a small room. Each participant had their own iPad—where the manipulation took place and where they responded to individual measures—and in each room there was a computer for participants to make a joint decision and watch the music video together.

To manipulate the selfish vs. altruistic interpersonal orientation, participants were randomly assigned to read a news article about new research which suggested either (1) that people who make a decision with their own interests in mind are happier (selfish motivation) or (2) that people who make a decision with a partner's best interests in mind are happier (altruistic motivation). Thus, there were three possible dyad combinations: selfish/selfish, selfish/altruistic, altruistic/altruistic.

Next the dyads jointly choose a music video to watch later in the session. They were presented with the seven options they had rated and ranked individually several weeks prior. After making their joint choice, participants watched the music video together.

Finally, participants responded to a manipulation check measure of interpersonal orientation ("In the joint music video decision that you made, whose preferences did you look out for?" to which participants responded using a 7-point Likert scale (1 = My preferences, 9 = My partner's preferences) and demographic questions.

Analysis and Results

Manipulation check

Participants in the selfish condition reported looking out for their own preferences during the decision significantly more than those in the altruistic condition ($M_{\text{selfish}}=4.57$ vs. $M_{\text{altruistic}}=5.07$; $F(1, 377)=7.41$, $p=.007$). The partner's interpersonal orientation condition and the interaction of the two conditions did not significantly predict the selfishness of the participant, providing further evidence that our manipulation was successful. Gender had no main effect on the manipulation check and did not interact with the manipulation.

Joint decision optimality

First, we examine pre-study *rankings* of the music video chosen by the dyad as an objective measure of decision quality. Thus, lower numbers indicated greater pre-study preference and an objectively more optimal joint decision. In a one-way ANOVA, we found a significant effect of dyad type on the quality of the dyad's decision ($F(2, 383)=3.02$, $p=.05$). Specifically, altruistic/altruistic dyads ended up with lower-ranked (worse) options ($M_{\text{altruistic/altruistic}}=3.76$) compared to a mixed-orientation dyad ($M_{\text{altruistic/selfish}}=3.15$; $p=.02$). There was no difference in the decision quality between selfish/selfish dyads and mixed dyads ($M_{\text{selfish/selfish}}=3.53$; $p=.19$) nor any difference between altruistic/altruistic dyads and selfish/selfish dyads ($p=.51$).

Next, we examined participant's pre-study *ratings* of the jointly chosen music video as another objective measure of decision quality. Higher numbers indicate greater pre-study preference and hence a better decision. Using a similar one-way ANOVA, the effect of dyad type was marginal ($F(1, 381)=2.71$, $p=.07$). The contrast between the altruistic/altruistic dyad ($M_{\text{altruistic/altruistic}}=4.28$) and mixed dyad ($M_{\text{altruistic/selfish}}=4.86$) was significant ($p=.03$), however, the contrasts between the selfish/selfish and the altruistic/altruistic dyads ($M_{\text{selfish/altruistic}}=4.45$, $p=.63$) and the selfish/selfish and mixed dyads were not significant ($p=.17$).

Discussion

Study 2 replicates the findings of Study 1 and demonstrates that when both members of a dyad are altruistic, worse decisions are made, measured objectively, compared to when one member is selfish and one member is altruistic.

CONCLUSION

The results of our studies suggest that dyads in which both partners have an altruistic orientation and seek to make decisions that benefit their partner make less optimal decisions than dyads in which one partner has an altruistic orientation while the other one has a selfish orientation. Decision optimality was captured by both subjective and objective measures, that is post-consumption satisfaction (Study 1) and deviation of the joint decision from the partners' personal preferences (Study 2). In other words, in a dyad there needs to be a "driver" of a decision and a "passenger" to get the most optimal outcome. Two "passengers" and two "drivers" leads to less optimal decisions.

Our work makes important theoretical contributions to the joint decision-making literature by being the first to examine how the interplay of interpersonal orientations (altruistic vs. selfish) within a decision-making dyad impacts the quality of the joint decision. Importantly, our research also provides clear recommendations for joint consumer decisions. First, partners in a decision-making dyad should attempt to sense the interpersonal orientation of their partner. If both partners are looking out for each other's interests (i.e. both partners are being altruistic), one partner should take the lead and state their individual preferences since this will lead to a more optimal decision

for both partners. Second, our research implies that partners within a couple should find different areas of expertise where they can lead and their partner can follow. This would result in a natural altruistic/selfish orientation within the couple which should lead to better joint decisions.

REFERENCES

- Bakan, David (1966), *The Duality of Human Existence*, Chicago: Rand McNally & Company.
- Cavanaugh, Lisa A. (2016), "Consumer Behavior in Close Relationships," *Current Opinion in Psychology*, 10, 101–106.
- Dzhogleva, Hristina and Cait Poyner Lambertson (2014), "Should Birds of a Feather Flock Together? Understanding Self-Control Decisions in Dyads," *Journal of Consumer Research*, 41 (2), 361-380.
- Eckel, Catherine C. and Philip J. Grossman (1998), "Are Women Less Selfish Than Men?: Evidence From Dictator Experiments," *The Economic Journal*, 108 (May), 726-735.
- Flowers, M. L. (1977), "A Laboratory Test of Some Implications of Janis's Groupthink Hypothesis," *Journal of Personality and Social Psychology*, 35 (12), 888-896.
- Gorlin, Margarita and Ravi Dhar (2012), "Bridging the Gap between Joint and Individual Decisions: Deconstructing Preferences in Relationships," *Journal of Consumer Psychology*, 22(3), 320–323.
- Harvey, Jerry B. (1988), "The Abilene Paradox: The Management of Agreement," *Organizational Dynamics*, 17 (1), 17-43.
- Janis, I. L. (1982). *Victims of Groupthink (2nd ed)*, Boston: Houghton Mifflin.
- Lowe, Michael L. and Kelly L. Haws (2014), "(Im)moral Support: The Social Outcomes of Parallel Self-Control Decisions," *Journal of Consumer Research*, 41 (2), 289-505.
- Moorhead, G., & Montanari, J. R. (1986), "An Empirical Investigation of the Groupthink Phenomenon," *Human Relations*, 39 (5), 399-410.
- Nikolova, Hristina and Cait Lambertson (2016), "Men and the Middle: Gender Differences in Dyadic Compromise Effects," *Journal of Consumer Research*, 43 (3), 355-371.
- Park, C. W. (1982), "Joint Decisions in Home Purchasing: A Muddling-Through Process," *Journal of Consumer Research*, 9 (2), 151–162.
- Peterson, Randall S. (1997), "A Directive Leadership Style in Group Decision Making Can Be Both Virtue and Vice: Evidence From Elite and Experimental Groups," *Journal of Personality and Social Psychology*, 72 (5), 1107.
- Poundstone, William (1992), *Prisoner's Dilemma: John von Neuman, Game Theory, and the Puzzle of the Bomb*, Anchor.
- Sedikides, Constantine, W. Keith Campbell, Glenn D. Reader, and Andrew J. Elliot (1999), "The Relationship Closeness Induction Task," *Representative Research in Social Psychology*, 23 , 1-4.
- Simpson, Jeffrey A., Vladas Griskevicius, and Alexander J. Rothman (2012), "Consumer Decisions in Relationships," *Journal of Consumer Psychology*, 22(3), 304–314.
- Thompson, Debora Viana, Rebecca W. Hamilton, and Roland T. Rust (2005), "Feature fatigue: When Product Capabilities Become Too Much of a Good Thing," *Journal of Marketing Research*, 42 (4), 431-442.
- Van Boven, Leaf, and Thomas Gilovich (2003), "To Do or To Have? That is the Question," *Journal of Personality and Social Psychology*, 85 (6), 1193.
- Van Lange, Paul AM (1999) "The Pursuit of Joint Outcomes and Equality in Outcomes: An Integrative Model of Social Value Orientation," *Journal of Personality and Social Psychology*, 77 (2), 337-349.

Tra il Dire e il Fare c'è di mezzo il Mare*: An Investigation into the Ethical Purchasing Gap

*Italian Proverb: Between Saying and Doing is half a Sea

Andreas Plank, University of Innsbruck, Austria

INTRODUCTION

Ethical consumption practices such as purchasing Fair Trade (FT) products are common at the turn of the 21st century (Andorfer and Liebe 2015). Just as the consumption of FT products is increasing (Krier 2008) so is research on ethical consumption in general and FT consumption in particular increasing (see Andorfer and Liebe 2012, Papaioikonomou et al. 2011 for reviews). Prior research has investigated the discrepancy between individuals' self-reported attitudes, intentions or purchasing and actual purchasing behavior under the notions of attitude-behavior gap (e.g., Kim et al. 1997), intention-behavior gap (e.g., Hassan et al. 2016), and ethical purchasing gap (e.g., Bray et al. 2011; Nicholls and Lee 2006). The theory of planned behavior (TPB; Ajzen 1985, 1991) has been the theoretical framework for many studies on ethical consumption. However, many studies on ethical consumption applying this theoretical framework, end up investigating individuals' buying intentions as the final outcome variable rather than individuals' actual buying behavior and thus these studies do not fully reflect the TPB (Andorfer and Liebe 2012). To date no study that builds on the TPB has compared the effects of driver and barrier variables on FT purchasing intentions and observed FT purchasing behavior. This study seeks to close this gap by combining observation in the field with a survey in the context of FT coffee consumption.

THEORETICAL BACKGROUND AND HYPOTHESES

In a nutshell, the TPB postulates that attitude, subjective norm, and perceived behavioral control impact behavioral intention which in turn impacts behavior in a specific situation (see Ajzen 1985; 1991). In the context of FT consumption several studies build on and extend the TPB (e.g., Chatzidakis et al. 2007; De Pelsmacker and Janssens 2007; Ozcalgar-Toulouse et al. 2006). However, the most prevalent methodological shortcoming of FT studies building on the TPB is that studies investigate consumers' purchasing intentions but not consumers' actual purchasing behavior (Andorfer and Liebe 2012). As a consequence, socially desirable responding might lead to an overestimation of FT consumption, which might result in a gap between stated and observed preferences due to unconstrained survey response methods (Auger and Devinney 2007). While research on ethical consumption grounded in the theoretical tradition of economics employs more incentive-compatible methods for data collection (e.g., choice experiments, Auger et al. 2003; conjoint experiments, De Pelsmacker et al. 2005; field experiments Arnot et al. 2006) these types of studies typically provide willingness to pay estimates but do not investigate consumers' motivations for their respective willingness to pay (Andorfer and Liebe 2012). In this respect prior research suggests that a combination of research methods could further improve our understanding of ethical consumption and the ethical purchasing gap (e.g., Andorfer and Liebe 2012; Auger and Devinney 2007). This study seeks to contribute to the extant literature on FT consumption by combining observation in the field with a survey and answering the following research questions (RQs):

RQ 1: Which factors differentially drive and impede FT purchasing intentions and FT purchasing behavior?

RQ 2: How do consumers who are inconsistent in terms of their FT purchasing intentions and FT purchasing behavior differ from

consumers who are consistent in their FT purchasing intentions and FT purchasing behavior?

In line with prior research on FT consumption building on the TPB (e.g., De Pelsmacker and Janssens 2007; Ozcalgar-Toulouse et al. 2006; Shaw et al. 2000; Shaw and Shiu 2003) this study hypothesizes that attitude has a positive effect on consumers' FT purchasing intentions and FT purchasing behavior:

Hypothesis 1: Attitude positively affects consumers' FT purchasing intentions (H1a) and consumers' observed FT purchasing behavior (H1b).

Building on Shaw et al. (2000), and in line with De Pelsmacker and Janssens (2007) this study disregards the construct subjective norm in its conceptual model. However, this study expects positive effects of both, ethical obligation and self-identity on consumers' FT purchasing intentions and behavior:

Hypothesis 2: Ethical obligation positively affects consumers' FT purchasing intentions (H2a) and consumers' observed FT purchasing behavior (H2b).

Hypothesis 3: Self-identity positively affects consumers' FT purchasing intentions (H3a) and consumers' observed FT purchasing behavior (H3b).

Building on Bray (2011) this study investigates the effect of perceived locus of control (Rotter 1966) instead of perceived behavioral control (Ajzen 1991) on FT purchasing intentions and behavior. More specifically, locus of control captures individuals' beliefs about their control over ethical dilemmas, with an external locus of control indicating an individual believes the ethical dilemma is beyond his control whereas an internal locus of control indicating an individual makes ethical decisions in defiance of conflicting social or situational pressures (Singhapakdi and Vitell 1991).

Hypothesis 4: Locus of control positively affects consumers' FT purchasing intentions (H4a) and consumers' observed FT purchasing behavior (H4b).

Typically, FT products sell at a price premium to conventional products in the respective categories. Several studies indicate that price and consumers' price sensitivities are among the most important barriers to FT consumption (e.g., Bray et al. 2011; Cailleba and Casteran 2010; De Pelsmacker et al. 2005).

Hypothesis 5: Price sensitivity negatively affects consumers' FT purchasing intentions (H5a) and consumers' observed FT purchasing behavior (H5b).

In a focus group study on barriers to ethical consumption Bray et al. (2011) find that inertia in purchasing behavior is a substantial barrier to purchasing ethical products. Likewise, De Pelsmacker and Janssens (2007) find that price, the effort to find FT products, as well as informants' lack of interest in FT products and breaking their habits of buying their usual brands are barriers to FT consumption.

Hypothesis 6: Inertia in purchasing behavior negatively affects consumers' FT purchasing intentions (H6a) and consumers' observed FT purchasing behavior (H6b).

Results on the effects of socio-demographic variables such as gender or age on ethical consumption remain inconclusive (e.g., Bray et al. 2011; De Pelsmacker et al. 2005). Given these inconsistent results, this study does not formulate formal hypotheses on the influences of socio-demographics on FT purchasing intentions and behavior but includes gender, age, and income as control variables. Figure 1 depicts this study's conceptual model.

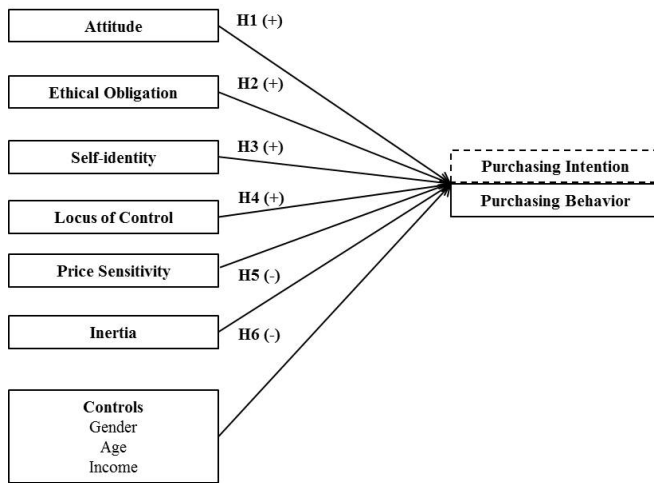


Figure 1: Conceptual Model

METHOD

This study combined observation in the field with a survey to test its hypotheses. Coffee vending machines at two campuses of a European university offered a unique data collection opportunity: The vending machines carry both, unlabeled and FT-labeled coffees. More specifically, all sorts of coffee (e.g., Cappuccino) are available both, as an unlabeled and a FT-labeled version. The unlabeled coffees sell at € 0.50 for 180 ml while the FT-labeled coffees sell at € 1.00 for 300 ml. That is, the price premium for FT-labeled coffees is 20.00%. Data were collected by first observing an individual's coffee choice (unlabeled vs. FT-labeled) and subsequently administering a questionnaire to willing consumers. Coffee choice was recorded first, to avoid that the questionnaire induces possible demand effects (Orne 1962). To incentivize participation in the survey, participants had the chance to win one of three shopping coupons (€ 25 each) for a major online retailer upon provision of their e-mail address at the end of the questionnaire. Data were collected on different weekdays, different times of the day, and two different campuses during 6 weeks in spring 2016. In the end the convenience sampling strategy yielded a total of 199 questionnaires.

To measure the drivers of- and barriers to FT purchasing this study either adapted prior studies' measures or derived measures from prior literature. More specifically, this study used three items to measure attitude (e.g., "In general, my attitude towards purchasing a Fair Trade product is favorable.", Shaw et al. 2000), two items to measure ethical obligation (e.g., "I feel that I have an ethical obligation to purchase Fair Trade grocery products.", Shaw et al. 2000), four items to measure self-identity (e.g., "I think of myself as some-

one who is concerned about ethical issues.", Shaw et al. 2000), two items to measure locus of control (e.g., "My life is determined by my own actions.", Halpert et al. 2011), three items to measure price sensitivity (e.g., "Fair Trade products should not be more expensive than ordinary products.", De Pelsmacker and Janssens 2007), and three items to measure inertia in purchasing (e.g., "I am not interested in fair trade products because I prefer my usual brands.", De Pelsmacker and Janssens 2007). All driver and barrier variables were measured using 7-point Likert-type scales. The questionnaire captured the socio-demographic variables gender, age, and income. As the cup size between regular and FT coffees differed (i.e. 180 ml vs. 300 ml) the questionnaire included an item (i.e. "How important was the cup size for your beverage choice?") to control for this potential confound in the analysis. The dependent behavioral variable was coffee choice (regular coffee = 0 vs. FT coffee = 1). To compare FT purchasing behavior with FT purchasing intentions the questionnaire additionally included an item to measure FT purchasing intentions (i.e. "The next time you go grocery shopping, how likely are you to purchase a Fairtrade product?", Shaw et al. 2000).

RESULTS

Multiple hierarchical regressions were used to test the hypothesized effects. First, only the demographic controls, then the hypothesized drivers, and finally, the hypothesized barriers were added to the regression model. With the addition of driver and barrier variables, the explained variance improved significantly from model 1 to model 2 (R -square change of .439 $F(4, 191) = 41.653, p = .000$) and from model 2 to model 3 (R -square change of .036 $F(2, 189) = 7.218, p = .001$) respectively. The results show significant positive effects of attitude, ethical obligation, and self-identity on FT purchasing intentions. Additionally, age has a significant positive effect whereas inertia in purchasing behavior has a significant negative effect on FT purchasing intentions (see Table 1, Panel A). Consequently, the analysis supports H1a, H2a, H3a, and H6a but rejects H4a and H5a.

In a second analysis this study investigated the effects of the potential drivers and potential barriers on observed FT purchasing behavior, controlling for socio-demographic variables. Furthermore, the control variable for cup-size was included in the hierarchical logistic regression model. First, only the demographic controls, next the control for cup-size, then the hypothesized drivers, and finally, the hypothesized barriers were added to model. With the addition of the control for cup-size as well as driver and barrier variables, the model fit improved significantly from model 1 to model 2 ($\chi^2(1) = 12.199, p = .000$), from model 2 to model 3 ($\chi^2(4) = 16.609, p = .002$), and from model 3 to model 4 ($\chi^2(2) = 10.880, p = .004$) respectively. The results show that the inclusion of the control for cup-size was adequate given its significant effect on observed purchasing behavior. Despite controlling for the effect of cup-size, the results of this analysis show that price sensitivity and inertia are significant barriers to FT purchasing behavior. Furthermore, attitude, ethical obligation, self-identity, and locus of control have no significant effects on FT purchasing behavior (see Table 1, Panel B). Consequently, the analysis supports H5b and H6b but rejects H1b, H2b, H3b, and H4b.

To further elaborate on the ethical purchasing gap this study compared consumers who exhibit consistent FT purchasing intentions and behavior with consumers who exhibit inconsistent FT purchasing intentions and behavior. First the variable purchasing intention was split at its median into a group high in FT purchasing intentions and a group low in FT purchasing intentions (i.e. observations at the median were excluded from this analysis, $n = 47$). Then, based on the newly calculated binary purchasing intention variable and observed purchasing behavior two groups were com-

Table 1: Results of hierarchical regression analysis for FT purchasing intention and behavior

Panel A: FT purchasing intention	Model 1	Model 2	Model 3
Constant			
Gender ¹	-.18*(.013)	-.00 (.939)	.00 (.937)
Age	.21*(.010)	.16**(.006)	.12* (.034)
Income	-.03 (.692)	-.04 (.450)	-.07 (.202)
Attitude		.22** (.001)	.21** (.001)
Ethical Obligation		.25** (.001)	.20** (.007)
Self-identity		.32*** (.000)	.27*** (.000)
Locus of Control		-.00 (.941)	-.01 (.776)
Price Sensitivity			-.09 (.123)
Inertia			-.18**(.004)
R ²	.058	.497	.533
Adj. R ²	.044	.479	.511
F	4.034	26.972	23.949
Sig.	.008	.000	.000

Notes: Model 1 includes control variables. Model 2 includes hypothesized driver variables. Model 3 includes hypothesized barrier variables.

¹Gender: 0 = female, 1 = male.

****p* < .001. ***p* < .01. **p* < .05, standardized estimates, *p*-values in parentheses

Panel B: FT purchasing behavior	Model 1	Model 2	Model 3	Model 4
Constant	-2.65* (.029)	-4.62** (.001)	-8.17*** (.000)	-4.45 (.050)
Gender ¹	-.44 (.161)	-.37 (.249)	-.01 (.974)	.03 (.941)
Age	.11 (.059)	.11 (.060)	.10 (.103)	.06 (.310)
Income	.15 (.270)	.17 (.251)	.17 (.269)	.12 (.464)
Cup-Size		.51** (.001)	.53** (.001)	.56** (.001)
Attitude			.21 (.263)	.19 (.338)
Ethical Obligation			.15 (.358)	.08 (.649)
Self-identity			.29 (.117)	.21 (.275)
Locus of Control			.04 (.817)	.03 (.860)
Price Sensitivity				-.25* (.044)
Inertia				-.29* (.043)
-2 Log-Likelihood	266.654	254.455	237.846	226.967
Nagelkerke's R ²	.060	.136	.232	.290
N	199	199	199	199

Notes: Model 1 includes sociodemographic control variables. Model 2 includes the control variable for cup-size. Model 3 includes hypothesized driver variables. Model 4 includes hypothesized barrier variables.

¹Gender: 0 = female, 1 = male.

****p* < .001. ***p* < .01. **p* < .05, standardized estimates, *p*-values in parentheses

pared applying multiple T-Tests with Bonferroni-Holm correction. The respective groups were (1) consumers who bought FT coffee and intended to buy FT products (i.e. consistent consumers, *n* = 69) and (2) consumers who did not buy FT coffee but intended to buy FT products (i.e. inconsistent consumers *n* = 41). The dependent variables were the drivers and barriers to FT consumption as well as the socio-demographic variables age and income. The results show that

inconsistent consumers are significantly more price sensitive ($M_{incon} = 4.35$; $M_{con} = 3.43$, $p = .001$), exhibit a higher level of inertia in purchasing behavior ($M_{incon} = 2.97$; $M_{con} = 2.31$, $p = .010$) and have a significantly lower income ($M_{incon} = 2.31$; $M_{con} = 2.91$, $p = .018$) than consistent consumers.

DISCUSSION

This study contributes to our understanding of FT consumption by showing that drivers of- and barriers to FT purchasing intentions and FT purchasing behavior differ substantially. This study shows that constructs based on the TPB have no effect on actual FT purchasing behavior, supporting prior research suggesting substantial gaps exist between consumers', self-reported ethical purchasing attitudes, intentions or behavior and actual ethical purchasing behavior (e.g., Auger and Devinney 2007; Bray et al. 2011; Carrigan and Attalla 2001; Hassan et al. 2016). Furthermore, the explained variance of consumers' FT purchasing behavior was satisfactory, lending support to the adequacy of a model of FT purchasing that takes into account driver as well as barrier variables and controls for sociodemographic variables. Additionally, this study sheds some more light on the ethical purchasing gap by showing that consumers who are inconsistent in their FT purchasing intentions and behavior differ in terms of price sensitivity, inertia in purchasing behavior, and income from consumers who show aligned FT purchasing intentions and behavior. That is, the FT price premium along with consumers' price sensitivities and income situation is a major obstacle to FT purchasing. Consequently, this study confirms prior research findings showing price and/or price sensitivity are important factors in the context of FT consumption (e.g., Andorfer and Liebe 2015; Bray et al. 2011; Hainmueller et al. 2014) and argues that TPB-based ethical consumption studies should include at least some attitudinal measure that accounts for the FT price premium (e.g., price sensitivity). As suggested by Bray et al. (2011) this study found that inertia is a significant barrier to FT purchasing that should be considered in future studies. This study shows that in the context of FT purchasing, consumers seem to be reluctant to change their usual purchasing and consumption habits. Overall, this study contributes to the literature on FT consumption by combining drivers of- and barriers to FT purchasing in an integrated model, building on the most commonly applied theoretical framework (i.e. TPB), controlling for socio-demographics, and comparing drivers' and barriers' effects on both, consumers' purchasing intentions and consumers' observed purchasing behavior. Prior research on ethical consumption calls for studies that capture actual behavior (Andorfer and Liebe 2012; Hassan et al. 2016) and this study's findings support such demands because predictors' effects differ substantially for purchasing intentions and behavior.

Furthermore, this study provides an implication for practitioners: While organizations promoting FT might not be able to reduce prices or consumers' price sensitivities, inertia in purchasing behavior is a barrier to FT consumption that could be more amenable to change. In this respect classical measures to raise awareness and motivate consumers to try something new (e.g., short term price promotions, advertising) might be effective in decreasing inertia in purchasing behavior.

REFERENCES

- Ajzen, Icek (1985), *From intentions to actions: A theory of planned behavior*, In J. Kuhl & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp. 11–39). Heidelberg: Springer.
- Ajzen, Icek (1991), "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, 50, 179–211.

- Andorfer, Veronika A., and Ulf Liebe (2012), "Research on fair trade consumption - A review," *Journal of Business Ethics*, 106 (4), 415-435.
- Andorfer, Veronika A., and Ulf Liebe (2015), "Do information, price, or morals influence ethical consumption? A natural field experiment and customer survey on the purchase of Fair Trade coffee," *Social Science Research*, 52, 330-350.
- Arnot, Chris, Peter C. Boxall, and Sean B. Cash (2006), "Do ethical consumers care about price? A revealed preference analysis of fair trade coffee purchases," *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*, 54 (4), 555-565.
- Auger, Pat, Paul F. Burke, Timothy M. Devinney, and Jordan J. Louviere (2003), "What will consumers pay for social product features?," *Journal of Business Ethics*, 42 (3), 281-304.
- Auger, Pat, and Timothy M. Devinney (2007), "Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions," *Journal of Business Ethics*, 76 (4), 361-383.
- Bray, Jeffery, Nick Johns, and David Kilburn (2011), "An exploratory study into the factors impeding ethical consumption," *Journal of Business Ethics*, 98 (4), 597-608.
- Cailleba, Patrice, and Herbert Casteran (2010), "Do ethical values work? A quantitative study of the impact of fair trade coffee on consumer behavior," *Journal of Business Ethics*, 97 (4), 613-624.
- Carrigan, Marylyn, and Ahmad Attalla (2001), "The myth of the ethical consumer - do ethics matter in purchase behaviour?," *Journal of Consumer Marketing*, 18 (7), 560-578.
- Chatzidakis, Andreas, Sally Hibbert, and Andrew P. Smit (2007), "Why people don't take their concerns about fair trade to the supermarket: The role of neutralization," *Journal of Business Ethics*, 74 (1), 89-100.
- De Pelsmacker, Patrick, Liesbeth Driesen, and Glenn Rayp (2005), "Do consumers care about ethics? Willingness to pay for fair-trade coffee," *Journal of Consumer Affairs*, 39 (2), 363-385.
- De Pelsmacker, Patrick, and Wim Janssens (2007), "A model for fair trade buying behaviour: The role of perceived quantity and quality of information and of product-specific attitudes," *Journal of Business Ethics*, 75 (4), 361-380.
- Hainmueller, Jens, Michael J. Hiscox, and Sandra Sequeira (2014), "Consumer demand for the fair trade label: Evidence from a multi-store field experiment," *Review of Economics and Statistics*, forthcoming.
- Halpert, Rita, and Russ Hill (2011), *28 Measures of Locus of Control*. Will to Power Press.
- Hassan, Louise M., Edward Shiu, and Deirdre Shaw. (2016), "Who says there is an intention-behaviour gap? Assessing the empirical evidence of an intention-behaviour gap in ethical consumption," *Journal of Business Ethics*, 136, 219-236.
- Kim, Youn-Kyung, Judith Forney, and Elizabeth Arnold (1997), "Environmental messages in fashion advertisements: Impact on consumer responses," *Clothing and Textiles Research Journal*, 15 (3), 147-154.
- Krier, Jean-Marie, (2008), *Fair Trade 2007: New Facts and Figures from an ongoing Success Story. A Report on Fair Trade in 33 Consumer Countries*, DAWS – Dutch Association of Worldshops, Netherlands.
- Nicholls, Alex, and Nick Lee (2006), "Purchase decision-making in fair trade and the ethical purchase 'gap': 'is there a fair trade twix?'," *Journal of Strategic Marketing*, 14 (4), 369-386.
- Orne, Martin T. (1962), "On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications," *American Psychologist*, 17 (11), 776.
- Ozcaglar-Toulouse, Nil, Edward Shiu, and Deirdre Shaw (2006), "In search of fair trade: Ethical consumer decision making in France," *International Journal of Consumer Studies*, 30 (5), 502-514.
- Papaoikonomou, Eleni, Gerard Ryan, and Mireia Valverde (2011), "Mapping ethical consumer behavior: Integrating the empirical research and identifying future directions," *Ethics & Behavior*, 21 (3), 197-221.
- Rotter, Julian B. (1966), "Generalized expectancies for internal versus external control of reinforcement," *Psychological Monographs: General and applied*, 80 (1), 1.
- Shaw, Deirdre, Edward Shiu, and Ian Clarke (2000), "The contribution of ethical obligation and self-identity to the theory of planned behaviour: An exploration of ethical consumers," *Journal of Marketing Management*, 16 (8), 879-894.
- Shaw, Deirdre, and Edward Shiu (2003), "The role of ethical obligation and self-identity in ethical consumer choice," *International Journal of Consumer Studies*, 26 (2), 109-116.
- Singhapakdi, Anusorn, and Scott J. Vitell Jr. (1991), "Research note: Selected factors influencing marketers' deontological norms," *Journal of the Academy of Marketing Science*, 19 (1), 37-42.

Men will be Men, Women will be Women: The Case of Cross-Gender Brand Extensions

Aravind Reghunathan, Indian Institute of Management Kozhikode, India

Joshy Joseph, Indian Institute of Management Kozhikode, India

ABSTRACT

The paper examines the current popularity of cross-gender brand extensions, based on its theoretical foundations in branding and gender differences in information processing strategies. We argue that consumers experience a situation of gender-salience in the case of cross-gender brand extensions, resulting in gender-differential responses towards the practice.

INTRODUCTION

“Definitely male!” said the tagline of Bajaj Pulsar motorcycle in one of their most popular advertisements. Extant literature in marketing has found that many of the brands in the marketplace possess gender identities (Grohmann 2009; Avery 2012). Consumers tend to place brands such as Davidoff, Marlboro, Lego in masculine category and Lancôme, Barbie, Chanel in feminine category (Jung and Lee 2006). At the same time, a recent phenomenon shows certain brands, usually associated with any one particular gender, extending into the opposite gender category using the same brand name. ‘Pond’s’, which has traditionally been perceived as a feminine brand, extending to the men’s segment with ‘Pond’s Men’ is a case in point. This practice, called cross-gender brand extensions, is a clear departure from the conventional branding practices of companies employing two different brands to target the two different gender segments or having a single brand that does not have a clear gender identity. This paper examines the current popularity of cross-gender brand extensions, based on its theoretical foundations in branding and gender differences in information processing strategies. We argue that the gender-differential responses to this practice can be explained by a situation of gender salience, stimulated in the consumer’s self-concept when the original brand gender associations are changed to target the opposite sex. Adding a novel perspective using gender differences in information processing, the paper advances the current understanding of cross-gender brand extensions.

THEORETICAL FOUNDATIONS

Brand Personality

Extant literature in marketing recognizes brand personality perceptions in consumer psyche, developed by consumers themselves or created as a result of specific strategies employed by brands. Aaker (1997) has given a commonly accepted definition of brand personality as “the set of human characteristics associated with a brand.”

Consumers tend to associate brands with human personality characteristics, as a result of the strategies used by advertisers (e.g. Coke projected as cool and all-American). Popular among these advertising strategies include anthropomorphization, personification, and the use of user imagery (Aaker 1997). McCracken (1989) argues that the transfer of personality traits to a brand is directly possible through the people associated with it. Consumers tend to form associations about the brand thinking about the brand’s user imagery, the company’s employees or CEO (e.g.: consumers may perceive the brand Virgin to be different based on the traits of its founder-CEO Richard Branson), or celebrity endorsers. The transfer of human personality traits can also happen in indirect ways such as consumers imbibing them through product-related attributes, forming associations about the particular product category, brand name, advertising style, logo, and other variables in the marketing mix (Batra, Lehm-

ann and Singh 1993). Fournier (1998) argued for the validity of relationships in brand-consumer context and added that consumers see brands as active relationship partners when they can connect with their own self with the brand, thus gender being a major dimension. The final purchase decision is shown to be influenced by this “one-to-one correspondence” between brand personality and the personality of the consumer (Mathews 2015).

Adding on to the personality characteristics, researchers including Levy (1959) suggest the addition of demographic features such as age, gender (“Usually it is hard to evade thinking of inanimate things as male or female”), and class to the symbolic language of different objects. Subsequently, Aaker’s definition (1997) also has encompassed demographic descriptions (i.e. age, gender, and socioeconomic status), human personality traits, and lifestyle characteristics as part of brand personality (Hayes, Alford, and Capella 2008). Taking cue from this stream of arguments, we explore the gender characteristic of a brand as the base for a brand’s gender crossing.

Brand Gender

Companies convey masculine or feminine characteristics to brands in order to differentiate products and to attract gender segments into their customer basket (Fugate and Philips 2010). Strong masculine and feminine brands are considered high on one of the two gender traits (that is, masculinity would be high for masculine brands, but they have low femininity, and vice versa). This intensity of brand gender makes their positioning in the market easily recognizable, contributes to brand equity and helps the consumers to categorize the brands with high degree of certainty into one of the gender segments (Lieven et al 2014).

Till and Priluck (2001) have observed that in many product categories such as jeans, cologne, and cigarettes, brands utilize masculine or feminine images in their advertisements to project their brand as more appealing to the target audience. Thus, marketers use classical conditioning as a mechanism for transferring gender perception in consumers’ minds. A common strategy is making use of celebrities or affixing a celebrity name to the brand (e.g.: Beyonce’s Heat perfumes or Someday by Justin Bieber, Michael Jordan shoes). McCracken (1986) argued that consumers exercise the appealing meanings out of products to categorize themselves into appropriate gender, age, and social class groups. Based on an individual’s self-perception, gender meaning can be a salient brand attribute that enhances the likelihood of purchase. In addition, the degree of masculinity or femininity influences purchase behaviour and people tend to favour products associated with their own gender (Alreck, Settle, and Belch 1982). Specifically, men prefer brands with masculine positioning and women prefer ones with feminine positioning (Till and Priluck 2001). Hence, a brand with an established gender positioning crossing over to the opposite gender category makes for interesting research.

Consumer Evaluations of Brand Extensions

Investigations about the various factors in consumer evaluations that influence success of brand extensions have figured prominently in extant branding literature (Morein 1975; Chernatony and McDonald 1998; Ahluwalia 2008; Loken, Ahluwalia, and Houston 2010). The extension’s perceived fit with the parent brand is considered to be a crucial factor leading to favourable consumer evaluations (Ahlu-

walia 2008; Kim and Yoon 2013). Generally, fit can be considered as the “extension’s perceived similarity to the parent brand” (Ahluwalia 2008). This is in terms of product category and attributes (e.g., product features, image, benefit, user imagery, usage situations) that can be classified as product or non-product-attribute-related associations (Bridges, Keller, and Sood 2000). Categorisation theories also (e.g. Lee and Sternthal 1999; Cowley and Mitchell 2003) suggest that if consumers observe connection or ‘fit’ between the parent brand and the extension, they tend to transfer the positive affect associated with the brand to the latter (Aaker and Keller 1990). A brand extension is more likely to be accepted when consumers sense commitment, trust, and/or liking for the parent brand or have had experience using the parent brand, when the extension is consistent with the core brand image or brand associations of the parent brand, and when the focus of the information about the brand extension includes favourable relevant information (Loken, Ahluwalia, and Houston 2010).

Several product development strategies, such as increasing brand breadth (Dacin and Smith 1994; Wu and Yen 2007), maintaining quality consistency (Dacin and Smith 1994), and generating brand extension synergies (Shine, Park, and Wyer 2007) also influence consumer perceptions, thereby leading to success or failure of the extension strategy. Research also points to the importance of retail environments in which brand extensions are exposed to consumers. Firms carefully choose retail locations that best reinforce their brand’s image (Joachimsthaler and Aaker 1997; Smith and Burns 2013) and that maintain consistency between a brand’s image and the retailer. In summary, it is clear that the factors in consumer evaluations of a conventional brand extension are generic to any brand extension strategy. However, the inherent nature of disturbing the gender status-quo would result in consumers being influenced by an additional set of factors in the case of cross-gender brand extensions.

Cross-Gender Brand Extensions

Gender stereotyping in consumption

Individuals often attempt to “create, enhance, and accomplish gender identities through consumption and, thus, our possessions function as symbolic gender identity markers” (Avery 2012). Penaloza (1994) argues that existing consumer cultures in a society dictate what is proper (and improper) to acquire or consume for each gender. Extant research in marketing has indicated brands as one of the markers we use to express our gender (Stern 1988; Palan 2001). Consequently, men and women have a preference towards brands, possessions, and practices that goes in tandem with their gender identity. Azar (2015) distinguishes three types of sexual attributions to brands within brand-as-a-person metaphor: brand sex as a demographic characteristic; brand gender as a personality characteristic; and brand sexual orientation as a behavioral characteristic. In this study, we consider brand gender as a personality characteristic, which is also in line with Levy’s argument (1959) that personality includes gender as a characteristic.

Cross-Gender Brand Extensions

Men and women, both, engage in ‘gender-bending consumption’, which is, adopting the consumption practices and products of the opposite sex to partake in redrawing the definitions of gender and give rise to novel ideologies (Avery 2012). Appropriating men’s consumption symbols to stand for gender fairness in the wave of feminism was the starting point of this paradigm shift (McCracken 1988; Hollows 2000). This was characterised by women patronizing cigarette smoking, short haircuts, and masculine fashion styles. On the other side, the metrosexual ideology emerged as an alternative to the prevailing concepts of masculinity and gave men the confidence

to choose products that had traditionally been linked with female or homosexual consumption (Crane 1999). These movements can be seen as attempts to redefine the boundaries of gender-based consumption and questioned the conservatives consciously or unconsciously dictating what is appropriate to consume for each gender category.

However, gender still occupies a prominent position in marketing. Brands usually associated with any one particular gender are often seen to target the opposite gender group by employing altogether different brand names. Philip Morris, which has the brand ‘Marlboro’ for men employs ‘Virginia Slims’ to cater to the women-folk (Alreck et. al 1982). At the same time, certain recent examples indicate gender-bending of brands by marketers, whereby products that had traditionally been focused at one sex are made appealing to the opposite gender without changing the brand name (Jung and Lee 2006; Ulrich 2013). The growing number of examples include Estee Lauder extending their ‘Pleasures’ perfume brand to men’s segment and Gillette targeting women with the same brand name offering. Considering the fact that cross-gender brand extensions are becoming popular even when gender identities of brands are not yet erased, how consumers evaluate and form attitudes about the same would influence the success of the practice.

Consumer Evaluation of Cross-Gender Brand Extensions

Gender studies have observed that in modern societies, masculine traits are likely to be placed higher than traditional feminine traits (Bem 1993; Kramer 2005). Consequently, the superior social appeal for masculine characteristics would be reflected in the consumer behaviour towards products as well as brands by consumers. This view is in line with past research which suggested that men will mostly reject feminine brands while women will most likely accept masculine brands (Alreck et. al 1982; Wolin 2003). According to this school of thought, using feminine brands carries a greater stigma for men than using masculine brands does for women (Borgerson and Schroeder 2004; Rinallo 2007; Avery 2012). Penaloza (1994) argues that the tendency for women crossing into the male domain by altering their dressing styles are viewed rational because of the higher number of men with money and power, when compared to women. Subsequently, for a man to cross into the feminine realm by trying clothes associated with women is to keenly follow its stigma. The phenomenon is referred to as “opposite sex rejection” (Alreck 1994), and is evident in our daily lives. Extant research in cross-gender brand extensions also points towards the impact of biological sex of consumers on the extension’s acceptance. Specifically, women are found to be more receptive when a typically masculine brand crosses over to the feminine category, than men when a feminine brand attempts to cross over to their category (Jung and Lee 2006). This essentially implies that the direction of the cross-gender extension also affects the success of the strategy.

Grohmann (2009) contended that consumers’ sex role identity and their brand personality-self-concept congruence in terms of masculine and feminine brand personality would influence their affective, attitudinal, and behavioral brand-related responses. This essentially recognizes gender as a multifactorial construct and maintains that gender, of the brand and of the consumer, influences the consumer attitude towards cross-gender extensions. The success factors of gender-based brand extensions are in line with the conventional extension literature and in addition, factors arising due to the characteristics associated with extending to the opposite gender category also play a significant role. Jung and Lee (2006) have established that the gender of a brand, gender of consumers, and product type influence the evaluation of cross-gender brand extensions.

Gender differences in information processing strategies

Consumers differ, according to gender, in evaluating products and services, decision processes, information searches, and attitudes towards marketing mix strategies (Gunay and Baker 2011). Men are said to be “selective processors” who depend on heuristics or overall themes for their decisions, whereas women are characterized as “comprehensive processors” who focus on integrating detailed information (Meyers-Levy and Maheswaran 1991; Meyers-Levy and Sternthal 1991).

In this paper, we propose that a gender-salience situation arises when a gendered brand crosses over to the opposite gender category. Psychologists have recognized situations of gender salience, where human behaviour can be affected by stimulations in gender-related elements of the self-concept (Deaux and Major 1987; Spence 1993). Specifically, they suggest that gender assumes salience when immediate situational cues prompt, such as the proportion of men and women in our environment; through the actions of another person in a specific context (e.g. when a man asks the opinion of a woman about something and she feels important); when the gender-related aspects in the self-concept are frequently stimulated (e.g. materials strongly associated with one gender, such as cooking utensils with women as opposed to mechanical tools); or the individual has the gender component central to his/her self-concept (e.g. school children who came from households where their sex is a minority are likely to mention gender in self-attributes (McGuire, McGuire, and Winton, 1979). The situational cues arising out of a change in the original brand associations due to a cross-gender brand extension may stimulate the gender-related elements of the consumer's self-concept (Ulrich 2013). Extant research in marketing has shown that the congruency between the consumer's gender and the brand gender leads to favourable evaluations for the brand (Grohmann 2009). We argue that a cross-gender brand extension shakes the consumers' original gender perceptions about the brand. This effect, in turn, would reflect in the consumer evaluations of both the parent brand and the extension. Several researchers have observed that significant results tend to be obtained from studies showing men and women differ in decision making and purchase behaviour in situations where gender was salient (e.g.: Ulrich 2013; Palan 2001). Thus, the paper contributes to strengthening the case for considering gender-salience in marketing research.

MANAGERIAL IMPLICATIONS

In case of a cross-gender brand extension strategy, practitioners may build favourable evaluations for the brand by positive gender associations related to the target consumers. They may also take care not to stimulate situations of negative gender salience. As an illustration, promotional activities featuring a celebrity who has a strong gender identity same as that of the target group may be employed to differentiate the extension from the gender identity of the parent brand. Another practical implication is in choosing the retail environments in which brand extensions are exposed to consumers. For example, a cross-gender extension targeting men may use retail props projecting several heuristics or overall themes to differentiate the brand from its parent brand gender. On the other hand, targeting women for the extension may require retail settings focusing on integrating detailed information about the extension's brand gender.

REFERENCES

- Aaker, D. A., and Keller, K. L. (1990), “Consumer Evaluations of Brand Extensions,” *Journal of Marketing*, 54(1), 27-41.
- Aaker, J. L. (1997), “Dimensions of Brand Personality,” *Journal of Marketing Research*, 34(3), 347-356.
- Ahluwalia, R. (2008), “How Far Can a Brand Stretch? Understanding the Role of Self-Construal,” *Journal of Marketing Research*, 45(3), 337-350.
- Alreck, P. L. (1994), “Commentary: A New Formula for Gendering Products and Brands,” *Journal of Product & Brand Management*, 3(1), 6-18.
- Alreck, Pamela L., Settle, Robert B., and Belch, Michael A. (1982), “Who Responds To “Gendered” Ads, and How? Masculine Brands Versus Feminine Brands,” *Journal of Advertising Research*, 22(2), 25-32.
- Avery, J. (2012), “Defending the Markers of Masculinity: Consumer Resistance to Brand Gender-bending,” *International Journal of Research in Marketing*, 29(4), 322-336.
- Azar, S. L. (2015), “Toward an Understanding of Brand Sexual Associations,” *Journal of Product & Brand Management*, 24(1), 43-56.
- Batra, R., Lehmann, D. R., and Singh, D. (1993), “Brand Equity and Advertising,” *Hillsdale, NJ: Lawrence Erlbaum Associates*.
- Bem, S. L. (1993), “The Lenses of Gender: Transforming the Debate on Sexual Inequality,” New Haven, CT: Yale University Press.
- Borgerson, J., and Schroeder, J. E. (2004), “Identity and Iteration: Marketing and the Constitution of Consuming Subjects,” Paper presented at the ACR Conference on Gender, Marketing, and Consumer Behaviour.
- Bridges, S., Keller, K. L., and Sood, S. (2000), “Communication Strategies for Brand Extensions: Enhancing Perceived Fit by Establishing Explanatory Links,” *Journal of Advertising*, 29(4), 1-11.
- Cowley, E., and Mitchell, A. A. (2003), “The Moderating Effect of Product Knowledge on the Learning and Organization of Product Information,” *Journal of Consumer Research*, 30(3), 443-454.
- Crane, D. (1999), “Gender and Hegemony in Fashion Magazines,” *The Sociological Quarterly*, 40(4), 541-563.
- Dacin, P. A., and Smith, D. C. (1994), “The Effect of Brand Portfolio Characteristics on Consumer Evaluations of Brand Extensions,” *Journal of Marketing Research*, 31(2), 229-242.
- De Chernatony, L., and McDonald, M. (1998), “Creating Powerful Brands in Consumer, Service and Industrial Markets,” Oxford: Butterworth-Heinemann.
- Deaux, K., and Major, B. (1987), “Putting Gender into Context: An Interactive Model of Gender-related Behaviour,” *Psychological Review*, 94(3), 369.
- Fournier, S. (1998), “Consumers and Their Brands: Developing Relationship Theory in Consumer Research,” *Journal of Consumer Research*, 24(4), 343-353.
- Fugate, D. L., and Phillips, J. (2010), “Product Gender Perceptions and Antecedents of Product Gender Congruence,” *Journal of Consumer Marketing*, 27(3), 251-261.
- Grohmann, B. (2009), “Gender Dimensions of Brand Personality,” *Journal of Marketing Research*, 46(1), 105-119.
- Gunay Nazan, G., and Baker, M. J. (2011), “The Factors influencing Consumers' Behaviour on Wine Consumption in the Turkish Wine market,” *EuroMed Journal of Business*, 6(3), 324-341.
- Hayes, J. B., Alford, B. L., and Capella, L. M. (2008), “When the Goal is Creating a Brand Personality, Focus on User Imagery,” *Academy of Marketing Studies Journal*, 12(1), 95.
- Hollows, J. (2000), “Feminism, Femininity, and Popular Culture,” New York: Manchester University Press.

- Joachimsthaler, E., and Aaker, D. A. (1996), "Building Brands without Mass Media," *Harvard Business Review*, 75(1), 39-41.
- Kim, J., and Yoon, H. J. (2013), "Association Ambiguity in Brand Extension," *Journal of Advertising*, 42(4), 358-370.
- Kramer, L. (2005), "The Sociology of Gender," Los Angeles, CA: Roxbury Publishing Company.
- Kwon Jung (2006), "Cross-Gender Brand Extensions: Effects of Gender of Brand, Gender of Consumer and Product Type on Evaluation of Cross-Gender Extensions", in NA - Advances in Consumer Research Volume 33, eds. Connie Pechmann and Linda Price, Duluth, MN : Association for Consumer Research, Pages: 67-74.
- Lee, Angela and Brian Sternthal (1999), "The Effects of Positive Mood on Memory," *Journal of Consumer Research*, 26 (September), 115-127.
- Levy, S. J. (1959), "Symbols for Sale," *Harvard Business Review*, 37(4), 117-124.
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R., and Tilburg, M. (2014), "The Effect of Brand Gender on Brand Equity," *Psychology & Marketing*, 31(5), 371-385.
- Loken, Barbara, Ahluwalia, Rohini, and Houston, Michael J. (2010), "*Brands and Brand Management: Contemporary Research Perspectives*," London: Routledge, 2010.
- Mathews, J. (2015), "Brand Personality : Finding Compatibility between Human Personality and Brand Characteristics," *The IUP Journal of Brand Management*, XII (2), 21-38.
- McCracken, G. (1986), "Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods," *Journal of Consumer Research*, 13(1), 71-84.
- McCracken, G. (1989), "Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process," *Journal of Consumer Research*, 16(3), 310-321.
- McGuire, W. J., McGuire, C. V., & Winton, W. (1979), "Effects of household sex composition on the salience of one's gender in the spontaneous self-concept," *Journal of Experimental Social Psychology*, 15(1), 77-90.
- Meyers-Levy, J., and Maheswaran, D. (1991), "Exploring Differences in Males' and Females' Processing Strategies," *Journal of Consumer Research*, 18(1), 63-70.
- Meyers-Levy, J., and Sternthal, B. (1991), "Gender Differences in the Use of Message Cues and Judgments," *Journal of Marketing Research*, 28(1), 84-96.
- Morein, J. A. (1975), "Shift from Brand to Product Line Marketing," *Harvard Business Review*, 53(5), 56-64.
- Palan, K. M. (2001), "Gender Identity in Consumer Behaviour Research: A Literature Review and Research Agenda," *Academy of Marketing Science Review*, 2001, 1.
- Peñaloza, L. (1994), "Crossing Boundaries/Drawing Lines: A Look at the Nature of Gender Boundaries and their Impact on Marketing Research," *International Journal of Research in Marketing*, 11(4), 359-379.
- Rinaldo, D. (2007), "Metro/fashion/tribes of men: Negotiating the boundaries of men's legitimate consumption," In B. Cova, R. V. Kozinets, & A. Shankar (Eds.), *Consumer tribes*. Oxford: Elsevier.
- Shine, B. C., Park, J., and Wyer Jr, R. S. (2007), "Brand Synergy Effects in Multiple Brand Extensions," *Journal of Marketing Research*, 44(4), 663-670.
- Smith, P. W., and Burns, D. J. (2013), "Positioning a Brand Extension in a Retail Environment: An Exploratory Look," *Journal of Business and Retail Management Research*, 8(1).
- Spence, J. T. (1993), "Gender-related Traits and Gender Ideology: Evidence for a Multifactorial Theory," *Journal of Personality and Social Psychology*, 64(4), 624.
- Stern, B. B. (1988), "Media Use and Gender Differences: Retailing Strategies for Bank Marketers," *International Journal of Bank Marketing*, 6(2), 20-30.
- Till, B. D., and Priluck, R. L. (2001), "Conditioning of Meaning in Advertising: Brand Gender Perception Effects," *Journal of Current Issues & Research in Advertising*, 23(2), 1-8.
- Ulrich, Isabelle (2013), "The Effect of Consumer Multifactorial Gender and Biological Sex on the Evaluation of Cross-Gender Brand Extensions," *Psychology and Marketing*, 30(9), 794-810.
- Wolin, L. D. (2003), "Gender Issues in Advertising—An Oversight Synthesis of Research: 1970-2002," *Journal of Advertising Research*, 43(01), 111-129.
- Wu, C., and Yen, Y. C. (2007), "How the Strength of Parent Brand Associations Influence the Interaction Effects of Brand Breadth and Product Similarity with Brand Extension Evaluations," *Journal of Product & Brand Management*, 16(5), 334-341.

A Cultural View on Healthcare Access: Considering the Hispanic Perspective

Sharon Schembri, University of Texas Rio Grande Valley, USA

Suad Ghaddar,, University of Texas Rio Grande Valley, USA

ABSTRACT

This research provides a cultural perspective on healthcare access with a specific focus on Hispanic consumers. The research question of how Hispanics experience healthcare access is addressed with 24 phenomenological interviews. The findings are presented as emergent themes: affordability, access and resistance, and consequences of a lack of healthcare access.

Keywords: Healthcare, Hispanic consumer, consumer culture, phenomenology

INTRODUCTION

This research addresses the question of how Hispanics experience healthcare access. Access to healthcare was proposed by the United Nations (UN) in 1948 and again in 2012 as a human right (UN 2012), which is a policy position supported by the United States of America (USA). Similarly, a key policy objective in the Organization for Economic Co-operation and Development (OECD) is to reduce health inequalities and to achieve adequate and equitable healthcare access (Devaux 2015). Accordingly, most OECD nations provide universal healthcare coverage (Pearson et al. 2016), with the exception of the USA (Davis et al. 2014). Ranked as the most expensive healthcare system globally (Lorenzoni, Belloni, and Sassi 2014; Mahon and Fox 2014), the USA ranks last on measures of quality of care, access, and equity (Brubaker et al. 2011; Davis et al. 2014; Mossialos et al. 2016).

Rather than universal coverage, USA employer-sponsored private insurance arrangements spread widely during 1940-1950 (Oberlander 2012), linking insurance to employment (Schembri and Ghaddar 2017). The 1965 establishment of Medicare and Medicaid was designed to accommodate the healthcare needs of the elderly and low-income households (Iglehart and Sommers 2015). More recently, the enactment of the Patient Protection and Affordable Care Act in 2010 enabled a significant decrease in the number of uninsured Americans with some 20 million adults gaining insurance and the greatest impact evident in African American and Hispanic minority groups (Office of the Assistant Secretary for Planning and Evaluation (ASPE) 2016). Yet, despite this progress, millions of American consumers remain uninsured with low-income (Milligan 2015) and minority consumers overly represented (Mitchell 2015). More specifically, across the USA and also in Texas, Hispanics show the highest rate of uninsurance (Marks, Ho, and Balihe 2015). Indeed, the negative social and economic impact of health inequalities is well documented (Brummer et al. 2016; LaVeist, Gaskin, and Richard 2011; Magge et al. 2013) and especially so amongst ethnic and racial minorities (Hunt and Whitman 2014; VanderWielen et al. 2015). Therefore, investigating the perspective of lower-income, minority, specifically Hispanic, consumers in terms of healthcare access is a timely and worthy question. To that end, this phenomenological investigation focuses on Hispanics and their experience of healthcare access.

CONSIDERING THE HISPANIC CONSUMER PERSPECTIVE

As the largest and fastest growing ethnic/racial minority in the USA (Ennis 2010) and representing 17% of the US population (US Census 2014), the Hispanic segment purchasing power is reported between \$1.2 and 1.5 trillion (Gonzalez and Monistere 2014; Nielsen

2012, 2015). However, rather than an identifiably homogenous group, there is much diversity within the 54 million Hispanic demographic (US Census 2014) with, for example, 63% of Mexican origin (63%), 9.6% from Puerto Rico, and 5.3% from Cuba (US Census 2010). As a predominantly collectivist culture, cultural values include familial relationships with primary reference groups including friends and family (Alvarez, Dickson, and Hunter 2014). Accordingly, overcompensation to children is high with documented higher spending in baby goods, hair care, and toiletries (Nielsen 2012). Hispanic brand loyalty is also reported as high because Hispanics are fear driven and risk-averse consumers (Korzenny and Korzenny 2012).

The challenge in engaging the Hispanic consumer with regards to healthcare is related to the documented disparities (Bleich et al. 2012; Ramirez, Thompson, and Vela 2013). Hispanics have significantly higher rates of diabetes (Brunk et al. 2015), obesity (Isasi et al. 2015), cancer (Shoemaker and White 2016), HIV and AIDS (Bonacci and Holtgrave 2016), and myriad other conditions (Martinez, Ward, and Adams 2015). Yet, the healthcare system is not necessarily designed to accommodate Hispanic needs. Compounding evident health disparities, proactive patient activation is low for Hispanics relative to non-Hispanics (Cunningham, Hibbard, and Gibbons 2011). As well, those without health insurance are less likely to seek health services and when they eventually do seek help, their health conditions tend to be more advanced (Cawley, Moriya, and Simon 2015). Little or no access to healthcare adversely affects health outcomes, increases morbidity and mortality, and increases healthcare costs, especially for minority groups (Reininger et al. 2012). While lack of health insurance and finances constitute formidable barriers for Hispanics to access healthcare, individual, interpersonal, and systemic influences are also substantial barriers (Reininger et al. 2012); personal influences include fear, denial, embarrassment, and unaffordability, interpersonal influences include culturally interpreted concepts of respect and effective communication, and systematic influences including healthcare access considered easier in Mexico than USA. Therefore, Hispanics are reluctant to access, likely choosing to delay care and prefer to access healthcare in Mexico (Su et al. 2011). Accordingly, there is a double jeopardy situation for Hispanics, where being uninsured as well as in poorer health means being at higher risk of needing medical care (Bruhn 2014).

METHOD

This research was conducted across two counties in South Texas, along the US-Mexico border. The population exceeds one million, is predominantly Hispanic (91%), with a median income less than \$35,000, 31+% living in poverty (US Census 2015), 39% uninsured (Smith and Medalia 2015), and with a high prevalence of obesity, diabetes, cancer, and heart disease (Ramirez et al. 2013). Existing at the periphery of the USA economy, the US-Mexico border community is distinct geographically, economically, culturally, and socially, and is subject to systematic economic, social, and health injustices (Lusk et al. 2012). As such, there is much need for access to healthcare and a phenomenological research design has been used to investigate the question of how Hispanics experience healthcare access.

For phenomenologists (Heidegger, 1962/1927; Husserl 1970/1900-1; Merleau-Ponty 1962/1945), the world is considered an experiential world where reality is assumed to be socially construct-

ed and meaning is based on the context. Generalizability therefore is not the goal but rather a depth of understanding (Hudson and Ozanne 1988; Schembri and Sandberg, 2002, 2011; Thompson, Locander, and Polio 1989, 1990). In this study, the research focus was to provide a contextually dependent depth of insight as to how Hispanic consumers access healthcare, which has been documented with 24 phenomenological interviews. Treating the interview transcripts as legitimate accounts of how Hispanics experience healthcare access, interpretation proceeded as a part to whole analysis of participant experience, as per Thompson et al. (1989, 1990). This analytical process began with repeatedly reading each of the transcripts in full to gain an initial understanding of the situation for each participant. From there, the set of interviews were considered more broadly and holistically and then segments and fragments were identified and contextually considered in relation to the whole. This part of whole analytical process continued to the point where recurrent meaningful themes began to emerge and stabilized. Then, significant statements were specifically identified as illustrative quotes of emergent themes. Note, the English grammar has not been corrected in the illustrative quotes presented to demonstrate the Hispanic linguistic context of these participants. As summarized in table 1, the emergent themes reported here are affordability, access and resistance, and the experiential consequences of the lack of healthcare access.

FINDINGS

This research addresses the question of how Hispanics experience healthcare access. From a series of phenomenological interviews and an interpretive analytical process, the emergent themes identified are affordability, access and resistance, and consequences of a lack of healthcare access. These findings are summarized in table 1.

Affordability

Given this research was conducted in one of the poorest areas of America, with almost a third of families living below the poverty level and nearly 40% uninsured (US Census Bureau 2015), cost constraints and affordability were a primary concern with regards healthcare access. Giving context to the financial consideration, Catalina (22 years) explains how very expensive her \$40 co-pay is. But Catalina is lucky because she has health insurance. Unlike Catalina, Matias (26 years) and his family do not and he explains how his mom was in hospital for nine days and will be paying that bill for the rest of her life. Like Matias, Ivanna (21 years) does not have insurance and neither does her younger sister. So when Ivanna’s sister had a kidney stone, they had to go to Mexico because *“we can’t really go to the hospital here [USA] because we know is really expensive.”* Similarly, 19 year old Elisa visited Mexico to go to the doctor on the weekend. She tells the story as a journey where the danger element is mentioned but largely dismissed.

“I’m so close to the border I can get very cheap medical assistance in Mexico. We drive over usually just in the mornings ‘cause you know it’s kind of a bit dangerous still. We have breakfast, pick up ice, and groceries, then we go to the doctor. We get our medicines and then we just come back. Usually we spend maybe two three hours.”

Access and Resistance

Beyond the lack of financial resources and health insurance, another constraint on healthcare access for Hispanics is the cultural orientation. Karen is 36 years old and works as an administrative

Table 1: Summary of findings on how Hispanics experience healthcare access

Theme	Summary	Illustrative quote
Affordability	In this low-income Hispanic context, affordability is given meaning with Catalina’s <i>“very expensive”</i> \$40 co-pay; without health insurance, Matias’ mother will be paying the bill for her 9-day hospital stay for the rest of her life; Ivanna’s younger sister went to Mexico to treat a kidney stone	<i>“We can’t really go to the hospital here [US] because we know is really expensive.”</i> (Ivanna, 21 years)
Access and resistance	Karen explains the Hispanic cultural orientation as a barrier to healthcare access; Elisa highlights the relational trust she experiences with Mexican healthcare service providers	<i>“...in the Hispanic community if we don’t have to go to the doctor we don’t go unless it is an absolute emergency. We are talking about bleeding and severe pain that you can’t control with a pill, [otherwise] we are not going to utilize ...I mean because anyone and everyone knows that whenever something is broken we [Hispanics] go to Mexico to fix it!”</i> (Karen, 36 years)
Consequences to lack of access	Jose is overweight with a thyroid problem and no health but explains he does not need healthcare access; even though Mateo had cancer as a child yet he too does not need healthcare access; Andrea explains the stress of not having healthcare access on her mother; Vanessa explains how working sick perpetuates illness; Daniela has never seen a doctor and is overwhelmed with not knowing the process; and Elisa’s parents are anti-doctor meaning the whole family lacks healthcare access	<i>“I just have colds and stuff it’s not a big deal.”</i> (Mateo, 24 years)

assistant in a dental office. She explains how the context of the Hispanic culture is a barrier to healthcare.

“...in the Hispanic community if we don’t have to go to the doctor we don’t go unless it is an absolute emergency. We are talking about bleeding and severe pain that you can’t control with a pill, [otherwise] we are not going to utilize”

Karen goes on to explain the Hispanic inclination to exit the USA in order to access healthcare.

“I mean because anyone and everyone knows that whenever something is broken we [Hispanics] go to Mexico to fix it!”

Multiple other participants discussed this cultural constraint and resistance to accessing healthcare even when it is available. In the following comment, Elisa highlights the quality of healthcare services she experiences in Mexico relative to the USA and the relational trust she experiences with her Mexican healthcare service provider.

“Here [USA] it’s a longer wait but there [Mexico] I just walk [in] and its empty so I just go in and sometimes I wait like thirty minutes if it’s busy. Here I use to go to the doctor and he [doctor] was like very busy, it was just a five minute thing [visit] and then he leave. I didn’t feel comfortable talking all my concerns and questions [but] over there like I guess since you trust a person [doctor] you know for a really long time you feel better over there in Mexico”

Consequences to Lack of Access

Given the financial, systemic, and cultural constraints on accessing healthcare, participants also brought to light consequences to a lack of healthcare access. Jose (33 years) for example is overweight with a history of thyroid problems and no health insurance. He explains that he does not need healthcare access because he does not get sick. This response from Jose mirrors the Hispanic cultural attitude towards healthcare access.

Manageable conditions left unattended may escalate unnecessarily, consequently requiring more resources when they are finally attended to. Other examples of this cultural orientation to healthcare access and the potential consequences are further demonstrated with Mateo’s situation. As a young child he suffered from cancer with healthcare access enabled through the Medicaid program. However, at 24 years of age, many years have passed since his last check up and he does not think he needs access. He says, “*I just have colds and stuff it’s not a big deal.*”

When there are complex medical needs, this non-attendance to manageable conditions is problematic not only for the individuals but also the immediate family in terms of worry and stress as well as the broader community in terms of financial burden. Andrea (20 years) highlights the stress of the situation when adequate healthcare access is not available.

“My mom is been I guess stressful and you know thinking ‘what about my kids get sick?’ ‘what about if they get in an accident?’ we have no way to be able pay the hospitals if we ever have to land at the hospital so it’s been very stressful, and then her work. It’s like work, us, the insurance. My grandma who is old and we have to take care of her I guess like is very stressful for my mom and you can tell by her face that she is stressed!”

Similarly, Vanessa (19 years) explains in the following comment the distress she feels in the face of not having health insurance and healthcare access. She explains that the fear of being unemployed, means working sick, possibly spreading the germs, and perpetuating the illness.

“If something happens to you or you feel sick you can’t go to the doctor and if you hate a job you can’t stop going to your job because you need the money and you’re just working sick and then people other people get sick ‘cause you’re sick and it’s like a little chain.”

At 23 years, Daniela explains that she has never seen a doctor and the consequence for her is that “*I don’t know the process, what to*

do, or what they accept in order to get checkups.” Not knowing the process seems overwhelming for Daniela to visit the doctor for the very first time. Elisa brings the point home in stating that “*my mom and dad, well my dad mostly, they’re like anti-doctor kind of thing.*” If mom and dad are anti-doctor then the family will lack access too.

CONTRIBUTION AND LIMITATIONS

This research has investigated the question of how Hispanics experience healthcare access. As such, the contribution of this work is a depth of insight on Hispanic healthcare access where the emergent themes of affordability, access and resistance, and the consequences of a lack of healthcare access have been documented. In line with the findings of Cunningham et al. (2011), Hispanic proactive health management is not evident. The findings presented here also confirm the findings of Reininger et al. (2012) that barriers to healthcare access for Hispanics include personal influences such as fear and unaffordability, interpersonal influences such as cultural interpretations, and systemic influences such as healthcare access considered easier in Mexico than USA. More than that, this work confirms the double jeopardy situation highlighted by Bruhn (2014), where uninsured Hispanics with complex healthcare needs are either delaying care or not accessing healthcare services. While this work confirms the work of Cunningham et al (2011), Reininger et al. (2012) and Bruhn (2014) from health, minority health, and health disparities literature, the contribution of this work is focused on a consumer behavior perspective.

This contribution is useful to policy makers and social marketers in the design of future policy and communications seeking to achieve an improved outcome for minorities. Policy makers are informed in terms of the challenges and barriers that Hispanic healthcare consumers are facing. Social marketers are informed in terms of Hispanic consumer needs and considered alternatives with regards to healthcare service utilization.

Beyond this contribution, a limitation of this work is the focus on consumers alone. Consumers are only one of many stakeholder perspectives that might inform the question of how Hispanics experience healthcare access. Other stakeholder perspectives that might be investigated include the myriad healthcare service providers and para-professionals. Focusing specifically on the Hispanic consumer perspective, however, has enabled documentation of the consumer views of this increasingly significant segment. More than that, the phenomenological research design has achieved a depth of insight not achievable with other research methods.

ACKNOWLEDGEMENT

The authors would like to thank the Public Health Action Support team at the University of Michigan, School of Public Health for their assistance with data collection. We would also like to thank Matthew Benavides, Patricia Garcia, Alyssa Garza, and Ruth Juarez for their invaluable assistance with recruitment and interview transcriptions.

This research was supported in part by the South Texas Border Health Disparities Center (STBHDC) at The University of Texas-Pan American (UTPA), now The University of Texas Rio Grande Valley (UTRGV). The contents of this manuscript are solely the responsibility of the authors and do not necessarily represent the official views of UTPA, UTRGV or STBHDC.

REFERENCES

- Alvarez, Cecilia M., Peter R. Dickson, and Gary K. Hunter (2014), "The Four Faces of the Hispanic Consumer: An Acculturation-Based Segmentation," *Journal of Business Research*, 67 (2): 108-15.
- ASPE (Office of the Assistant Secretary for Planning and Evaluation) (2016), "Health Insurance Coverage and the Affordable Care Act, 2010-2016," US Department of Health and Human Services, <https://aspe.hhs.gov/pdf-report/health-insurance-coverage-and-affordable-care-act-2010-2016>
- Bleich, Sara N., Marian P. Jarlenski, Caryn N. Bell, and Thomas A. LaVeist (2012), "Health Inequalities: Trends, Progress, and Policy," *Annual Review of Public Health*, 33 (April): 7-40.
- Bonacci, Robert A. and David R. Holtgrave (2016), "Unmet HIV Service Needs Among Hispanic Men who Have Sex with Men in the United States," *AIDS and Behavior*, 20 (10): 2444-451
- Brubaker, Laruen M., Eugenio Picano, David J. Breen, Luis Marti-Bonmati, and Richard C Semelka (2011), "Health Care Systems of Developed Non-U.S. Nations: Strengths, Weaknesses, and Recommendations for the United States - Observations from Internationally Recognized Imaging Specialists," *American Journal of Roentgenology*, 196 (1): W30-W36.
- Bruhn, John G. (2014), *Culture and Health Disparities*. Switzerland: Springer International Publishing.
- Brummer, Savoy, Iris Reyes, Marcus L. Martin, Leslie Uldine Walker, and Sheryl L. Heron. (2016), "Racial/Ethnic Health Care Disparities and Inequities: Historical Perspectives," in *Diversity and Inclusion in Quality Patient Care*, ed. Martin, Marcus L., Sheryl L. Heron, Lisa Moreno-Walton, and Anna Walker Jones, Switzerland: Springer International Publishing, 11-21.
- Brunk, Debra. R., Ann Gill Taylor, Myra L. Clark, Ishan C. Williams and Daniel J. Cox (2015), "A Culturally Appropriate Self-Management Program for Hispanic Adults With Type 2 Diabetes and Low Health Literacy Skills," *Journal of Transcultural Nursing*, 28 (2): 187-94.
- Cawley, John, Asako S. Moriya, and Kosali Simon (2015), "The Impact of the Macroeconomy on Health Insurance Coverage: Evidence from the Great Recession," *Health Economics*, 24 (2): 206-23.
- Cunningham, Peter J., Judith Hibbard, and Claire B. Gibbons, (2011), "Raising Low Patient Activation Rates Among Hispanic Immigrants May Equal Expanded Coverage in Reducing Access Disparities," *Health Affairs*, 30 (10): 1888-894.
- Davis, Karen, Kristof Stremikis, David Squires, and Cathy Schoen (2014), "Mirror, Mirror on the Wall: How the US Health Care System Compares Internationally," *The Commonwealth Fund* http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf.
- Devaux, Mario (2015), "Income-related Inequalities and Inequities in Health Care Services Utilization in 18 selected OECD countries," *European Journal of Health Economics*, 16 (1), 21-33.
- Gonzalez, Eva, and Maria Monistere (2014), "Engaging the Evolving Hispanic consumers: A Look at Two Distinct Sub-groups," The Nielsen Company. <http://www.nielsen.com/us/en/insights/news/2014/engaging-the-evolving-hispanic-consumers.html>.
- Heidegger, Martin (1962/1927). *Being and Time*, New York: Harper and Row.
- Hudson, Laurel Anderson and Julie L. Ozanne, (1988), "Alternative Ways of Seeking Knowledge in Consumer Research," *Journal of Consumer Research*, 14 (4): 508-21.
- Hunt, Bijou and Steve Whitman (2014), "Black-White Health Disparities in the United States and Chicago: 1990-2010," *Journal of Racial and Ethnic Health Disparities*, 2 (1): 93-100.
- Husserl, Edmund (1970/1901), *The Crisis of European Sciences and Transcendental Phenomenology* (trans. by WRB Gibson), London, UK: Collier Macmillan Publisher.
- Iglehart, John. K., and Benjamin D. Sommers (2015), "Medicaid at 50 - From Welfare Program to Nation's Largest Health Insurer," *New England Journal of Medicine*, 372 (22): 2152-159.
- Isasi, Carmen. R., Guadalupe X. Ayala, Daniela Sotres-Alvarez, Hala Madanat, Frank Penedo, Catherine M. Loria, John P. Elder, Martha L. Daviglus, Janice Barnhart, Anna Maria Siega-Riz, Linda Van Hornand, and Neil Schneiderman (2015), "Is Acculturation Related to Obesity in Hispanic/Latino Adults? Results from the Hispanic Community Health Study/Study of Latinos," *Journal of Obesity*, 2015, Article 186276.
- Korzenny, Felipe and Betty Ann Korzenny (2012), *Hispanic Marketing: A Cultural Perspective*. New York, NY: Routledge.
- LaVeist, Thomas A., Darrell Gaskin, and Patrick Richard (2011), "Estimating the Economic Burden of Racial Health Inequalities in the United States," *International Journal of Health Services*, 41 (2): 231-38.
- Lorenzoni, Luca, Annalisa Belloni, and Franco Sassi (2014), "Health-Care Expenditure and Health Policy in the USA Versus Other High-Spending OECD Countries," *The Lancet*, 384 (9937): 83-92.
- Lusk, Mark, Staudt Kathleen, and Eva Moya (2012), *Social Justice in the US-Mexico Border Region*. Netherlands: Springer International.
- Mahon, Mary and Bethanne Fox (2014), "US Health System Ranks Last Among Eleven Countries on Measures of Access, Equity, Quality, Efficiency, and Healthy Lives," *The Commonwealth Fund*. <http://www.commonwealthfund.org/publications/press-releases/2014/jun/us-health-system-ranks-last>.
- Magge, Hema, Howard J. Cabral, Lewis E. Kazis, and Benjamin D. Sommers (2013), "Prevalence and Predictors of Underinsurance Among Low-Income Adults," *Journal of General Internal Medicine*, 28 (9): 1136-42.
- Marks, Elena, Vivian Ho, and Philomene Balihe (2015), "Health Reform Monitoring Survey – Texas, Issue Brief #12: Change in Insurance Status of Adult Texans by Demographic Group as of March 2015," Rice University Baker Institute. <http://bakerinstitute.org/files/9257/>.
- Martinez, Michael E., Brian W. Ward, and Patricia F. Adams (2015), "Health Care Access and Utilization Among Adults Aged 18-64, by Race and Hispanic Origin: United States, 2013 and 2014," US Department of Health and Human Services. <http://www.cdc.gov/nchs/data/databriefs/db208.pdf>.
- Merleau-Ponty, Maurice (1962/1945) *The Phenomenology of Perception*, London, UK: Routledge and Kegan Paul.
- Milligan, Susan (2015), "Poverty, Wages Remain Stagnant Despite Economic Recovery: Rate of Uninsured Americans is Down Across the Board," *US News and World Report*. <http://www.usnews.com/news/articles/2015/09/16/poverty-wages-remain-stagnant-despite-economic-recovery>.

- Mitchell, Felicia M. (2015), "Racial and Ethnic Health Disparities in an Era of Health Care Reform," *Health and Social Work*, 40 (3): e66-e74.
- Mossialos, Elias, Martin Wenzl, Robin Osborn, and Dana Sarnak (2016), *2015 International Profiles of Health Care Systems*. The Commonwealth Fund. http://www.commonwealthfund.org/~media/files/publications/fund-report/2016/jan/1857_mossialos_intl_profiles_2015_v7.pdf
- Nielsen (2012), "State of the Hispanic consumer: The Hispanic Market Imperative," <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2012-Reports/State-of-the-Hispanic-Consumer.pdf>
- _____ (2015), "Nielsen Share Of Wallet: A Look at Hispanic Spending on Consumer Packaged Goods," <http://www.nielsen.com/us/en/insights/reports/2015/nielsen-share-of-wallet-lite-march-2015.html>
- Oberlander, Jonathan (2012), "Unfinished Journey-A Century of Health Care Reform in the United States," *New England Journal of Medicine*, 367 (7): 585-90.
- Pearson, Mark, Francesca Colombo, Yuki Murakami, and Chris James (2016), "Universal health coverage and health outcomes," OECD. <https://www.oecd.org/els/health-systems/Universal-Health-Coverage-and-Health-Outcomes-OECD-G7-Health-Ministerial-2016.pdf>
- Ramirez, Amelie G., Ian M. Thompson, and Leonel Vela, (2013), *The South Texas Health Status Review: A Health Disparities Roadmap*. New York: Springer International Publishing.
- Reininger, Belinda M., Cristina S. Barroso, Lisa Mitchell-Bennett, Marge Chavez, Maria E. Fernandez, Ethel Cantu, Kirk L. Smith and Susan P. Fisher-Hoch (2014), "r," *Journal of Immigrant and Minority Health*, 16 (2): 218-28.
- Schembri, Sharon and Ghaddar, Suad (2017), "The Affordable Care Act, the Medicaid Coverage Gap, and Hispanic Consumers: A Phenomenology of Obamacare," *Journal of Consumer Affairs*. DOI: 10.1111/joca.12146
- Schembri, Sharon and Jörgen Sandberg (2002), "Service Quality and the Consumer's Experience: Towards an Interpretive Approach," *Marketing Theory*, 2 (2): 189-205.
- _____ (2011), "The Experiential Meaning of Service Quality," *Marketing Theory*, 11 (2): 165-86.
- Shoemaker, Meredith L. and Mary C. White (2016), "Breast and Cervical Cancer Screening Among Hispanic Subgroups in the USA: Estimates from the National Health Interview Survey 2008, 2010, and 2013," *Cancer Causes and Control*, 27 (3), 453-57.
- Smith, Jessica C. and Carla Medalia (2015), "Health Insurance Coverage in the United States: 2014," U.S. Census Bureau, <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-253.pdf>.
- Su D, Richardson C, Wen M, Pagán JA. (2011), "Cross-border utilization of health care: evidence from a population-based study in South Texas." *Health Services Research*, 46 (3):859-76.
- Thompson, Craig J., William B. Locander, and Howard R. Pollio (1989), "Putting Consumer Experience Back into Consumer Research: The Philosophy and Method of Existential-phenomenology." *Journal of Consumer Research*, 16 (2): 133-46.
- _____ (1990), "The Lived Meaning of Free Choice: an Existential-Phenomenological Description of Everyday Consumer Experiences of Contemporary Married Women," *Journal of Consumer Research*, 17 (3): 346-61.
- United Nations (2012), *Global Health and Foreign Policy*. https://www.un.org/ga/search/view_doc.asp?symbol=A/67/L.36
- US Census Bureau (2010), *American Community Survey*. <http://www.census.gov/programs-surveys/acs/data/summary-file.2010.html>.
- _____ (2014), *American Community Survey 5-year Estimates*. <http://factfinder.census.gov>.
- VanderWielen, Lynn A. Vanderbilt, Steven H. Crossman, Sallie D. Mayer, Alexander S. Enurah, Samuel S. Gordon and Melissa K. Bradner (2015), "Health disparities and Underserved Populations: A Potential Solution, Medical School Partnerships with Free Clinics to Improve Curriculum," *Medical Education Online*, 20 (1). <http://dx.doi.org/10.3402/meo.v20.27535>

Brand-Mediated Ideological Edgework: Negotiating the Aestheticized Human Body on Instagram - The Case of American Apparel

Jonathan D. Schöps, University of Innsbruck, Austria
Philipp K. Wegerer, University of Innsbruck, Austria
Andrea Hemetsberger, University of Innsbruck, Austria

INTRODUCTION

Brands make vast use of social media platforms such as Instagram to connect with “cultural intermediaries” and engage consumers (Carah and Shaul 2016, 69). Recent research finds that consumers – on new sites such as Twitter or Instagram – rather use brands in an instrumental manner for self-presentation, publicity, self-branding or bragging (Arvidsson and Caliandro 2016; Marwick 2015; Presi, Maehle, and Kleppe 2016; Rokka and Canniford 2016). So, how can brands engage consumers? Contrary to these findings, the Instagram account of American Apparel (AA) – a fashion brand that is well known for its controversial visual ads – provokes considerable consumer reaction and gender-ideological discourse on Instagram. How do brands use visual rhetoric to initiate ideological discourse on otherwise quite self-centered social networking platforms? And how do these brand visuals mediate what Thompson and Üstüner (2015) denominate as consumer ideological edgework?

Ideological edgework refers to marketplace performances of consumers that “challenge orthodox gender boundaries, without losing sociocultural legitimacy” (Thompson and Üstüner 2015, 1). Thompson and Üstüner (2015) describe ideological edgework as a form of gender work, but focus on the consumer as primary actor. However, brands also play a significant role in the (de-)construction of social reality, and market morality. Prior research describes the active role of brands as facilitators of networked brand performativity (von Wallpach, Hemetsberger, and Espersen 2017), and as catalysts of moral coalition formation (Stoeckl 2014). Research on the facilitating and catalyst role of brands in ideological discourse is scant.

This study aims to investigate into the role of brands as mediators of ideological edgework on social networking sites. Our analysis focuses on the visual and textual discourse that enfolds on the Instagram account of American Apparel. We analyze the visual performances of the brand, as well as brand-mediated consumer practices, and how these practices co-construct (body) ideologies in the digital marketplace. Findings reveal three brand, and three consumer practices. The brand authenticates, sets agendas and sensitizes through provocative visual performances of the body. Consumers textually applaud, moralize, and negotiate. We introduce and discuss the notion of brand-mediated ideological edgework, point out limitations of this study, and offer future research possibilities.

THEORY

Brands and Consumers on Social Media

In the age of digitalization, social media became an indispensable medium for brands to connect, communicate, and interact with consumers. Scholars find that consumers do interact with brands on social media, but use brands merely as a mediation device to gain publicity, and self-promotion (Arvidsson and Caliandro 2016; Marwick 2015; Presi et al. 2016; Rokka and Canniford 2016). These consumer practices do not lead to the development of a collective identity around the brand of interest (Arvidsson and Caliandro 2016), but rather to a multitude of identities that can destabilize the “spatial, temporal, symbolic and material properties of brand assemblages” (Rokka and Canniford 2016, 1). Closely related to this phenomenon is the notion of the microcelebrity (Marwick 2015). Microcele-

brities mimic celebrity culture by “using the familiar trappings of thin but buxom bodies, sports cars and designer clothes” (Marwick 2015, 157). These studies rely on the concept of the “demiotic turn,” which describes the possibility to acquire mass audiences through the display of “a set of physical and aesthetic criteria” (Marwick 2015, 157). The relationship between brands and consumers can be described as unidirectional, where consumers use brands as means to gain publicity in social networks. On the other hand, studies point out micro-practices of consumers that aggregate and eventually change social institutions, such as fashion (Dolbec and Fischer 2015; McQuarrie, Miller, and Phillips 2013; Scaraboto and Fischer 2013).

Our aim is to extend this stream of research by studying how consumers and brands co-construct and challenge dominant ideological formations around idealized body and gender norms. Performativity theory offers a theoretical lens that allows investigating the co-construction of social norms through brands and consumers.

Performativity Theory

This study draws on performativity theory (Austin 1975; Butler 1993, 2010; Callon 1998; Lash 2015) in order to investigate how a brand visually performs the human body on Instagram. The central idea of performativity theory is that social reality, in our case the human body, is constructed through repetitive performances by brands and consumers. Performativity is constituted through the three elements of actors (brand and consumers), performances (the body), and socio-materiality (visuals) (Lucarelli and Hallin 2014). Performativity theory is based upon the idea that linguistic acts, practices, and visuals form a (perlocutionary) force that shapes reality (Austin 1975; Butler 2010). In the context of this study, this implies that a brand’s visual performances combined with consumers’ linguistic acts provide a discursive space, in which these two actors negotiate conceptions of the human body. A performance of the body is a “stylized repetition of acts” by multiple actors (Butler 1990, 140), that is, the hegemonic body ideal is itself a constant and repeated effort to imitate its own idealizations. The representation of the body by fashion brands can be subversive to the extent that it reflects on the imitative structures of hegemonic body representations. Thus, fashion brands can produce and dispute body ideals and claims for naturalness and originality.

This study focuses on a brand’s visual performances of the human body, and how this perlocutionary act is re-constructed by the brand’s audience. We study socio-material (Instagram brand images), as well as linguistic acts (comments of consumers) (Callon 1998). Applying this performative view onto the co-construction of human body aesthetics in the context of Instagram provides a more nuanced understanding of how brands and consumers contribute to the performance of the human body in the digital marketplace.

METHODOLOGY

Our study uses a netnographic approach to investigate how a brand mediates ideological consumer discourse in the digital marketplace (Bartl, Kannan, and Stockinger 2016; Kozinets 2015). Our primary source of data was the Instagram account of American Apparel (@americanapparelusa) as a prime example of a brand that induces ideological discourse through controversial visual body performanc-

es on Instagram. We collected 2528 posts from a total of 4842, covering a time frame from 2012 to 2017. We browsed through all Instagram posts of AA and selected all posts with an extensive comment section. The final sample comprised 37 Instagram posts with slightly more than 8000 comments in total. Data analysis encompassed an iterative process of inductive categorization (Kreiner, Hollensbe, and Sheep 2006; Spiggle 1994) and abstraction to derive major themes related to the visual performances of AA and the textual discourse of the consumers. An interpretive group of three authors coded independently, and reached final consensus and intercoder reliability in extensive rounds of discussion (Arnold and Fischer 1994; Kreiner et al. 2006).

FINDINGS

The majority of brand accounts on Instagram show little to no interaction among consumers in the comment section, or between consumers and brands (Arvidsson and Caliendo 2016). In contrast, we found an extensive discourse among consumers, reacting to non-conventional brand-mediated portrayals of the human body, for instance to a portrayal of an elderly model, a gay couple or other body forms and performances that deviate from prevalent fashion market ideologies (Dolbec and Fischer 2015). Consumers draw on the visual performances of the AA brand and address previous comments of other consumers in their attempt to (re-)construct ideologies of the human body. In the following we provide a detailed description of the discursive practices of the brand and the consumers (Table 1).

Visual Brand Performances: Authenticating, Agenda-Setting and Sensitizing

We find that the posts that trigger extensive consumer discourse employ a number of **authenticating performances** (Arnould and Price 2000) that embrace the natural and imperfect nature of the human body. Performances include featuring employees as brand models. The brand intentionally uses the hashtags #AAmodel or #AAemployee to emphasize whether the model is a professional or an employee. Sometimes the brand links the Instagram username of the model or the employee in the caption. AA also commonly adds personal interests of the models in the caption; that is, personalizing the ads to diminish the objectification of the depicted female bodies. Diversity is emphasized by depicting all body sizes and shapes, as well as all ethnicities and age groups in their ads. The posts are neither photo-shopped, nor retouch the depicted bodies. Various posts exhibit natural features of the human body, i.e. armpit hair on women, nipples or women with visible stretch marks, practices that aim to subvert the normalized social body, authenticating naturalness instead.

Agenda-setting contrasts the socialized body with 'out of the norm' visuals thus setting a mental agenda for public discourse (Ragas and Roberts 2009; Sutherland and Galloway 1981). AA, for instance, supports minorities, i.e. the LGBTQA+ community. For example, an ad depicting two black gay men featured the caption: "*American Apparel celebrates sexuality! #LegalizeGay.*" AA further cooperates with activist movements, i.e. the Human Rights Campaign, and challenges ideologies of youth by portraying Jacky O'Shaughnessy, a 64-year-old model, for their campaign "*Sexy has no expiration date.*" Agenda-setting performances question aestheticized body ideologies that go beyond the institution of fashion, addressing the social body. AA's agenda-setting addresses consumers to follow the brand's effort to challenge societal issues.

A third performance of brand-mediated ideological edgework is **sensitizing** through visuals (Hirschman and Thompson 1997). The edgy and provocative ads differ from mainstream ads pursu-

ing contemporary norms of human body shape, health, or hygiene. AA regularly depicts bodies that deviate from aesthetic ideologies, i.e. pregnant or hairy women. Sensitizing refers to practices of repetitively introducing visuals that raise awareness of the implicit persuasiveness of the normalized social body. That is, AA's visual performances can be interpreted as an attempt to problematize taste regimes and management of corporeality in contemporary society (Bauman 2005; Dolbec and Fischer 2015).

Brand-Mediated Consumer Practices: Applauding, Moralizing and Negotiating

How does the brand's audience react to brand performances? First, we find that consumers **applaud the brand**. They do so textually, i.e. "*Love it!*" but also sign-based, using emojis. We find that consumers embrace the visual performances of the brand on Instagram to express visions of a different human body ideology. For example, one consumer commented on an ad depicting model Jacky O'Shaughnessy: "*I am so fucking proud to have a company like this based in America. #gousa #AALove.*"

Moreover, consumers embrace the idea of "*real human beings*" that defy "*the made up concept of beauty*" in our society. Consumers further defend the brand against negative comments and brand-attacks of other consumers. They bond with the brand to "*shatter the delusions [...] of youth obsessed culture,*" emphasizing the collaborative character of ideological edgework (Fournier 1998).




Second, in response to AA's brand performances we find **moralizing** consumer discourse (Luedicke, Thompson, and Giesler 2010). Consumers regularly attack the depicted human bodies. Human bodies that deviate from beauty conventions are targeted with negative comments in an attempt to (re-)stabilize current social norms of beauty and social order. Consumers do not only attack the depicted human bodies, but also the LGBTQA+ community as such, religious beliefs of other consumers, and AA itself for their attempt to break institutionalized norms of beauty, sexuality, and religion. For example, one consumer commented: "*American Apparel goes too far to break the boundaries of 'beauty' sometimes.*"

In contrast, counter-ideological moralizations defend brand-mediated edgework and argue for freedom of speech and belief. We find that these consumers verbally defend the brand's visual rhetoric. As one consumer put it: "*I love how you all are shattering standard societal beauty norms.*" Moralizing consumer discourse addresses the brand or other consumers directly, mostly by the use of the affordance "@[username]". Consumers and the brand form a moral coalition and destabilizing force to break the rigidity of social conventions and beliefs in normalized body aesthetics.

Third, we also find that consumers **negotiate body-related ideologies** initiated by the brand's visual performances (Rokka and Moisander 2009; Thompson and Hirschman 1995; Thompson, Rindfleisch, and Arsel 2006). Negotiations comprise gender-related ideologies, i.e. what does it mean to be a woman or a man in our society; where does beauty start and where does it end. For instance, consumers discuss the role of body hair and shaving practices. An ad of AA featuring a young woman showing her armpit hair initiated negotiations of women's liberation, and why men do not have to shave off armpit hair, but women do. In defense of armpit hair, a consumer comments: "*YES. Just a huge yes to promoting females loving their body even they don't match standards for women these days.*"

Similarly, consumers negotiate body sizes and shapes (Scaraboto and Fischer 2013), or argue for more ethnic diversity and sexual freedom. Consumer negotiations comprise discourse of liberation and empowerment and include consumers as well as the brand. In contrast to moralizing, negotiating practices articulate consumers'

Table 1: Findings

Visual Brand Performances	Examples of Visual Brand Performances
<p>Authenticating</p> <ul style="list-style-type: none"> Naturalizing the human body Displaying the imperfect human body, i.e. stretch marks Displaying diversity, i.e. body shapes, sizes, ages, ethnicities Personalizing the ad, i.e. “Meet Jacky” 	
<p>Agenda-setting</p> <ul style="list-style-type: none"> Expressing solidarity with minorities through the use of hashtags, i.e. “#LoveConquersHate” or by producing products that express solidarity, i.e. “This month purchase a shirt or tote and proceeds will support the Equality Act and the fight to end #LGBTQA discrimination” Adding agenda-setting captions and hashtags to the IG posts, i.e. “#LegalizeGay” or “#MakeAmericaGayAgain” 	
<p>Sensitizing</p> <ul style="list-style-type: none"> Edgy and provocative visual performances Display of ideology-deviant human bodies in an aestheticized fashion Provocative captions and hashtags, i.e. “Sexy has no expiration date” 	
Brand-Mediated Consumer Practices	Examples of Consumer Data
<p>Applauding</p> <ul style="list-style-type: none"> Expression of positive feelings towards the depicted human body, i.e. through comments, likes and emojis Embracing the brand’s visual performances Embracing the marketing style of AA 	<p>“This is beautiful, she is beautiful and the commentators on the AA Instagram are always so disappointing. This is a great ad and those who think a human body past a certain age is gross are just ignorant. This deserves more positive comments and I applaud AA for not letting comments like these stop the use of models of all shapes, sizes, ages and colors”</p> <p>“Beautiful! Let’s shatter the delusions we’ve created in this youth obsessed culture! I hate to tell you guys, but just as she was a young woman once, so shall each of us age. Let’s accept that and not judge people based on their age. How is that any better than judging based on ethnicity or gender?”</p>
<p>Moralizing</p> <ul style="list-style-type: none"> Attacking <ul style="list-style-type: none"> the depicted human body the brand minorities, i.e. LGBTQQA+ community religions Defending <ul style="list-style-type: none"> the depicted human body minorities freedom of speech freedom of belief 	<p>“Shame on your company @americanapparelusa! Maybe you should just try to make quality clothing to sell your product instead of using porn to draw attention. On a side note your clothing is boring and monochromatic”</p> <p>“Everyone has their own beliefs no matter what religion is. We need to stop those who want to cause harm to innocent people. No matter what religion, race, gender or sexual orientation we cannot let people die cause of what they are. Humans are all born equally and we need to join together and share peace and love with the world! Violence isn’t the answer. LOVE IS!”</p>
<p>Negotiating</p> <ul style="list-style-type: none"> Gender ideologies Female objectification vs. liberation and empowerment Freedom of the feminine body Ethnic diversity Freedom of sexuality 	<p>“[...] because for decades now women have been molded to fit a certain image and if you don’t meet up to this image you aren’t worthy, beautiful, etc so with her not giving a fuck about the natural hair she has and that we were ALL born with and sharing her confidence with the world, can uplift and encourage a way bigger movement than just you and I and everyone else commenting on this damn thing. Not sure why this needs to be explained to so many women it’s frightening and the only gross thing about this fucking post”</p> <p>“[...] Anyway. Only us women argue about body hair. I, myself, don’t like hairy armpits, vagina, upper lip, or nothing that looks ungroomed. No hair on those parts of my body make me feel clean and feminine. I don’t even like too much hair on men. So it’s not a “I’m a sheep who follows society’s rules about women.” But I guess didn’t do my research enough to know that nothing screams out “I am a rebel” or “f*** you, society rules!!” like hairy women. #VivaLaBush (tree-emoji) I’m out.”</p>

opinions towards societal ideologies per se. Brand-mediated ideological edgework is applauded as liberating and at the same time contested for simply abusing human bodies for marketization.

DISCUSSION

This paper introduces the notion of brand-mediated ideological edgework to illustrate how brands induce consumer discourse that challenges societal ideologies and norms. Interestingly, in the case of AA, we find that a commonly monologue oriented social media platform provides a discursive space enabling powerful visual rhetoric for brand-mediated ideological edgework. Our notion of brand-mediated ideological edgework extends Thompson and Üstüner's (2015) perspective by showing how a brand becomes a central actor in ideological edgework. We define brand-mediated ideological edgework as a brand's effort to mediate consumer ideological discourse that destabilizes and (re-)stabilizes social convention and order. Ideological edgework thus becomes collaborative work of diverse market actors, embracing brand performances that exert an intentional (illocutionary) force (Austin 1975; Butler 2010) followed by a perlocutionary act visible in consumer discourse (Schechner 2006).

Our study shows that social formations around a brand within a digital environment are more multifaceted than the notion of brand public implies (Arvidsson and Caliandro 2016). Our findings suggest that social media based consumer culture may very well be structured by discourse, and not only by affects, intended to generate publicity and fame (Arvidsson and Caliandro 2016; Marwick 2015; Presi et al. 2016; Rokka and Canniford 2016). The case of American Apparel demonstrates that brands mediate consumer discourse in that consumers use brand rhetoric to express their concern and form coalitions with brands to engage in ideological edgework about beauty ideals, body, and gender norms.

This study has two main limitations. First, our study focuses on one brand and one digital platform. Second, findings are still exploratory. Further research should therefore investigate ads in detail, i.e. using a critical visual analysis (Rokka and Canniford 2016), and adopt a processual perspective in order to capture the dramaturgy of brand-mediated ideological edgework. Social network analysis could further illuminate central themes and key players that manifest the public negotiation of the human body in the social network of a brand.

REFERENCES

- Arnold, Stephen J. and Eileen Fischer (1994), "Hermeneutics and Consumer Research," *Journal of Consumer Research*, 21 (1), 55–70.
- Arnould, Eric J. and Linda L. Price (2000), "Authenticating Acts and Authoritative Performances: Questing for Self and Community," in *The Why of Consumption: Contemporary Perspectives on Consumer Motives, Goals and Desires*, ed. Srinivasan Ratneshwar, David G. Mick, and Cynthia Huffman, London and New York: Routledge Press, 140–63.
- Arvidsson, Adam and Alessandro Caliandro (2016), "Brand Public," *Journal of Consumer Research*, 42 (5), 727–48.
- Austin, John L. (1975), *How to Do Things with Words (2nd edition)*, Cambridge, MA: Harvard University Press.
- Bartl, Michael, Vijai K. Kannan, and Hanna Stockinger (2016), "A Review and Analysis of Literature on Netnography Research," *International Journal of Technology Marketing*, 11 (2), 165–96.
- Bauman, Zygmunt (2005), *Liquid Life*, Cambridge: Polity Press.
- Butler, Judith (1990), *Gender Trouble: Feminism and the Subversion of Identity*, New York: Routledge.
- _____ (1993), *Bodies that Matter*, New York: Routledge.
- _____ (2010), "Performative Agency," *Journal of Cultural Economy*, 3 (2), 147–61.
- Callon, Michel (1998), *Laws of the Markets*, Oxford: Blackwell.
- Carah, Nicholas and Michelle Shaul (2016), "Brands and Instagram: Point, Tap, Swipe, Glance," *Mobile Media & Communication*, 4 (1), 69–84.
- Charmaz, Kathy (2008), "Grounded Theory," in *Qualitative Psychology: A Practical Guide to Research Methods*, Vol. 2, ed. Jonathan A. Smith, London: Sage Publications, 81–110.
- Dolbec, Pierre-Yan and Eileen Fischer (2015), "Refashioning a Field? Connected Consumers and Institutional Dynamics in Markets," *Journal of Consumer Research*, 41 (6), 1447–67.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343–53.
- Hirschman, Elizabeth C. and Craig J. Thompson (1997), "Why Media Matter: Toward a Richer Understanding of Consumers' Relationships with Advertising and Mass Media," *Journal of Advertising*, 26 (1), 43–60.
- Kozinets, Robert V. (2015), *Netnography: Redefined*, London: Sage.
- Kreiner, Glen E., Elaine C. Hollensbe, and Mathew L. Sheep (2006), "Where is the 'Me' Among the 'We'? Identity Work and the Search For Optimal Balance," *Academy of Management Journal*, 49 (5), 1031–57.
- Lash, Scott (2015), "Performativity or Discourse? An Interview With John Searle," *Theory, Culture & Society*, 32 (3), 135–47.
- Lucarelli, Andrea and Anette Hallin (2014), "Brand Transformation: A Performative Approach to Brand Regeneration," *Journal of Marketing Management*, 31 (1-2), 84–106.
- Luedicke, Marius K., Craig J. Thompson, and Markus Giesler (2010), "Consumer Identity Work as Moral Protagonism: How Myth and Ideology Animate a Brand-Mediated Moral Conflict," *Journal of Consumer Research*, 36 (6), 1016–32.
- Marwick, Alice E. (2015), "Instafame: Luxury Selfies in the Attention Economy," *Public Culture*, 27 (1), 137–60.
- McQuarrie, Edwards F., Jessica Miller, and Barbara J. Phillips (2013), "The Megaphone Effect: Taste and Audience in Fashion Blogging," *Journal of Consumer Research*, 40 (1), 136–58.
- Ragas, Matthew W. and Marilyn S. Roberts (2009), "Agenda Setting and Agenda Melding in an Age of Horizontal and Vertical Media: A New Theoretical Lens for Virtual Brand Communities," *Journalism & Mass Communication Quarterly*, 86 (1), 45–64.
- Rokka, Joonas and Johanna Moisander (2009), "Environmental Dialogue in Online Communities: Negotiating Ecological Citizenship Among Global Travellers," *International Journal of Consumer Studies*, 33 (2), 199–205.
- Rokka, Joonas and Robin Canniford (2016), "Heterotopian Selfies: How Social Media Destabilizes Brand Assemblages," *European Journal of Marketing*, 50 (9/10), 1789–13.
- Presi, Caterina, Natalia Maehle, and Ingeborg A. Kleppe (2016), "Brand Selfies: Consumer Experiences and Marketplace Conversations," *European Journal of Marketing*, 50 (9/10), 1814–34.
- Scaraboto, Daiane and Eileen Fischer (2013), "Frustrated Fatshionistas: An Institutional Theory Perspective on Consumer Quests for Greater Choice in Mainstream Markets," *Journal of Consumer Research*, 39 (6), 1234–57.

- Schechner, Richard (2006), *Performance Studies: An Introduction (2nd edition)*, New York: Routledge.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21 (3), 491–503.
- Stoeckl, Verena E. (2014), "Lonely Rebel or Pioneer of the Future? Towards an Understanding of Moral Stakeholder Framing of Activist Brands," in *NA - Advances in Consumer Research*, Vol. 42, ed. June Cotte and Stacy Wood, Duluth, MN: Association for Consumer Research, 371–76.
- Sutherland, Max and John Galloway (1981), "Role of Advertising: Persuasion or Agenda-Setting?," *Journal of Advertising Research*, 21 (5), 25–9.
- Thompson, Craig J. and Elizabeth C. Hirschman (1995), "Understanding the Socialized Body: A Poststructuralist Analysis of Consumers' Self-Conceptions, Body Images, and Self-Care Practices," *Journal of Consumer Research*, 22 (2), 139–53.
- Thompson, Craig J., Aric Rindfleisch, and Zeynep Arsel (2006), "Emotional Branding and the Strategic Value of the Doppelgänger Brand Image," *Journal of Marketing*, 70 (1), 50–64.
- Thompson, Craig J. and Tuba Üstüner (2015), "Women Skating on the Edge: Marketplace Performances as Ideological Edgework," *Journal of Consumer Research*, 42 (2), 235–65.
- von Wallpach, Silvia, Andrea Hemetsberger, and Peter Espersen (2017), "Performing Identities: Processes of Brand and Stakeholder Identity Co-construction," *Journal of Business Research*, 70, 443–52.

Impact of Numerosity on Allocation Behavior

Sunaina Shrivastava, University of Iowa, USA

Gaurav Jain, University of Iowa, USA

Dhananjay Nayakankuppam, University of Iowa, USA

Gary J Gaeth, University of Iowa, USA

Irwin P Levin, University of Iowa, USA

EXTENDED ABSTRACT

We often decide how to allocate resources between ourselves and others, or, between our needs and other causes we support. The traditional Dictator game is probably the most frequently used tool to study allocation behavior. In the standard Dictator game, an individual referred to as the ‘dictator’ is allotted an initial sum of money (initial endowment) and is asked to allocate a portion of it to another individual who must accept the allocated amount (Forsythe, Horowitz, Savin & Sefton 1994). Ideally, the dictator should take all the money for herself and allocate nothing to the recipient. However, past research has demonstrated that many allocate a substantial share of their initial endowment to the recipient. Recent research has sought to understand several factors that influence the level of allocation (See Engel 2011 for a review). Despite the considerable research in this area, there is little work on how the ‘numerosity’ of the resource itself impacts the decision-maker’s allocation to the recipient.

To this end, we find that the form of the numerical value representing the quantity of the resource (e.g., 5 Kg vs 5000 grams; \$20 vs 2000 cents) systematically biases the decision-maker to perceive the quantity she is thinking of allocating as being ‘less than adequate’ or ‘more than adequate’ - consequently influencing her final allocation decision. We attribute this systematic bias to ‘numerosity’ bias.

Numerosity Bias

“Make six slices of the pizza, I can’t eat eight” - ‘not so hungry’
Yogi Berra

As the classic pizza slices joke depicts, we may perceive a resource, such as a pie of pizza in the above case, to be greater in quantity if it’s represented in terms of the more-numerous eight slices than the less-numerous six slices. This is Numerosity “bias” (Pelham, Sumarta & Myaskovsky 1994), because the size of the resource (i.e., the pie) remains the same. The numerosity bias explains that individuals over-infer quantity when it’s represented with higher numeric values or bigger numbers (Pelham et al 1994).

Recently, numerosity has been shown to impact judgments across consumer domains (Bagchi & Davis 2016) such as points in loyalty/reward programs (Bagchi & Li 2011; Nejad & Onay 2014), quality perceptions (Burson, Larrick & Lynch 2009) and pricing (Coulter, Choi & Monroe 2012; Coulter & Coulter 2010). However, how numerosity can impact pro-social behavior, is under-studied (Bagchi & Davis 2016). We look to fill this gap as our work has implications for charity behavior. Across four experiments, we show that numerical values representing the quantity of a resource systematically bias decision-makers’ perception of the quantity to be less than, adequate, or more than adequate. As we demonstrate, this bias significantly impacts decision-makers’ allocations.

In our studies, we manipulate the decision-maker’s perception of quantity of resources (which is money in this case) by describing the initial endowment using objectively equivalent amounts expressed in either dollars or cents. Essentially, we posit that when a decision-maker contemplates how much to allocate to the recipient in ‘cents’, the numerosity bias will occur. By that we mean, a

certain amount in cents such as 300 cents, will be perceived to be greater in quantity or more abundant than an objectively equivalent amount expressed as 3 dollars, as the numerical representation of 300 is much bigger than 3. Consequently, under this ‘Cents’ condition, any amount in cents that the decision-maker is thinking about allocating to the other person (e.g., 300 cents) will be perceived to be greater than an objectively equivalent amount that a counterpart decision-maker may be thinking of giving in the ‘Dollar’ condition (e.g., 3 dollars). Because the decision-maker tends to over-infer the amount when represented in cents, and thus perceives it to be more than adequate, she will adjust her contemplated allocation in cents to a lower value (for e.g. 270 cents), when compared to an allocation decided by the counterpart decision-maker in dollars. Accordingly, as a direct result of the numerosity bias, we expect to see that the final allocation made to the recipient in the ‘Cents’ condition will be lesser in absolute value when compared to the allocation made in the ‘Dollar’ condition. We check this intuition in study 1 and find that the other individual’s share was substantially (more than 10%) lower in the more numerous Cents condition when compared to that in the Dollar condition.

To provide further insight into the manner in which numerosity drives allocation, we manipulate the decision-maker’s focus by framing the decision as “giving to the other” versus “keeping for oneself” (study 2a), and, manipulate the decision-maker’s relative attention by bolding either the numerical value or the denomination (study 2b). Finally, we use a hypothetical currency to validate our process account and show that numerosity biases the decision-maker’s perception of ‘adequacy’ with respect to quantity of the allocated resource (study 3).

Past research has often used dictator games to study charity behavior (e.g., Bekkers 2007; Engel & Grosman 1996). In the context of charitable giving, the Dictator is in the role of the benefactor and the recipient takes the role of the charity. Thus the present work, which demonstrates the impact of numerosity on allocation behavior in dictator games, can have implications for charity behavior as well. In this vein, our paper paves the way for further research on how numerosity affects pro-social behavior, which is currently understudied (Bagchi & Davis 2016). In this way, our work contributes to the numerosity bias literature as well as adds to research studying determinants of allocation behavior.

REFERENCES

- Bagchi, R., & Li, X. (2011). Illusory progress in loyalty programs: magnitudes, reward distances, and step-size ambiguity. *Journal of Consumer Research*, 37(5), 888-901.
- Bagchi, R., & Davis, D. F. (2016). The role of numerosity in judgments and decision-making. *Current Opinion in Psychology*, 10, 89-93.
- Bekkers, R. (2007, December). Measuring altruistic behavior in surveys: The all-or-nothing dictator game. *In Survey Research Methods* (Vol. 1, No. 3, pp. 139-144). University of Groningen.

480 / Impact of Numerosity on Allocation Behavior

- Burson, K. A., Larrick, R. P., & Lynch, J. G. (2009). Six of one, half dozen of the other expanding and contracting numerical dimensions produces preference reversals. *Psychological Science, 20*(9), 1074-1078.
- Coulter, K. S., Choi, P., & Monroe, K. B. (2012). Comma N'cents in pricing: The effects of auditory representation encoding on price magnitude perceptions. *Journal of Consumer Psychology, 22*(3), 395-407.
- Coulter, K. S., & Coulter, R. A. (2010). Small sounds, big deals: phonetic symbolism effects in pricing. *Journal of Consumer Research, 37*(2), 315-328.
- Eckel, C. C., & Grossman, P. J. (1996). Altruism in anonymous dictator games. *Games and economic behavior, 16*, 181.
- Engel, C. (2011). Dictator games: A meta study. *Experimental Economics, 14*(4), 583-610.
- Forsythe, R., Horowitz, J. L., Savin, N. E., & Sefton, M. (1994). Fairness in simple bargaining experiments. *Games and Economic behavior, 6*(3), 347-369.
- Nejad, M. R., & Onay, S. (2014). Numerosity and cognitive complexity as moderators of the medium effect. *Procedia Economics and Finance, 14*, 445-453.
- Pelham, B. W., Sumarta, T. T., & Myaskovsky, L. (1994). The easy path from many to much: The numerosity heuristic. *Cognitive Psychology, 26*(2), 103-133.

The Effect of Temporal Distance on Self-Presentation by Brand

Teck Ming Tan, University of Oulu, Finland

Jari Salo, University of Helsinki, Finland

Jouni Juntunen, University of Oulu, Finland

Ashish Kumar, Aalto University, Finland

INTRODUCTION

In this paper, we examine how consumers' self-presentation of self-brand connections is affected by the temporal distance. Although the research on self-brand connections and consumer-brand relationship have been well documented (MacInnis and Folkes 2017), the effect of temporal distance on self-brand connections is less well understood. We are particularly interested in the extent to which the temporal distance influences the brand's ability to serve as a means of consumers' self-presentation.

Consumers make choices based on their self-construal via the attitude object, which is influenced by their judgment of how far into the future the event will happen (Trope and Liberman 2010). Further, consumers assess the value of a symbolic brand depending on how they construe themselves with the brand hypothetically (Sung and Tinkham 2005). Thus, the interesting question is—does people's temporal distance determine his or her self-presentation?

The current paper suggests that the way the consumer perceives, comprehends, and interprets a brand's ability to serve as a means of *self-presentation by brand* (SPB) is dependent on whether the brand is to be used in a near-future event or in a distant-future event—in other words, it depends on temporal distance. As such, our research contributes to the self-brand connections literature, which emphasizes the effect of temporal distance on consumers' self-construal via the brand as a means of presenting their actual self or ideal self.

CONCEPTUAL FRAMEWORK

SPB

Self-presentation relates to impression management with interactions involving close relationships, those of the same-sex, those of the opposite-sex, and strangers (Leary et al. 1994; Tice et al. 1995). Apart from verbal presentation, non-verbal expression, and purposive behaviors, people use artifactual displays for self-presentational tactics (Schneider 1981). To illustrate this point, people tend to project their desired images on cues for physical appearance (Schneider, Hastorf, and Ellsworth 1979), clothing and jewelry (O'Guinn, Tanner, and Maeng 2015), and conspicuous and inconspicuous consumption (Berger and Ward 2010).

SPB is defined as the connection of the self with a brand—the self-brand connections—in which the consumer utilizes the brand as a means of self-presentation to create a positive impression in the social world (Escalas and Bettman 2009). SPB engages the consumer's self with a brand by involving the signifying and connecting processes (Schmitt 2012). Thus, SPB enables consumers managing their self-presentation by associating with a symbolic brand, which serves as a means of presenting their actual self and ideal self (Cialdini and De Nicholas 1989).

Effect of Temporal Distance on SPB

We adopt temporal distance because it has a significant effect on the use and effectiveness of self-presentational strategy (Carter and Sanna 2008). Temporal distance refers to the judgment of an upcoming event in terms of how far into the future the event will happen (Trope, Liberman, and Wakslak 2007). It has a significant influence on people's evaluations, predictions, and choices (Trope

and Liberman 2003). Wakslak et al. (2008) state that people perceive self-concept more abstractly in the temporally distant condition than in the temporally proximal condition and tend to perceive a wider form of self-concept due to broader self-reflection.

When construing near-future events, people tend to think more concretely as they are currently engaged with low-level construals and are inclined to utilize all the rich and contextualized details (Trope et al. 2007). Therefore, their psychological distance from the direct experience of reality should be closer when compared to people who are considering a distant-future event. Consequently, people in the temporally proximal condition are motivated to engage with an actual self because the event is closer to the "here and now" and therefore at a smaller psychological distance (Malär et al. 2011).

People tend to conceptualize objects more abstractly while they think about distant-future events (Trope et al. 2007). Thus, people in the temporally distant condition are likely to engage with an ideal self because they are motivated toward involvement in self-enhancement activities (Malär et al. 2011). Furthermore, self-enhancement involves moving toward one's ideal self by promoting self-presentation and exaggeration of one's strength (Alicke and Sedikides 2011). Therefore, we hypothesize:

When considering events in the near future (vs. distant future), people exhibit more favorable attitudes and choices towards a brand that serves as a means of presenting their actual self (vs. ideal self) rather than a brand that serves as a means of presenting their ideal self (vs. actual self).

STUDY 1A AND STUDY 1B

The goal of Study 1a was to examine whether considering a near-future (vs. distant-future) event; people tended to exhibit more favorable attitudes towards a brand that served as a means of presenting their actual self (vs. ideal self). The objective of Study 1b was to examine the effect of temporal distance on the choices of familiar brands that served as a means of presenting consumer's self.

Study 1a

One hundred twenty adults from across the US (63 men; age 18–69, $M_{\text{age}} = 32$) were recruited from an online panel to participate in this study in exchange for a fee. The study was a 2 (temporal distance: near vs. distant) \times 2 (consumer's self: actual vs. ideal) between-subjects design. The participants were randomly assigned to a near-future or a distant-future event (Appendix). They were then asked to indicate three items on a temporal thought index (TTI, $\alpha = .91$; adapted from Spassova and Lee 2013). Next, the participants were told to imagine they were currently inside in a shopping complex to search for clothing for the event. A sales assistant approached them by showing four clothing items (i.e., Tommy Hilfiger, Gant, Clarks, and Esprit) that could serve as a means of presenting their actual self or ideal self. The participants were then asked to rate a manipulation check item. We assessed brand attitude as dependent measure by asking the participants to evaluate the fashion brands using a three-item, 7-point scale ($\alpha = .88$; adapted from Spassova

and Lee 2013). All the measurement items were listed in the methodological details appendix.

Results

The results revealed successful manipulations of temporal distance ($t = 14.33, p < .001$) and consumer’s self ($t = 5.44, p < .001$). Table 1 showed that the participants in the temporally proximal condition evaluated the brands more favorably when they were offered the brands that served as a means of presenting their actual self ($M_{actual} = 1.75$ vs. $M_{ideal} = 1.04; t(58) = 2.57, p < .05$), whereas the participants in the temporally distant condition evaluated the brands more favorably when they were offered the brands that served as a means of presenting their ideal self ($M_{actual} = .87$ vs. $M_{ideal} = 1.49; t(58) = -2.53, p < .05$).

Study 1b

One hundred adults from across the US (52 men; age 18–62, $M_{age} = 34$) were recruited from an online panel to participate in this study in exchange for a fee. The participants first were told to choose three brands that could serve as a means of presenting their actual self and three brands that could serve as a means of presenting their ideal self from a pool of fifteen familiar brands (i.e., Nike, Adidas, Levi’s, Calvin Klein, Michael Kors, GAP, Coach, Armani, Forever21, Gucci, Old Navy, H&M, Ralph Lauren, Zara, and Puma). They were then randomly assigned near- or distant-future travel prizes (Appendix) and were asked to indicate their TTI ($\alpha = .93$). Next, the participants were informed that they had bought the selected six

brands and they wanted to use the clothes of the brands during the trip. We assessed brand choices as dependent measure by asking the participants to allocate a percentage of how much time they would spend wearing the clothes for the trip, and the total percentage had to add up to 100%. The participants then answered a brand-checking question.

Results and Discussion

The result revealed successful manipulation of temporal distance ($t = 11.54, p < .001$). All the participants scored at least 50% correct answers for the brand-checking section and the average percentage of correct answers was significantly above the 50% ($t = 26.53, p < .001$). The participants in the temporally proximal condition allocated a significantly higher percentage to the brands that served as a means of presenting their actual self ($M_{actual} = 54.78\%$ vs. $M_{ideal} = 45.22\%; t(49) = 1.98, p < .05$). In contrast, the participants in the temporally distant condition allocated a significantly higher percentage to the brands that served as a means of presenting their ideal self ($M_{ideal} = 55.16\%$ vs. $M_{actual} = 44.84\%; t(49) = 2.35, p < .05$).

Study 1 provides empirical evidence that the participants construed themselves via the brands to present their actual and ideal self, which then influences brand attitude and choices. However, there is no evidence whether temporal distance shifts the way people construe a brand’s ability to serve as a means of self-presentation. Further, Study 1 did not cover such effect reflected on a comparison with a brand that might not relate to self-presentation. Thus, we addressed these issues in the next study.

Table 1: Key findings from studies 1–2

Studies & Dependent Variables	Near future				Distant future			
	Actual self <i>M (SD)</i>		Ideal self <i>M (SD)</i>		Actual self <i>M (SD)</i>		Ideal self <i>M (SD)</i>	
Study 1a	1.75 (.96)		1.04 (1.16)		0.87 (1.02)		1.49 (.89)	
Brand attitude	$t(58) = 2.57^*$				$t(58) = -2.53^*$			
Study 1b	54.78% (17.11)		45.22% (17.11)		44.84% (15.53)		55.16% (15.53)	
Brand choices	$t(49) = 1.98^*$				$t(49) = -2.35^*$			
Study 2	2.29 (.64)		1.57 (1.35)		1.97 (.83)		2.53 (.51)	
Brand attitude	$t(38) = 2.17^*$				$t(38) = -2.58^*$			
SPB	5.99 (.89)		5.38 (.91)		5.58 (1.13)		6.28 (.72)	
	$t(38) = 2.12^*$				$t(38) = -2.34^*$			
Study 2	Actual self <i>M (SD)</i>	Listed brand <i>M (SD)</i>	Ideal self <i>M (SD)</i>	Listed brand <i>M (SD)</i>	Actual self <i>M (SD)</i>	Listed brand <i>M (SD)</i>	Ideal self <i>M (SD)</i>	Listed brand <i>M (SD)</i>
Brand choices	61.94% (21.71)	38.06% (21.71)	60.64% (26.02)	39.37% (26.02)	58.84% (21.97)	41.16% (21.97)	69.04% (18.57)	30.96% (18.57)
	$t(19) = 2.46^*$		$t(19) = 1.83$		$t(19) = 1.80$		$t(19) = 4.59^{**}$	

Note: $*p < .05, **p < .001$

STUDY 2

To minimize potential confounding effects, we used a fictitious brand to prompt the SPB. A self-customization procedure was adopted because this method enables consumers to construct a customized offer for each of the brand's attributes that best fits their preference (Valenzuela, Dhar, and Zettelmeyer 2009).

Method

Eighty adults from across the US (46 men; age 18–64, $M_{\text{age}} = 30$) were recruited from an online panel to participate in this study in exchange for a fee. The study was a 2 (consumer's self: actual vs. ideal) \times 2 (temporal distance: near vs. distant) between-subjects design. The participants were first asked to list three fashion brands that they preferred. They have subsequently invited to an imaginary near- or distant-future event and have been asked to indicate their TTI ($\alpha = .93$). The participants have been asked to imagine they had entered a new fashion outlet called Zeemiata. Next, they were randomly assigned to customizing Zeemiata clothing that could serve as a means of presenting their actual self or ideal self (Appendix). The participants were first asked to report on their brand attitude ($\alpha = .94$) and three items on SPB for Zeemiata ($\alpha = .90$; "I believe that Zeemiata could help me to present myself effectively in front of my friends," "I believe that Zeemiata could help me to present myself effectively in front of strangers," "I believe that Zeemiata could help me to give a positive impression of myself in front of the public"; ranging from 1 = strongly disagree to 7 = strongly agree), they were then informed that they had finalized two clothing options for the event: a customized Zeemiata clothing and clothing item produced by the first fashion brand listed by the participants. The participants were asked to allocate a percentage of their choices to both Zeemiata and the listed brands, ranging from 0% to 100%. This was followed by answering one manipulations item of consumer's self.

Results and Discussion

The results revealed successful manipulations of temporal distance ($t = 14.11, p < .001$) and consumer's self ($t = 12.16, p < .001$). As predicted, Table 1 showed that the participants in the temporally proximal (vs. distant) condition evaluated Zeemiata more favorably and had significantly higher levels of SPB when it served as a means of presenting their actual self (vs. ideal self). Participants in the temporally near condition chose Zeemiata that served as a means of presenting their actual self ($M_{\text{actual}} = 61.94\%$ vs. $M_{\text{listed}} = 38.06\%$; $t(19) = 2.46, p < .05$), but there was an insignificant difference in the participants' choice of Zeemiata that served as a means of presenting their ideal self ($M_{\text{ideal}} = 60.64\%$ vs. $M_{\text{listed}} = 39.37\%$; $t(19) = 1.83, ns$). In contrast, the participants in the temporally distant condition chose Zeemiata that served as a means of presenting their ideal self ($M_{\text{ideal}} = 69.04\%$ vs. $M_{\text{listed}} = 30.96\%$; $t(19) = 4.59, p < .001$), but there was an insignificant difference in the participants' choice of Zeemiata that served as a means of presenting their actual self ($M_{\text{actual}} = 58.84\%$ vs. $M_{\text{listed}} = 41.16\%$; $t(19) = 1.80, ns$).

Study 2 provides convergent evidence for our proposed effects, people in the temporally proximal (vs. distant) condition are more likely to have favorable attitude and make choices that concur with a brand that serves as a means of presenting the consumer's actual self (vs. ideal self). We conclude that this effect has strong evidence of causality because it shows a high degree of internal validity.

GENERAL DISCUSSION

Our work contributes to the self-brand connections literature (Escalas and Bettman 2009), which addresses the consumer's self-construal via a brand as a means of presenting their actual self and

ideal self. Current research moves the examination of self-brand connections beyond an association of brand personality and brand image (Aaker 1999; Malär et al. 2011) toward an understanding of how the symbolic attributes of a brand could be further enhanced by tapping the psychological distance that results from the shift in the temporal distance. We demonstrate fine-grained insight into how the consumers' self-construal via the brand as a means of self-presentation is affected by their thoughts about events in the near or distant future, which results in a more favorable attitude toward a symbolic brand and influences the choices consumers make.

An important remark is that we found that the consumers' choice of near- and distant-future events is not influenced by the brand's ability to serve as a means of presenting their actual self or ideal self (Appendix for an additional study). This is because consumers are more likely to wear a purchased product of a brand to a near-future event once they have received positive comments about using the brand.

This research is relevant to the practical implication of authentic branding strategy (i.e., a strategy that targets on the fit of the perception of consumer's actual self with the brand's personality) and aspirational branding strategy (i.e., a strategy that focuses on consumer's ideal self-congruence). To enhance SPB, marketing managers should consider individuals' construals of future events while emphasizing a brand personality related to actual self or aspirations, especially on product self-customization, remarketing, and retargeting.

The samples of this research were recruited from the US. Thus, it limits the universality of SPB in Eastern cultures. In the third study by Ryder, Alden, and Paulhus (2000), the results show an unrelated independent self-concept for Chinese and East Asian samples, and this could be due to the self-criticism found in Eastern cultures, wherein people are vigilant about their self-presentation and try to fulfill their roles in the eyes of their parents, family, relatives, and friends rather than trying to be self-sufficient and autonomous (Heine 2001). Further, Eastern consumers may heavily emphasize status consumption, which is significantly influenced by the power distance belief (Gao, Winterich, and Zhang 2016). Future research is needed to generalize the findings to different cultures.

A SUMMARY OF AN ADDITIONAL STUDY

Our framework proposes that consumers tend to evaluate a brand that serves as a means of presenting their actual self (vs. ideal self) more favorably when they are thinking about events in the near future (vs. the distant future), but it does not rule out an alternative explanation for this effect. We argue that consumers are excited to wear or use purchased products in the near future once they have received positive comments from others, regardless of whether the brand serves as a means of presenting their actual or ideal self. Thus, this study set out to test the effect of a brand's ability to serve as a means of presenting the consumer's self on a choice regarding a near-future event versus a distant-future event. One hundred twenty adults from across the United States (62 men; age 18–69, $M_{\text{age}} = 33$) were recruited to participate in this study in exchange for a fee. The participants were randomly assigned to imagine that they had bought a dark suit or gown that highly recommended by their friends and family members, which was also served as a means of presenting their actual self, their ideal self, or no specific self-concept. The participants then were required to make a decision about wearing the dark suit or gown for either a near- or distant-future event and were asked to provide a brief description of their choices.

Results and Discussion

The results showed that the participants wished to wear the purchased black suit or gown for a near-future event; either it served as a means for presenting their actual self (83%), their ideal self (75%), or they were in the control condition (85%; $\chi^2 (1.40), p > .10$). We crosschecked the written explanations with the event choice, and the given reasons were reasonable because the dark suit or gown was perfect and the participants were excited to wear it to a near-future event. In contrast, the participants who wished to keep the dark suit or gown for a distant-future event had provided various reasons that were not related to the consumer's self.

REFERENCES

- Aaker, Jennifer L. (1999), "The Malleable Self: The Role of Self-Expression in Persuasion," *Journal of Marketing Research*, 36 (February), 45–57.
- Alicke, Mark D. and Constantine Sedikides (2011), *Handbook of Self-Enhancement and Self-Protection*: Guilford Press.
- Berger, Jonah and Morgan Ward (2010), "Subtle Signals of Inconspicuous Consumption," *Journal of Consumer Research*, 37 (4), 555–69.
- Carter, Seth E. and Lawrence J. Sanna (2008), "It's Not Just What You Say but When You Say It: Self-Presentation and Temporal Construal," *Journal of Experimental Social Psychology*, 44, 1339–45.
- Cialdini, Robert B. and Maralou E. De Nicholas (1989), "Self-Presentation by Association," *Journal of Personality and Social Psychology*, 57 (4), 626–31.
- Escalas, Jennifer Edson and James R. Bettman (2009), "Self-Brand Connections: The Role of Reference Groups and Celebrity Endorsers in the Creation of Brand Meaning," In *Handbook of Brand Relationships*, ed. Deborah J. MacInnis, C. Whan Park, Joseph Priester, New York: Society for Consumer Psychology and M.E. Sharp, 107–123.
- Gao, Huachao, Karen Page Winterich, and Yinlong Zhang (2016), "All That Glitters is Not Gold: How Others' Status Influences the Effect of Power Distance Belief on Status Consumption," *Journal of Consumer Research*, 43 (April), 265–81.
- Heine, Steven J. (2001), "Self as Cultural Product: An Examination of East Asian and North American Selves," *Journal of Personality*, 69 (6), 881–905.
- Leary, Mark R., John B. Nezlek, Deborah Downs, Julie Radford-Davenport, Jeffrey Martin, and Anne McMullen (1994), "Self-Presentation in Everyday Interactions: Effects of Target Familiarity and Gender Composition," *Journal of Personality and Social Psychology*, 67 (4), 664–67.
- MacInnis, Deborah J. and Valerie S. Folkes (2017), "Humanizing Brands: When Brands Seem to Be Like Me, Part of Me, and in a Relationship with Me," *Journal of Consumer Psychology*, 27 (3), 355–74.
- Malär, Lucia, Harley Krohmer, Wayne D. Hoyer, and Bettina Nyffenegger (2011), "Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self," *Journal of Marketing*, 75 (July), 35–52.
- O'Guinn, Thomas Clayton, Robin J. Tanner, and Ahreum Maeng (2015), "Turning to Space: Social Density, Social Class, and the Value of Things in Stores," *Journal of Consumer Research*, 42 (2), 196–213.

METHODOLOGICAL DETAILS APPENDIX

Temporal Distance Scenarios

Study 1a and 2	Imagine that you have been invited to a significant annual event that will be held <i>on next Friday (after six months)</i> . Assume that you have accepted the invitation and that there is no particular dress code for the event.
Study 1b	Imagine that you have won a trip for five days and four nights to Barcelona from American Airlines, and the travel prize includes two flight tickets, accommodation, and other packages such as two nights' fine-dining and tickets to various attractions and shows. Assume that you have accepted the travel prize and have found a person to go with you <i>on next Friday (after six months)</i> .

Manipulation of Self-customization

Study 2	Imagine that you are currently in a new fashion brand store called Zeemiata; a sales assistant approach you by introducing a mobile application that can customize offerings to your preferences. Kindly use the online clothing design studio to customize a Zeemiata clothing style that best fits your <i>actual self (ideal self)</i> by tailoring it to a particular size, color, clothing material, and by adding personalized texts to the clothing.
----------------	---

Measurements

Study 1a, 1b, and 2	Temporal Thought Index (Spassova and Lee 2013)	This event is going to happen (1 = <i>soon</i> , 7 = <i>not so soon</i>) I will be going to this event (1 = <i>in a few days</i> , 7 = <i>in a few months</i>) I have (1 = <i>limited time</i> , 7 = <i>a lot of time</i>) to plan for this event
Study 1a and 2	Brand Attitude (Spassova and Lee 2013)	bad (-3) versus good (+3) unpleasant (-3) versus pleasant (+3) unfavorable (-3) versus favorable (+3)
Study 1a	Manipulation Check of Consumer's Self	Just now, the sales assistant was trying to present me with fashion brands that could serve as a means of presenting my (-3 = <i>actual self</i> , 3 = <i>ideal self</i>)
Study 2	Manipulation Check of Consumer's Self by Self-Customization	Generally, Zeemiata could serve as a means of presenting my (-3 = <i>actual self</i> , 3 = <i>ideal self</i>)

- Ryder, Andrew G., Lynn E. Alden, and Delroy L. Paulhus (2000), "Is Acculturation Unidimensional or Bidimensional? A Head-to-Head Comparison in the Prediction of Personality, Self-Identity, and Adjustment," *Journal of Personality and Social Psychology*, 79 (1), 49–65.
- Schmitt, Bernd (2012), "The Consumer Psychology of Brands," *Journal of Consumer Psychology*, 22 (1), 7–17.
- Schneider, David J. (1981), "Tactical Self-Presentations: Toward a Broader Conception," In *Impression Management Theory and Social Psychological Research*, ed. James T. Tedeschi, Academic Press, 24–40.
- Schneider, David J., Albert H. Hastorf, and Phoebe Ellsworth (1979), *Person Perception*, 2nd ed., Reading, Mass.: Addison-Wesley.
- Spasova, Gerri and Angela, Y. Lee, (2013), "Looking into the Future: A Match between Self-View and Temporal Distance," *Journal of Consumer Research*, 40 (June), 159–71.
- Sung, Yongjun and Spencer F. Tinkham, (2005), "Brand Personality Structures in the United States and Korea: Common and Culture-Specific Factors," *Journal of Consumer Psychology*, 15 (4), 334–50.
- Tice, Dianne M., Jennifer L. Butler, Mark B. Muraven, and Arlene M. Stillwell (1995), "When Modesty Prevails: Differential Favorability of Self-Presentation to Friends and Strangers," *Journal of Personality and Social Psychology*, 69 (6), 1120–38.
- Trope, Yaacov and Nira Liberman (2003), "Temporal Construal," *Psychological Review*, 110 (3), 403–21.
- Trope, Yaacov and Nira Liberman (2010), "Construal-Level Theory of Psychological Distance," *Psychological Review*, 117 (2), 440–63.
- Trope, Yaacov, Nira Liberman, and Cheryl Wakslak (2007), "Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior," *Journal of Consumer Psychology*, 17 (2), 83–95.
- Valenzuela, Ana, Ravi Dhar, and Florian Zettelmeyer (2009), "Contingent Response to Self-Customization Procedures: Implications for Decision Satisfaction and Choice," *Journal of Marketing Research*, 46 (6), 754–63.
- Wakslak, Cheryl J., Shiri Nussbaum, Nira Liberman, and Yaacov Trope (2008), "Representations of the Self in the Near and Distant Future," *Journal of Personality and Social Psychology*, 95 (4), 757–73.

Constructing a Narrative Identity of Los Angeles Through a Gastronomic Adventure

Mine Üçok Hughes, California State University Los Angeles, USA

Tony Stovall, Towson University, USA

Rossen Ventzislavov, Woodbury University, USA

INTRODUCTION

O’Henry famously quipped that New York would have made a great city if they finished it. This observation is meant as an exaggeration but it also registers an important truth—cities are works-in-progress. The question of a city’s identity is ultimately one about people—the locals who shape the outlook of a place and the visitors who try to decipher or contest this outlook. In terms of the human factor, however, cities present a modern paradox—they facilitate both quiet anonymity and stark individuality. Ever since the Parisian *flâneur* of the nineteenth century this paradox has driven our perception of our cities and of our own selves. The study of residents’ relation to, valuation of, and identity with the city tends to be rooted in the disciplines of environmental psychology (i.e. Twigger-Ross and Uzzell 1996; Lewicka 2008) and geography (i.e. Molotch 1976; Harvey 1989), while the field of marketing tends to approach the consumption of the city from an overly-general, value-based perspective exercise in place (Rainisto 2003) or destination marketing (Goss 1993) or from a very specific perspective such as an examination of public goods like street art (Visconti, et. al. 2010). Because the various types of value – product value (Sweeney and Soutter 2001), service value (Vargo, Maglio and Akaka 2008), and experiential value (Holbrook and Hirschman 1982) – can all apply to varying degrees to the city, we situate our study in the realm of consumer culture and propose, that the city, itself, is an object to be consumed.

In this interdisciplinary study drawing from philosophy, geography, environmental psychology, anthropology, and consumer research, we explore the various narratives which make social, cultural, economic and political change intelligible to us, that account for the dynamic personality of a city. The city is not a person, but it lends itself to articulations of personhood similar to those that apply to any urban dweller. Our life stories are thus not merely responsive to the city’s symbolic identity but are also in equal measure constitutive of it.

We look at the relationship between two types of narratives which we label as dominant and emergent and explore the tensions that underpin the confluence of these narratives for city dwellers. Cities invariably give rise to dominant narratives, which include the historical records, urban legends and major branding campaigns. Conversely, cities also inspire and facilitate emergent narratives—stories that capture the personal, the particular and the idiosyncratic, but find resonance beyond the private individual.

In this brief treatment of our thesis we structure our paper as follows: We first introduce the concepts of dominant and emergent narratives and how they clash within the context of the city as a consumed entity. We chose to examine the ways in which food is used as a system of communication to expound on the way narrative modes of thinking and expression contribute to the identity of the city. Los Angeles serves as the context to understand how dominant narratives and emergent ones shape our conceptual understanding of the city. We focus on a particular form of cultural engagement - a series of thematic dining events titled *Los Angeles Eats Itself* (LAEI). LAEI, in particular, is a pertinent example of the productive tension between dominant narratives and emergent ones. We explore this tension through the dinner series that recreates and re-consumes notorious events that shape the narratives of Los Angeles. The real Los Angeles is a notion whose validity hangs in the balance between the two

extremes -- a negotiation between competing narratives, in which the dominant and the emergent narratives conspire to respond to the dynamic nature of the city.

DOMINANT AND EMERGENT NARRATIVES

It is our desire to grasp the city in its totality that accounts for what we have identified as dominant narratives. The city’s identity is, on Certeau’s (1984) reading, not the sum total of such dominant stories. Instead, it is a function of the interplay between them and what we have identified as emergent narratives. We understand the latter as stories of real human lives that implicate the city as a character.

The dominant narrative is defined as a top-down imposition of city branding from historians, politicians, corporations, advertising and marketing professionals. We suggest examples of qualifiers meant to elucidate both the origin of this type of narrative (marketing, branding) and its essential character (overarching, organized, homogenous, dogmatic, totalizing). While the emergent identity represents the unregulated agglomeration of micro-narratives that find resonance upon the symbolic urban fabric. The following qualifying terms are examples that capture how emergent narratives are formed (individually, spontaneously, arbitrarily, authentically) and what challenges they present for the dominant narrative of the city (irreverence, subversiveness, fluidity).

In the case of Los Angeles, branding labels such as “The City of Angels,” “Tinseltown” and “La La Land” represent aspects of so-called dominant narratives. The reason Los Angeles makes a perfect study subject is that it does not cater to dominant narratives as readily as the average global metropolis. While cities like New York and Paris have built strong brands that lend themselves to immediate articulation and recognition, Los Angeles challenges its visitors by defying the preconceptions they seek to confirm. But this challenge is equally present for Los Angeles residents because they often mythologize the parts of the city they do not frequent. In this sense everyone in Los Angeles is a visitor. The effect this has is that the city amplifies the two contradictory conditions that the nineteenth century *flâneur* was trying to enjoy at the same time—it oscillates between the extreme existential anonymity of the sprawl and the radical individualization of the spotlight. The middle ground that exists between the two is the narrative function of identity. We approach Los Angeles as a city-making toolkit—a story each one of us, visitor and resident alike, pieces together to ever more idiosyncratic specifications.

The convergence of these two types of narratives creates what we term *negotiated identity*. This occupies the shared space of the previous two—a contested ground whose boundaries are perpetually redrawn. In the tension between artificial order (dominant narrative) and organic chaos (emergent narratives) there exists a conceptual space, which we qualify as liminal, collaborative, dynamic, transitional, mediated, and relational. And while both extremes--the dominant and the emergent--are real and ever present in our reading of the city, it is this middle negotiated ground that represents the urban reality that informs our judgments and actions.

CONSUMING THE CITY THROUGH CULINARY ADVENTURES

The physical aspect of cities is just as inconstant as that of humans. When we think of cities it is not of statistics or infrastructural

agglomerations that supply our operational concepts. Instead, it is certain events, people and places that command disproportionately important status in the urban imagination. The sanction of what is remembered and what is conscripted to oblivion is a function of the city's narrative arc. For Baudelaire, the city is a spectral accumulation of "glorious perspectives, only increased by the thought of all the drama they contain" (as cited in Benjamin 1999, 231). This is in agreement with Hughes' (1964) insistence on the vital role partially arbitrary abstractions play in the composition of historical narratives. Each event, place and person that lends itself to such arbitrary abstraction, to the multiple perspectives of multiple beholders and storytellers, gains entry into the symbolic identity of the city. The unique trajectories we travel along—commutes, diversions, explorations—are not derived from the city's identity but are, rather, constitutive of it.

The construct of place encompasses three components: geography, available activities, and the cultivated meanings its residents give to the city (Gustafson 2001). The identity of each place/city is unique, and is created in consort with both official narratives (originating with government entities and marketing firms) and communal ones, both of which are separate from the influence of any one group of residents (Lewicka 2008). Much of the literature on place argues that the way people understand cities is similar to the way they understand brands (Ashworth and Kavaratzis 2009), which suggests that the branding of a city can be similar to that of other goods and services (Freire 2005). Each year, billions of dollars is spent marketing places (cities) as "commodities to be consumed" (Rainisto 2003), and as invigorating, entrepreneurial, alluring and fun, yet safe and distinct (Prytherch 2002). Still, Ashworth and Kavaratzis (2009) have argued that a city is more than simply a product to be marketed—it is also an object to be consumed. Hence, our focus here is not city/place branding/marketing.

Understanding a particular location allows for deeper insights into the specific consumptive behavior of its inhabitants. Freire (2005) argued that a city's residents consume the goods, services, and experiences in and of the city, and these acts of consumption serve as the foundation of belongingness and identification with that city, which ultimately drives its continued consumption. Invariably, place plays a pivotal role in the formation of any negotiated identity (Twigger-Ross and Uzzell 1996). In an urban environment, the highly differentiated consumption spaces often leave residents negotiating multiple identities.

The critical components of a brand—equity, essence and authenticity—are all reliant on the relevant modes of consumption. This is why those who live in and consume the city co-create its identity and culture. Living in a particular city impacts each resident's identity constructions including values and culturally-influenced customs (Aitken and Campelo 2011). Cities inherently create a binary engagement which suggests not only a sense of one's individual place in society, but also of others' place in it (Bourdieu 1984). The extent to which values and customs are disseminated by residents drives the collective understanding of the city's brand for both residents and non-residents (Aitken and Campelo 2011). Although people consume a city through a variety of means -- transit, geographic layout, entertainment choices/venues, festivals, to name but a few, -- food is perhaps the most quotidian. In its many shapes and forms, and cultural/ethnic/racial affiliations, food shapes our relationship to a city. It is a system of communication (Barthes (1961) 1997; Douglas, 1991) in which the relations between the members of a social group are reflected. When treated as a code, the message food encodes can be "found in the pattern of social relations being expressed" (Douglas 1991, 249). When treated as a narrative device,

culinary adventure becomes a metaphor for cultural consumption writ large.

Los Angeles Eats Itself is "a dinner series where cuisine and LA noir merge like freeway onramps in a savory digestible history." (<http://losangeleseatsitself.com/about/>). The themes for each dinner "event" are notorious LA moments that "border on the tragic, catastrophic and macabre" (<http://losangeleseatsitself.com/about/>). Our taste of and for Los Angeles is in part a function of these adventures which are centered around some of Los Angeles' most notorious events, like the Black Dahlia murder and the Heidi Fleiss (Hollywood Madam) scandal, and the salacious stories that drive them. "If the narrative of Los Angeles is one of an industry that makes narratives but has no singular story, *Los Angeles Eats Itself* is an effort to present a range of narratives in a unique and tangible way" (<http://losangeleseatsitself.com/about/>).

The *Los Angeles Eats Itself* project affords a contextualized understanding of the city's negotiated identities. Since the stories around which the dinner series is built are sealed in the formaldehyde of urban legend, their deconstruction through the clash of culinary and artistic visions is truly transformative. All relevant parties—the creators, the artistic and culinary luminaries, and even the intrepid diners—are given the opportunity to reread history from a highly personal viewpoint. The dominant narratives of exploitation, inequality and disaster are confronted by the idiosyncratic personalities and remembrances of everyone involved. It is a scripted clash, but the resultant mythologies are impossible to predict. So are also the new identities Los Angeles assumes as it consumes itself.

CONCLUSION

In exploring the way cities are understood and consumed, scholars operate on a reductive picture of the formation and structure of the city's identity. With the help of philosophy and critical theory we explore a series of unresolved dichotomies that frame our understanding of the city as a disjunction of two types of narrative identity--the dominant and the emergent. Dominant narrative is the centralized top-down image of the city produced over time through marketing, branding, etc. Emergent narrative is the idiosyncratic fabric of individual, bottom-up storytelling that links to and challenges the dominant narrative. While the extant literature accommodates both sides of the dichotomy, the relationship between the two is left unexplored. We propose a third kind--*negotiated identity*--which not only furnishes a novel ground for conceptual analysis, but also captures the realities of how the identity of the city is constructed and, consequently, how the city is consumed. We show that narrativity is as helpful in understanding our consumption of the city as it is in articulating our phenomenological and semiotic engagements with it.

Between the dominance of urban legend and the emergence of personal association we are able to apprehend a middle ground--*negotiated narrative identity* at its most palpable. Further discussions on the dominant and emergent narrative construct could explore the mechanisms through which negotiated identities enable emergent narratives to become dominant narratives over time, and examine whether dominant narratives are fixed, or dissolve over time through negotiated identities?

While our study has its limitations, one of which is the specific context of Los Angeles and the food theme, we propose that the scope of our thesis reaches far beyond the example of this series of culinary adventures. Our notion of negotiated identity could benefit from intentional application to other cultural contexts such as art, education, sports, or politics.

REFERENCES

- Aitken, Robert and Adriana Campelo (2011), The four Rs of place branding. *Journal of Marketing Management*, 27 (9-10), 913-933.
- Ashworth, Gregory and Mihalis Kavaratzis (2009), Beyond the logo: Brand management for cities. *Journal of Brand Management*, 16 (8), 520-531
- Barthes, Roland (1997) [1961], "Toward a Psychosociology of Contemporary Food Consumption" in Counihan, C. & Van Esterik, P. (eds.), *Food and Culture: A Reader*, New York, & London: Routledge.
- Benjamin, Walter, (1999), *The Arcades Project*, Tr. Howard Eiland and Kevin McLaughlin, Cambridge: Harvard University Press.
- Bourdieu, Pierre (1984) [1979], *Distinction: A Social Critique of the Judgement of Taste*, London: Routledge and Kegan Paul.
- Certeau, Michel de (1984), *The Practice of Everyday Life*, Tr. Steven Rendall, Berkeley: University of California Press.
- Douglas Mary (1991), "Deciphering a Meal" in *Implicit Meanings: Essays in Anthropology*, London, New York: Routledge.
- Freire, J. R. (2005), Geo-branding, are we talking nonsense? A theoretical reflection on brands applied to places. *Place Branding*, 1(4), 347-362.
- Goss, J. (1993), Placing the market and marketing Place: Tourist destination of the Hawaiian Islands 1973-1993. *Environment and Planning D: Society and Space* 11, 663-688.
- Gustafson, Per (2001), Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, 21(1), 5-16.
- Harvey, David (1989), *The urban experience*. Baltimore: Johns Hopkins University Press.
- Holbrook, Morris B. and Elizabeth C. Hirschman (1982), The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 132-140.
- Hughes, Stuart, H. (1964), *History as Art and Science*, Chicago: University of Chicago Press.
- Lewicka, Maria (2008), Place attachment, place identity, and place memory: Restoring the forgotten city past. *Journal of Environmental Psychology*, 28 (3), 209-231.
- Los Angeles Eats Itself. <http://losangeleseatsitself.com/about/>
- Molotch, Harvey (1976), The city as growth machine: Toward a political economy of place. *American Journal of Sociology*, 82(2), 309-332.
- Prytherch, D. L. (2002), Selling the eco-entrepreneurial city: natural wonders and urban stratagems in Tucson, Arizona. *Urban Geography*, 23(8), 771-793.
- Rainisto, Seppo K. (2003), *Success factors of place marketing: A study of place marketing practices in Northern Europe and the United States*. Helsinki University of Technology.
- Sweeney, J. C., and G. N. Soutar. (2001), Consumer Perceived Value: The development of a Multiple Item Scale. *Journal of Retailing* 77 (2),203-220.
- Twigger-Ross, Clare L. and David L. Uzzell (1996), Place and identity processes. *Journal of Environmental Psychology*, 16 (3), 205-220.
- Vargo, Stephen L., Paul P. Maglio, and Melissa A. Akaka (2008), On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145-152.
- Visconti, Luca M., John F. Sherry, Stefania Borghini and Laurel Anderson (2010), Street art, sweet art? Reclaiming the "public" in public place. *Journal of Consumer Research*, 37(3), 511-529.

Corporate Branding as a Source for Employees' Moral Identity Work

Philipp Wegerer, University of Innsbruck, Austria

INTRODUCTION

There is a growing interest on the moral dimension of consumption (Luedicke, Thompson and Giesler 2010, Belk 1988; Arnold and Thompson 2005; Holt, 2002, 2006, Caruana and Crane 2008) and the ethical dimension of branding (Palazzo and Basu 2007, Land and Taylor 2010, Jeanes 2013, Arvidsson 2005). The present study engages in this discussion and sets the focus of inquiry onto how brands effect the 'self' of employees. It studies how the ethical branding of a chocolate company becomes a key resource for employee identity work.

The ethical dimension of consumption and the ambivalent moral nature of brands gained increasing attention over the past years. There is an extensive critical literature that has highlighted the role of branding in the manipulation of consumers (Klein 2000, Curana and Crane 2008), and the role of brands in various consumption practices such as 'brand avoidance' (Lee and Conroy 2009) and 'anti-brand activism' (Palazzo and Basu 2007), free labour (Arvidsson 2005, 2015, Cova and Dall'Aglio 2009, Curana and Crane 2008, Land and Taylor 2010), and in terms of managerial control and organizational culture (Jeanes 2013, Klein 2000, Willmott 2010). The question how branding conceptually relates to employee identity still a matter of discussion.

The study draws on social identity theory (Giddens 1991, Watson 2008) and organization theory (Alvesson and Willmott 2002) in order to link the concept of self-identity with the concept of corporate brands. This perspective highlights how corporate brands can transform discourses in society into coherent brand-stories, which can be understood as meaningful social identities used by employees in their identity work. The paper then presents a case study which illuminates the various ways by which a corporate brand informs and affects employee identity work. The findings show the crucial importance of moral stories in the branding process and furthermore their significance in framing the moral superiority of employees who draw upon these stories in their identity work.

THEORETICAL FRAMEWORK: BRANDING AND IDENTITY WORK

There is a growing body of research examining the relationship of brands and consumer ethics (Luedicke, Thompson and Giesler 2010, Belk 1988; Arnold and Thompson 2005; Holt, 2002, 2006; Muniz and O'Guinn 2001), and the interplay of brands and other stakeholders (Vallaster and vonWallpach, 2013), such as employees (Kärreman and Rylander 2008, Land and Taylor 2010, Jeanes 2013, Miles and Mangold 2007). This study engages in this growing stream of research by shifting the attention onto how employees consume brands. Thus, it seeks to highlight the complex, yet ambivalent relationship of brands, ethics and employee identity work.

The reflexive self and the process of branding share a common mechanism in their creation on the grounds that both rely heavily upon storytelling and narrative construction in their enactment. Following Belk (1988), this paper argues that consumers and employees alike draw on brand stories in shaping their own self-identities. Where Belk (1988) emphasised the role of possessions for consumer identity work Watson (2008) has pointed the role of non-material stories and discourses for identity work. Watson (2008) argues that social identities are personalized elements of a discourse "in a way which makes them [the discourses] meaningful, accessible, and appealing or unappealing to the individual" (Watson 2008, p. 129).

The analytical category of 'social identities' allows us to understand 'identity work' as "a coming together of inward/internal self-reflection and outward/external engagement – through talk and action – with various discursively available social identities" (Watson 2008 p. 130). How does the concept of 'social identities' relate to brands?

Brands draw on, reflect and re-interpret discourses in society by crafting meaningful stories that provide narratives that overcome personal struggles with contradictions in society (Holt and Camerun 2010). Thus, successful brands provide meaningful 'social identities' for consumers and employees to position themselves in the discursive landscape. We can understand brands as carefully narrated 'social identities' (Watson 2008) based on the absorption, reflection and play with contradictions, discourses and cultural shifts within society. Following Watson (2008), I argue that the brands have become an important element of 'social identities' that consumers and employees draw on in the shaping of their own personal self-identities. According to this line of argument, brands do not merely offer one story amongst other possible accounts of ourselves and our world, but provide "an idealized image that one strives to become" (Kornberger, 2010, p. 92).

METHODOLOGY

Data gathering was based upon a set of qualitative methods including a number of visits to the organization, interviews, participant observations, informal conversations, field notes and document analysis. In sum 15 semi-structured interviews including the marketing director, the director of distribution and retail staff employed in the three retail shops located beyond the headquarter were conducted. In addition, the researcher analysed company branding documents including the company website, advertising materials, social media platform activities, and employee training documents. The analysis followed an inductive approach to research in order to identify emerging patterns within the data related to the branding process (Miles and Huberman 1994; Flyvbjerg 2006).

FINDINGS

The data indicates that the brands communicational efforts, although directed towards consumers, has a major effect on its employees. The theory driven analysis revealed that 3 modes of identity work predominate the branding process: i) moral self-definition by differentiation, ii) explicating morals and values as moral superiority, and iii) categorization and affiliation into a common sense of mission. Check the table for illustrative interview data.

Moral self-definition by differentiation

Differentiation is the primary strategy for defining what Chukka is and, logically, what it is not. Differentiation was a pattern that appeared in talking about their customers, competitors, products, and their way of doing business. The emphasis was not so much on what Chukka actually does or on what makes Chukka unique, but what Chukka does (and of course does not do) as compared to others. The others, be it competitors, customers or society at large, are framed as being average, amoral, normal or mainstream.

One instance of differentiation occurred when we talked about the business policy of Chukka. Questions about topics such as fair trade and organic production were regularly answered in a negative, excluding way. Interviewees explained what the others believe, think, and do wrong. However, questions about what the company actually

Table 1: Illustrative data

Moral self-definition by differentiation	
<i>Sentiments against competitors</i>	"There are chocolates [on the market] I doubt if they have cacao in them, they look like they are only painted brown, they just taste like sugar, some of them have this white milk inside them, probably they don't have milk in them, so [they consist] only of sugar, basically they are sugar bombs." (Shop assistant)
<i>Using brand vocabulary for differentiation</i>	"(...) I used to eat Milky before, but since I know the difference, since I know what is the difference between standard chocolate and 'bean to bar'; I don't eat that anymore (...) I don't know (...) this Milky thing, that is something completely different, it is chocolate but it is a product I would not buy." (Shop assistant)
<i>Critique against customers</i>	"For sure, something stays in the employees' minds. But when a customer was in our manufactory five or six years ago, what stays in his mind is that he could eat as much chocolate as he wanted to, and not that the beans have to be harvested by hand. And I doubt that the people are really more sensitive for this topic after their visit." (Shop assistant)
<i>Constructing employees as true believers</i>	"... they [the costumers] have the impression of a prestige organization. I don't think that all people see the Fair Trade, organic, sustainability concept that Chukka wants to be seen and associated with, I don't believe that. I believe that people basically think that it is expensive chocolate." (Shop assistant)
<i>Constructing employees as true believers</i>	"There are customers who are well informed [about Chukka business approach], others have basic information and got in touch with the topic of sustainability recently, and there are customers who ask directly in the shop what we are about. But there is definitely a tendency among the customers towards the insight that they are doing something good if they consume [our products] (...) but basically I have the impression that the customers have less of an idea on the topic [of sustainability and fair trade] than they believe." (Shop assistant)
Explicating moral and values as moral superiority	
Ethical conception of work	„Humm (...) to live up to Chukkas' philosophy, Yes I think I feel a kind of pressure, because Chukka has for me (...) if I look at the label, they are so damn good that I really want to try hard to do better [in following a sustainable lifestyle]. (Shop assistant)
The myth of the charismatic leader	"There is a name and a face which stands for his values. There is a personality, a character that is transformed into our products. This is what most products do not have anymore."
Voluntary constrain of consumption	Hmm, I think it is much better to pay a bit more for fair-trade chocolate. Personally, I would spend more for one bar of fair-trade chocolate than for three bars of Milky chocolate, because one chocolate bar a week is enough, just because there is no reason to eat three bars of chocolate a week if I cannot afford it right now." (Shop assistant)
Vagueness of organic and fair trade	Organic? There are these standards from the European Union. What organic means? It focuses on the use of pesticides." (Shop assistant) That means that these products should be healthier than products produced with pesticides, and that (the farmers) have certain requirements for the environment and they way of production which they have to follow." (Shop assistant)
Job as an ethical practice	"I only stand here [as a shop assistant] this I really have to say, because it is for Chukka and because it is this product. If it would not be this brand I would not work in here, that is clear, I have to say that".
Job as an ethical practice	„Humm (...) to live up to Chukkas' philosophy, Yes I think I feel a kind of pressure, because Chukka has for me (...) if I look at the label, they are so damn good that I really want to try hard to do better [in following a sustainable lifestyle]. (Retail assistant)
Categorization and affiliation into a common sense of mission	
Conversion of competitors	Market participants, no we don't talk about them in any evil or aggressive way, (...) [our CEO] talked to one of these guys from Jupiter [an industry leader], it was at a trade fair, he said you could rebuild your business, you could work sustainably, you could work in a fair way. So he appealed to his conscience (...) but I think in those companies the will for change is missing (...). And I think that's the difference between [them and] Chukka, which is a stable family business that does not want to grow above a specific size within a given time period."
Conversion of customers	"(...) we have certain customers which show a strong awareness [for fair trade and sustainability], and who have an awareness that they are buying organic and fair trade products [at Chukka] (...) but of course that's not everybody. That's why we try to bring it close to everybody. Because it is us who represent the company's philosophy and it is our duty to create and maintain this awareness (among the customers)."
Expansion as ethical education	"[With the expansion to Shanghai] Chukka can teach the Chinese people, whose economy is based mainly on the exploitation of resources, how to conduct business in a sustainable way (...), that is really cool, this social-pedagogical approach, this market education approach, that's really cool shit!" (Shop assistant)
Social transformation	"So you would say that Chukka has some effects?" (Interviewer) "Yes definitely, that [the customers] start at least to think, or if they don't start to think that they are at least offended, and that somebody else starts to think for them." (Shop assistant)
The high price as moral	"Our price is not something that we calculate arbitrarily like a stock price, or that we check the market for what we can get, or how much we can get out of the customer for our product. It is actually very simple: it is the raw material plus working hours, then we get a price X, and then of course we want to earn something, so that the company can be successful. In sum this is the retail price. It is very simple; we all want a fair wage and a safe place to work. We cannot work or give something away for free. We can only produce more cheaply if we buy cheaper raw materials, but this would change the character of our product." (Shop assistant)

does were answered vaguely or by using common statements such as "Chukka is fair trade". If asked what fair trade, organic or sustainability actually meant, or what the terms meant for Chukka, the answers remained vague, or differed significantly from each other.

The interviewees explained Chukka's strategy by highlighting how their competitors exploited native farmers and the environment and that Chukka avoided this by sticking to fair-trade or organic pro-

duction. The interview respondents did not show in-depth knowledge of Chukka actual business practices. Some competitors were seen as so inferior that they were described as having a different product, serving a different market and having a different manner of production and distribution.

The brand created a strong division between 'them' vs. 'us', where the employees clearly distinguish themselves as being brand

believers in contrast to both their competitors and even their own customers. Competitors were seen as exploiting nature and native societies, customers were perceived as naive and ignorant, society is framed as blind and based on exploitation. This negative framing of others is used as a source of differentiation. Employees framed Chukka as a responsible producer and themselves as experts in the chocolate business and as responsible members of society.

Explicating Moral and Values as Moral Superiority

In addition to the tendency to define Chukka by differentiating it from others, the organization was also positioned as being morally superior. The two labels 'fair trade' and 'organic' in particular played a key role in this realm; both were regularly subsumed under the term 'sustainability' and used to define Chukka directly as a morally outstanding organization. The position of Chukka was framed as "against profit maximization", "authentic" and "driven by its own values". Phrases used by interviewees included "we do not outsource sustainability" and "we stand behind what we say", and Chukka is a "credible", "authentic" and "reliable" organization.

Interviewees also saw and presented themselves as morally outstanding individuals. They expressed doubts about topics such as endless growth, profit maximization and reservations towards capitalism and globalization in general. Western capitalism was seen as being an exploitative, destructive force. Their job as shop assistants was seen as an ethical practice in which these negative tendencies of capitalism are addressed. Working for Chukka is thus an expression of a different, responsible way of life.

The dimension of moral superiority can also be found in the pricing policy. Chukka is situated in the premium sector. Today a 70-gramme bar of chocolate is sold about three to four times the price of a regular bar of chocolate. This high price was legitimized by the employees on a moral level. The rationales given included: the complex production process, the high quality of the raw materials, and the fair prices paid for raw materials. Additionally, the price is seen as being calculated in a reasonable, and thus an ethically correct way. The price is 'credible' and 'authentic'; it is seen as the 'real' expression of the production costs.

The high price becomes an expression of the company's ethical brand; it is justified as being the result of a morally superior purchasing policy and production techniques. It cannot be questioned as being illegitimate because it is the proof of the high quality of the raw materials, the sustainable production methods, and the fair prices paid to farmers for these materials. The chocolate is framed as a luxury product which must be consumed in an ethically conscious way.

Based on Chukkas branding efforts the employees developed a clear understanding of the production reality in the mainstream chocolate production sector. This includes the exploitation of the chocolate farmers, market inequalities and environmental issues. Chukka is seen as being in opposition to those practices, as producing in a responsible ('organic') and fair ('fair trade') way and is therefore in a morally superior position. When we asked in detail about Chukka practices and what the terms 'fair trade' and 'organic' implied, the answers remained vague and differed significantly between interviewees. Questions such as "What does it mean to be organic?" or "What does it mean to be fair trade, what is that exactly?" were answered in a vague way.

The employees used the moral vocabulary provided by the brand messages in giving moral justifications. Employees used the brands vocabulary to portray Chukka as being morally superior in terms of the company's business practices (fair trade and organic) and the production techniques (bean to bar). The brand image of the

organization has also become a key element of the employees' identity work. Employees explicitly draw on the images, the vocabulary and discourses of the brand for defining themselves as morally superior to others.

Categorization and Affiliation into a Common Sense of Mission

'Categorization and affiliation' is a key mode of identity work, which engenders a sense of community and a common sense of purpose. In the present study, this was apparent both from the respondents' feelings of being morally superior to their competitors, but also in terms of their missionary zeal. The interviewees had a desire to spread their worldview and convert the whole world (including me as a researcher) to a new form of business. This included a strong belief in the notions of 'organic production', 'fair trade' and 'sustainability'. Employees talked about converting their competitors to "better business practices".

Employees expressed a sense of mission to transfer Chukka business practices to other organizations in order to create a sustainable society. Some shop assistants described Chukka expansion plans to China not as a new business opportunity, but as a way of disseminating Chukka sustainability concept to other countries.

The missionary zeal of Chukka is also apparent in their relationship with the customers. For instance, the visitors centre (an important tourist attraction with more than 200.00 visitors a year) was not seen as a marketing tool, but as a way of ethically educating the consumers and of changing their minds in thinking about fair trade, sustainability and the condition of our society in general. The shop assistants understood their job as containing a sense of mission that goes far beyond selling chocolate. Their part-time job as a shop assistant is understood as containing an ethical duty of educating the customers in responsible consumption practices.

CONCLUSIONS

The main empirical finding of this study is that quite specific modes of identity work are engaged by the brand in its effects on employee identity formation. The company's brand-story is largely built on the incorporation and modification of available social discourses, such as 'organic production', 'fair trade' and 'sustainability' into meaningful 'social identities'. The employees draw upon these ready-made 'social identities' as meaningful narratives in the construction of their own self-narratives. The choice of these particular discourses is significant because they all tend to focus on the moral qualities of the product and the way in which it is being produced. The moral values and stories that have been drawn upon in the development of the brand directly mimic the brand-stories found in successful social movement organizations. In fact, the social discourses that the brand taps into are themselves brands associated with social movement organizations such as the Fairtrade movement and the organic farming movement, and the organizations whose work is involved in supporting these social movements.

The theoretical contribution extends existing research on ethical branding and consumption (Luedicke, Thompson and Giesler 2010, Arnold and Thompson 2005; Holt, 2002, 2006, Caruana and Crane 2008) by identifying the specific 'modes of identity work' (Alvesson and Willmott 2002) that are mediated by company branding processes. This research shows that in the case of branding, specific modes of identity work appear to be far more influential than others, and offers a theoretical refinement of the existing work on identity work for understanding the effects of the branding process on employee identity. The brand is largely built around the three modes of identity

work: i) 'self-definition by differentiation, ii) 'explicating moral and values' as moral superiority, and iii) 'categorization and affiliation'.

In the case of Chukka the brand not only communicates a moral position, but also positions the organization's actions within a wider meaning system as a contribution to a vision of a 'better world' situated beyond endless growth and capitalist exploitation. The brand enables employees to make sense of their job in a way that goes far beyond earning money. The work identity of the individual is shifted from being a low paid shop assistant towards experiencing the job as being part of wider ethical and social movements within society. The brand connects the employees with desirable lifestyles in society and thus helps the individual to address their struggle to choose between the different competing discourses in work and life.

REFERENCES

- Alvesson, Matt and Hugo Willmott (2002), „Identity Regulation as Organizational Control: Producing the Appropriate Individual,” *Journal of Management Studies*, 39 (5), 619- 644.
- Arvidsson, Adam and Alissandro Caliendo (2016), „Brand Public,” *Journal of Consumer Research*, 42 (5) 727-748.
- Arvidsson, Adam (2005), „Brands: A critical perspective,” *Journal of Consumer Culture*, 5 (2) 235– 258.
- Arnold, Eric J. and Thompson Craig J. (2005), „Consumer Culture Theory (CCT): Twenty Years of Research,” *Journal of Consumer Research* 31 (4) 868-882.
- Belk, Russell W. (1988), „Possessions and the Extended Self,” *Journal of Consumer Research*, 15(2) 139–168.
- Caruana, Robert and Crane Andrew (2008), „Constructing Consumer Responsibility: Exploring the Role of Corporate Communications,” *Organization Studies*, 29 (12) 1495–1519.
- Cova, Bernhard and Daniele Dalli (2009), „Working consumers: the next step in marketing theory?,” *Marketing Theory*, 9 (3) 315-339.
- Flyvbjerg, Bent (2006), „Five Misunderstandings About Case-Study Research,” *Qualitative Inquiry* 12, 219–245.
- Giddens, Antony (1991), „Modernity and Self- Identity,” Stanford: Stanford University Press.
- Guido Palazzo, Kunal Basu. (2007), „The Ethical Backlash of Corporate Branding,” *Journal of Business Ethics* 73, 333-346.
- Hatch, Mary Jo and Majken Schultz (2003), „Bringing the Corporation into Corporate Branding,” *European Journal of Marketing*, 37 (7/8), 1041-1064.
- Holt, Douglas (2002), „Why Do Brands Cause Trouble? A Dialectical Theory of Consumer Culture and Branding,” *Journal of Consumer Research*, 29 (1), 70–90.
- Holt, Douglas (2006), „Toward a sociology of branding,” *Journal of Consumer Culture*, 6(3), 299– 302.
- Holt, Douglas and Douglas Cameron (2010), „Cultural Strategy: Using innovative ideologies to built breakthrough brands,” Oxford: Oxford University Press.
- Jeanes, Emma. L. (2013), „The construction and controlling effect of a moral brand,” *Scandinavian Journal of Management*, 29 (2), 163–172.
- Karreman, Dan and Rylander, Anna (2008), „Managing Meaning through Branding- the Case of a Consulting Firm“, *Organization Studies*, 29(1), 103–125.
- Klein, Naomi (2000), „No Logo,” New York: Picador.
- Kornberger, Martin (2010), „brand society: How brands transform management and lifestyle,” New York: Cambridge University Press.
- Land, Chris and Scott Taylor (2010), „Surf 's Up: Work, Life, Balance and Brand in a New Age Capitalist Organization,” *Sociology*, 44(3), 395–413.
- Miles, Sandra J. and Glynn Mangold (2007), „Growing the Employee Brand at ASI: A Case Study,” *Journal of Leadership and Organizational Studies*, 14(1), 77– 85.
- Muniz, Albert M and Thomas C. O'Guinn (2001), „Brand Community”, *Journal of consumer research*, 27(4), 412–432.
- Vallaster, Christina and Silvia von Wallpach (2013), „An online discursive inquiry into the social dynamics of multi-stakeholder brand meaning co-creation,” *Journal of Business Research*, Volume 66, (9) 1505-1515.
- Watson, Thomas J. (2008), „Managing Identity: Identity Work, Personal Predicaments and Structural Circumstances,” *Organization*, 15(1), 121–143.
- Willmott, Hugh (2010), „Creating “value” beyond the point of production: branding, financialization and market capitalization,” *Organization*, 17(5), 517–542.
- Zick Varul, M. (2008), „Consuming the Campesino“, *Cultural Studies* 22(5), 654- 679.

Competitive Papers—Extended Abstracts

When Doing Healthy is Scary: The Case of Detection versus Prevention Health Messages

Chethana Achar, University of Washington, USA

Meng-Hua Hsieh, Pennsylvania State University-Harrisburg, USA

Nidhi Agrawal, University of Washington, USA

EXTENDED ABSTRACT

Engaging in a healthy behavior is often seen as a self-control issue and conceptualized as a tension between goal-oriented self-regulation and temptation-driven indulgences (Trope & Fishbach, 2000, 2005). As a result, much of literature on health consumption has identified that higher-level, goal-focused thinking increases healthy behavior (Agrawal & Wan 2009, Fujita & Han, 2009; Zhang et al. 2010). The intuition behind this is that higher-level thought (operationalized either as the construal or the mindset with which an action is considered) increases focus on the goal, while reducing focus on lower-level thoughts of indulgences, efficacy and resource concerns (Fujita et al. 2006).

The premise here is that the higher-level outcome (e.g., losing weight) is *more desirable* than the lower-level process (e.g., exercising everyday, avoiding high-calorie foods) and therefore higher (vs. lower)-level focus is more likely to lead to healthy behavior. We ask: does this premise hold true to all health consumption contexts? What if a healthy action was not a pleasant one? In the current research, we identify healthcare actions with outcomes that - while healthy - may be dreadful and therefore, undesirable. Specifically, we consider the case of messages that suggest illness detection health actions.

Consider a health message about mammograms claiming that “early detection saves lives” and encouraging women with risk of breast cancer to take the screening test. This is a *detection message*, which promotes actions that help early detection of health problems. *Prevention messages*, in contrast, suggest actions that prevent a health problem from developing in the future. An example is a sunscreen ad suggesting “shield yourself with sunscreen & prevent skin cancer.” In this way, health messages can be classified as two types with a clear demarcation between preventive and detective actions (Detweiler et al. 1999; Fielding 1978).

In current research, we demonstrate that detection (vs. prevention) health actions are associated with the scary outcome of finding out that one is ill. Next, we show that as a result of this dread, a higher (vs. lower)-level thought about the action reduces the persuasiveness of a detection (vs. prevention) health message. This is a reversal of past predictions. On the other hand, a lower (vs. higher)-level thought focuses on efficacy concerns and reduces the persuasiveness of prevention (vs. detection) messages. This replicates predictions from past research. We provide converging evidence for this phenomenon through a dual mediation process.

This work makes two major theoretical contributions to consumer behavior. First, we explore the understudied psychology of detection health messages (Keller and Lehmann 2008) and show that the unique dread associated with illness detection (vs. prevention) drives their persuasiveness. Second, we contribute to the literature on construal level & persuasion (White, MacDonnell, & Dahl, 2011) by showing when the predictions of the past literature about high (vs. low)-level thought hold, and when they reverse.

Theoretical Development

While both prevention and detection advocacies are types of messages that advocate healthy behaviors, they differ in how consumers might conceptualize these actions. Complying with a detection message might lead to discovery of an illness. On the other hand, complying with a prevention message might lead to maintenance of or improvement over the current state of health. Given this, is the outcome of, say, *detecting* skin cancer as desirable or pleasant as preventing skin cancer?

Detection Actions Have Scary Outcomes. Research has shown that individuals perceive detection behaviors as riskier than prevention behaviors because detection behaviors involve the risk of finding out whether they are ill (Kirscht 1983; Rothman et al. 1999). For example, complying with a health message promoting mammography can be construed as a gamble because getting a mammography involves the chance that one might get a positive test result for breast cancer. On the other hand, prevention behaviors can maintain one’s current health state and have little, if any, shortcomings. For example, complying with a health message promoting sunscreen use does not present a gamble; rather, sunscreen use is considered protection from future risks.

In the context of illness-detection, health actions have the dreaded outcome of finding out that one is ill. For example, the outcome of getting a mammogram is the possible detection of breast cancer. In contrast, outcome of engaging in an illness-prevention action is desirable. For example, the use of regular sunscreen leads to prevention of cancer. As a result of this difference, consumers are likely to view detection (vs. prevention) actions as taking a gamble (Rothman, Salovey, Antone, Keough, & Martin, 1993).

Message Types and High (vs. Low)-level Thought. The important behavioral implication of viewing detection behaviors as scary is that focusing on the goal or outcome of the behaviors may *reduce* the likelihood of performing the goal-oriented action since individuals are reluctant to pursue that goal. This is counterintuitive to the extant literature which conceptualizes that higher level thought leads to focus on the outcome of a healthy behavior and is therefore more effective in comparison to lower-level thought which leads to focus on resources and efficacy (Agrawal & Wan 2009).

We posit that there is a message type and construal level match such that a) detection messages are more persuasive when combined with lower-level thought, and this is driven by reduced scariness of the behavior and b) prevention messages are more persuasive when combined with higher-level thought, and this is driven by goal focus.

Four experiments that systematically test this theory are reported below. In study 1, we demonstrate that participants anticipated that using a skin lotion would be scarier when they were told that it detects (vs. prevents) skin cancer. In study 2, we show that the scariness is reduced when individuals are made to elaborate on low (vs. high) level thought about a detection (vs. prevention) product and that this is moderated by disease severity. Participants were more likely to use a detection skin lotion when elaborating on how (vs. why; study 3) and use a detection dental rinse when in the process

(vs. outcome) mindset (study4). These findings reverse for prevention messages. Study 3 also presents a dual mediation test to demonstrate that lowered scariness drives the effectiveness of detection messages whereas lowered efficacy concerns drive the effectiveness of prevention messages.

Study 1: Detection (Prevention) Actions are Scary

In Study 1a, our objective was to empirically verify the premise that the outcomes associated with detection (vs. prevention) actions are scary. For this purpose, we developed stimuli about a skin lotion (adapted from Mathur et al. 2013), which is presented as either designed to detection skin cancer (detection condition) or prevent skin cancer (prevention condition).

105 undergraduate lab participants ($M_{\text{age}}=21.20$ years, 46 females) were assigned to a one-way (detection vs. prevention) between-subjects design. Each participant saw one of two health messages about a skin lotion. They were then asked to rate “how scary would it be to use this lotion (not scary at all =1, very scary=9)”, how much would you dread using this lotion “ and “how scared would someone be to use this lotion”(not at all=1, very much=9)”. Participants anticipated that using the lotion would be scarier under the detection condition ($M=4.20$) than the prevention condition ($M=2.48$; $t(103)=3.20, p=.002$).

This study conceptually replicates past literature that detection (vs. prevention) actions are perceived to be riskier (Rothman and Salovey 1997). This also empirically confirms the premise for the following studies. In study 2, we test if the scariness associated with detection (vs prevention) actions is changed based on high (vs. low)-level thought.

Study 2: ‘How’ (vs. Why) makes Detection (vs. Prevention) Actions less Scary

In Study 2, we tested the prediction that lower (vs. higher) construal thinking about the outcome of an action reducing the scariness associated with the outcome. Further, we used disease severity moderator as test of process. We reasoned that the scariness of engaging in detection (vs. prevention) actions would hold for high (vs. low) severity diseases. Study 2 ($N=230$) had a 2 (advocacy: detection vs. prevention) X 2 (disease severity: high vs. low) X 2 (elaboration: how vs. why) design. Participants were presented with a health message about an oral rinse that either helped detecting or preventing a disease. The target disease was called dental plaque (low severity) or dental cancer (high severity). Participants were then instructed to write about how (vs. why) they would use the rinse (adapted from White, MacDonnell, & Dahl, 2011). A three-way ANOVA ($F(7,218)=4.73, p<.001$) using an index of scariness (used in study 1) as the DV revealed that participants anticipated that they would be more scared using the oral rinse when it was framed as detecting (vs. preventing) and under high disease severity ($b=6.12, p=.007$). Interestingly, thinking about why (vs. how) increased how scared they expected to be while using this rinse ($b=2.91, p=.004$).

Study 2 provides evidence that low (vs. high)-level thinking about detection actions reduces the dread associated with them. This finding sets foundation for the following studies in which we test the thought-level and message type matching effect.

Study 3: ‘How’ Enhances Detection Message and ‘Why’ Enhances Prevention Message for Skin Cancer

Study 3 tested that high (vs. low) construal thinking enhances healthy behaviors as response to prevention advocacies (as predicted by Fujita & Roberts, 2010), but reverses for detection advocacies (as predicted by current theory).

A panel of 205 participants were randomly assigned to one condition in a 2 (advocacy: detection vs. prevention) X 2 (elaboration: how vs. why) design. The primary dependent variable was their intentions to use the lotion by indicating their answers to “how likely are you to use this lotion”, “how interested are you in using this lotion” on a scale of 1 to 10 such that higher numbers are higher intentions.

Health Intentions. ANOVA results showed that participants in the detection condition were more likely to use the lotion when they thought about how (vs. why) ($M_{\text{det-how}}=7.89$; $M_{\text{det-why}}=7.29$), while those in prevention condition were more likely to use the lotion when they thought about why (vs. how) ($M_{\text{prev-how}}=6.89$; $M_{\text{prev-why}}=7.67$; $F(1, 200)=4.17, p=.042$).

Dual Mediation. We had theorized that a thinking about how (vs. why) enhances the effectiveness of detection advocacies by reducing the scariness of the action, thinking about why (vs. how) enhances the effectiveness of the prevention advocacies by reducing the perceived difficulty of the action. Scariness and efficacy concerns were measured and used as two mediators in analysis (PROCESS Model 4; Hayes 2013). In case of detection advocacies, elaboration on why (vs. how) increased how scary using the lotion was and this mediated persuasion such that higher index of scariness reduced attitudes toward the ad ($b=-.13$; 95% CI $-.39, -.07$). Conversely, in the case of prevention advocacies, elaboration on why (vs. how) reduced the felt difficulty of prevention actions, acting as a mediator, such that reduced difficulty improved persuasion ($b=-.64$; 95% CI $.09, 1.26$).

These results show that different processes drive the effectiveness of detection (vs. prevention) health messages under high (vs. low) –level elaboration. Detection health messages are more effective when associated with lower (vs. higher)-level elaboration - in contrast to findings in the past literature – and this is driven by scariness of detection. However, in case of prevention messages, we replicated the findings from past literature that high (vs. low) level thought is more effective and is driven by lowered efficacy concerns. In study 4, we present another test of process through moderation.

Study 4: Outcome vs. Process Mindset Influences Detection (vs. Prevention) of Dental Cancer

In study 4, we used another operationalization of high (vs. low) level thinking by inducing the participants with an outcome (high-level) or process (low-level) mindset. Further, to test that the underlying process in the effect is that of dread, we used relevance as a moderator, pre-measured as ratings of their perceived dental health while recruiting participants.

Relevance as test of process. Among individuals with poor dental health, detection is more likely to lead to discovery of dental cancer, therefore they are scared and more likely to use the product when thinking about the process (vs. outcome). However, among individuals with good dental health, detection is very low likelihood; therefore they are not threatened by it and are indifferent to outcome vs. process. Similarly, among individuals with poor dental health, prevention is a salient goal but are deterred by efficacy concerns (Fujita & Roberts 2010, Agrawal & Wan 2009). Therefore, they more likely to use the product when thinking about the outcome (vs. process). However, to individuals with good dental health, prevention is not a salient goal, therefore they are indifferent to outcome vs. process.

Procedure. In a 2 (mindset: outcome vs. process) x 2 (advocacy: detection vs. prevention) x 2 (relevance: high vs. low; continuous) design, 408 online participants ($M_{\text{age}}=34.43$ years, 189 females) were asked to evaluate a ‘dental rinse’ and focus on the outcome

(vs. process) of using the product. They were then presented health messages that framed the product as being a dental cancer detection or dental cancer prevention rinse. The 3-way model using product use intentions as dependent variable (adapted from study 3) was significant (PROCESS Model 3; Hayes 2013; $F(7,400)=2.34, p=.023$). The three-way interaction among independent variables was significant ($b=.54, p=.04$). Among participants who thought their dental health was bad (-1 SD on dental health; high relevance) were more likely to use the detection rinse when they were in the outcome mindset ($b=1.31, p=.019$), while they were more likely to use the prevention rinse when they were in the process mindset ($b=-1.75, p=.002$). Participants who thought they had good dental health (+1 SD on dental health; low relevance) were indifferent to mindset and message type ($b=.02, p>.50$) in forming their intentions.

Note. Means are provided as data labels. Under low relevance, means are not significantly different between message type and mindset conditions. Under high relevance, contrasts are significant ($p<.05$) between mindset conditions in both detection and prevention message types.

General Discussion

Using five experiments, this paper demonstrates that a) detection (vs. prevention) actions, are perceived to be scary, b) a lower (higher) level elaboration enhances the effectiveness of detection (prevention) advocacies, and c) two different processes jointly mediate this effect. This research presents implications to consumer behavior theory by identifying that a lower-level, 'how' construal might lead to healthier behavior when the outcome of the healthy action is scary.

One limitation of the set of studies reported here is that the thought level was manipulated as mindset or elaboration *outside* the health message. Future studies can test if framing the health messages at a high versus low level will replicate this effect.

Findings presented here offer insights to health marketers about the thought-level matching effect to promote the effectiveness of detection versus prevention advocacies.

REFERENCES

- Agrawal, Nidhi, and Echo Wen Wan. "Regulating risk or risking regulation? Construal levels and depletion effects in the processing of health messages." *Journal of Consumer Research* 36, no. 3 (2009): 448-462.
- Block, L. G., & Keller, P. A. (1995). When to accentuate the negative: The effects of perceived efficacy and message framing on intentions to perform a health-related behavior. *Journal of Marketing Research*, 32, 192-203.
- Detweiler, J. B., Bedell, B. T., Salovey, P., Pronin, E., & Rothman, A. J. (1999). Message framing and sunscreen use: Gain-framed messages motivate beach-goers. *Health Psychology*, 18, 189-196.
- Fujita, K., & Han, H. A. (2009). Moving beyond deliberative control of impulses: The effect of construal levels on evaluative associations in self-control conflicts. *Psychological Science*, 20, 799-804.
- Fujita, K., & Roberts, J. C. (2010). Promoting prospective self-control through abstraction. *Journal of Experimental Social Psychology*, 46, 1049-1054.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*: Guilford Press.
- Mathur, Pragya, Shailendra Pratap Jain, Meng-Hua Hsieh, Charles D. Lindsey, and Durairaj Maheswaran. "The influence of implicit theories and message frame on the persuasiveness of disease prevention and detection advocacies." *Organizational Behavior and Human Decision Processes* 122, no. 2 (2013): 141-151.
- Keller, Punam Anand, and Donald R. Lehmann. "Designing effective health communications: a meta-analysis." *Journal of Public Policy & Marketing* 27, no. 2 (2008): 117-130.
- Rothman, A. J., & Salovey, P. (1997). Shaping perceptions to motivate healthy behavior: The role of message framing. *Psychological Bulletin*, 121, 3-19.
- Rothman, A. J., Salovey, P., Antone, C., Keough, K., & Martin, C. D. (1993). The influence of message framing on intentions to perform health behaviors. *Journal of Experimental Social Psychology*, 29, 408-433.
- Trope, Y., & Fishbach, A. (2000). Counteractive self-control in overcoming temptation. *Journal of Personality and Social Psychology*, 79, 493-506.
- Trope, Y., & Fishbach, A. (2005). Going beyond the motivation given: Self-control and situational control over behavior. In In R. R. Hassin, J. Uleman & J. A. Bargh, (Eds.), Hassin (Ed.), *The new unconscious* (pp. 537-565). NY: Oxford University Press.
- White, K., MacDonnell, R., & Dahl, D. W. (2011). It's the mind-set that matters: The role of construal level and message framing in influencing consumer efficacy and conservation behaviors. *Journal of Marketing Research*, 48, 472-485.

Consumer-Brand Relationships in Conspiratorial Narratives

Mathieu Alemany-Oliver, Toulouse Business School, France

EXTENDED ABSTRACT

To summarize this research, I show that conspiracy theories infuse marketplaces, leading to specific conspiratorial relationships between consumers and brands. Discourse analysis of 30 consumption-related conspiracy narratives available on the Internet --in English and in French, underlines that consumers and brands can play the integrative roles of the culprit and the victim.

In the realm of consumer research, a conspiracy theory can be defined as an alternative, explanatory, non-refutable, and logical narrative about a brand-related event which is rooted in consumer's belief that nothing happens by accident, and that there must be a secret and powerful group of people pulling the strings behind the scene. It therefore differs from rumors, (urban) legends, hoaxes, and gossip. Marketers are particularly interested in understanding and anticipating conspiracy theories in that these conspiratorial narratives happen outside of marketing channels of communication and therefore out of marketers' control. Moreover it is difficult to persuade conspiracists that their theory is unfounded once they start to believe in it (Nyhan, Reifler, and Ubel 2013; Sunstein and Vermeule 2009). Reasons for such hardly debunkable narratives might be, among others, that some theories revealed to be true (Keeley 1999). To Aupers (2012) and Jane and Fleming (2014), conspiracy thinking carries a cultural logic of modernity that is taken to its extreme through the accumulation of proofs in a methodological and rational way, finally leading to a manifestation of distrust and "fashionable conspiracism" (Aaronovitch 2010, 3). Recent increase of conspiracy thinking might be understood as a consequence of new technologies of information, and more particularly the advent of the Internet (Barkun 2003). The abundant flows of online information would decentralize all forms of discourses and favor echo chambers in which ideas and theories are no longer challenged, but only strengthen (Pariser 2011; Sunstein 2009).

Several convincing reasons might lead consumers to develop conspiracy thinking. For example, some business traditions such as special-interest lobbying that are characteristic of the late 20th and early 21st centuries can only feed conspiracy thinking since on many occasions particular industries -- especially the tobacco industry -- have been accused and found guilty of conspiring against the law (Brandt 2009). Another plausible reason for the belief in conspiracy is to be found in the Goliath effect (Fine 1985). Like the too big to fail theory in economics, there might be a too big to be honest consumer theory developed regarding the size of major companies such as Nestlé, Google, Amazon, Procter & Gamble, Monsanto, Walmart, ExxonMobil, or Toyota. When one of these giants is involved in a scandal, such as the recent Volkswagen emissions scandal, consumers might give more credit to conspiracy theorists and to the possibility of hegemonic entities that try to deceive and control them.

In order to better understand conspiratorial relationships between consumers and brands, 30 consumption-related conspiracy narratives, available online, were analyzed through a poststructuralist perspective (Moisander, Valtonen, and Hirsto 2009; Thompson and Hirschman 1995). Analysis was also structured around the idea that characters and storylines structure texts and semiotic relationships (Hirschman 2000). We have therefore used Greimas' (1966) concepts of *acteur* and *actant*. Results underline the different roles that consumers and brands can play, and more particularly two integrative roles that gather all the other roles: the victim and the culprit. Most conspiracy narratives in the field of consumption involve a cul-

prit/victim relationship between consumers and brands/companies. From the analysis, we find that a majority of conspiracy theories make consumers the victims, while brands, companies, or industries are considered the guilty party (e.g., McDonald's ice cream machine conspiracy). We also find narratives in which the company is a victim of consumers' conspiracy. These narratives often appear as official counter-narratives to answer conspiracy theories that directly attack the company (e.g., Phil Schiller from Apple about the removal of the audio jack). Two other kinds of consumer/brand relationships are the culprit/culprit and victim/victim situations. In these cases, events are interpreted either as the consequence of collaboration between consumers and brands/companies/industries (e.g., black market of Hollywood movies in Iran organized by consumers themselves and the USA to pervert Islam, local culture, and Americanize the whole world) or as the unfortunate cause of both consumer and brand misfortune (e.g., Malaysia Airlines flights 370 and 17 in 2014, allegedly shot down for secret political reasons). Finally, the brand can sometimes benefit from conspiracy theories and even feed them. For example, the Newton community considers Microsoft to be a conspirator (Muniz and Schau 2005). Drawing on this narrative in which Microsoft is the villain, Apple takes the roles of both the victim and the hero fighting the suppressor of superior technology. These conspiracy narratives are even more plausible to the audience when the media announces that Microsoft shares consumers' information with the NSA whereas Apple refuses to collaborate with the FBI in order to protect its consumers' privacy.

REFERENCES

- Aaronovitch, David (2010), *Voodoo Histories: The Role of The Conspiracy Theory in Shaping Modern History*, New York: Riverhead Books.
- Aupers, Stef (2012), "'Trust No One': Modernization, Paranoia and Conspiracy Culture," *European Journal of Communication*, 27 (1), 22-34.
- Barkun, Michael (2003), *A Culture of Conspiracy: Apocalyptic Visions in Contemporary America*, Berkeley, CA: University of California Press.
- Brandt, Allan M. (2009), *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America*, New York: Perseus Books.
- Fine, Gary A. (1985), "The Goliath Effect: Corporate Dominance and Mercantile Legends," *The Journal of American Folklore*, 98 (January-March), 63-84.
- Greimas, Algirdas J. (1966/1983), *Structural Semantics: An Attempt at a Method*, Lincoln, NE: University of Nebraska Press.
- Hirschman, Elizabeth C. (2000), *Heroes, Monsters, and Messiahs: Movies and Television Shows as the Mythology of American Culture*, Kansas City, MO: Andrew McMeel.
- Jane, Emma A., and Chris Fleming (2014), *Modern Conspiracy: The Importance of Being Paranoid*, New York: Bloomsbury.
- Keeley, Brian L. (1999), "Of Conspiracy Theories," *The Journal of Philosophy*, 96 (March), 109-26.
- Moisander, Johanna, Anu Valtonen, and Heidi Hirsto (2009), "Personal Interviews in Cultural Consumer Research – Post-Structuralist Challenges," *Consumption Markets & Culture*, 12 (4), 329-48.

- Muñiz, Albert M., and Hope Jensen Schau (2005), "Religiosity in the Abandoned Apple Newton Brand Community," *Journal of Consumer Research*, 31 (April), 737-47.
- Nyhan, Brendan, Jason Reifler, and Peter A. Ubel (2013), "The hazards of correcting myths about health care reform," *Medical Care*, 51 (February), 127-32.
- Pariser, Eli (2011), *The Filter Bubble: What the Internet is Hiding from You*, New York: Penguin.
- Sunstein, Cass R. (2009), *Going to Extremes: How Like Minds Unite and Divide*, Oxford: Oxford University Press.
- Sunstein, Cass R., and Adrian Vermeule (2009), "Conspiracy Theories: Causes and Cures," *The Journal of Political Philosophy*, 17 (2), 202-27.
- Thompson, Craig J., and Elizabeth C. Hirschman (1995), "Understanding the Socialized Body: A Poststructuralist Analysis of Consumers' Self-Conceptions, Body Images, and Self-Care Practices," *Journal of Consumer Research*, 22 (September), 139-53.

Unsustainable Luxury and Negative Word-Of-Mouth: The Role of Shame and Consumers' Cultural Orientation

Cesare Amatulli, University of Bari, Italy
Matteo De Angelis, LUISS Guido Carli University, Italy
Giovanni Pino, University of Salento, Italy
Gianluigi Guido, University of Salento, Italy

EXTENDED ABSTRACT

Sustainability is often treated as an unimportant driver of luxury consumption (Davies et al. 2012), if not simply deleterious to their perceptions about the quality of luxury items (Achabou and Dekhili 2013). Although most studies have focused on the link between luxury and positive emotions such as pride, prior research neglected to explore the association between luxury and negative emotions. To supplement this growing literature, first, we investigate how negative emotions—shame in particular—affect unsustainable luxury consumption. We propose that messages highlighting the unsustainable (vs. sustainable) nature of luxury products may trigger a sense of shame in consumers, which will then affect their subsequent behavioral intentions, in particular their intention to share negative word-of-mouth (hereafter, NWOM). We also study the moderating role of culture (Hofstede et al. 2010) by focusing on *individualism* (the tendency to seek personal rewards) versus *collectivism* (the tendency to prize collective wellbeing). These orientations are relevant to sustainability research, inasmuch as sustainability is linked to people's concern about making a positive (or at least non-negative) contribution to the well-being of society.

In this research, we specifically examine NWOM as a type of pro-social behavior that follows consumers' exposure to messages emphasizing the unsustainable (versus sustainable) nature of luxury goods. Because shame leads individuals to engage in coping behaviors aimed at restoring their self-worth (Duhachek et al. 2012), we expect, first of all, that ashamed consumers would strive to restore a positive view of themselves by engaging in NWOM. Existing research shows indeed that people engage in WOM behavior to re-establish a positive self-image in social contexts (De Angelis et al. 2012). Second, we consider consumers' cultural orientation as a moderator of the effect of unsustainable-luxury driven shame on NWOM and predict that shame will increase (decrease) the tendency to share NWOM about a company selling an unsustainable luxury product when consumers have a collectivistic (individualistic) cultural orientation. We expect indeed that individualistic consumers will be more concerned with preserving their social image than others' welfare.

METHOD AND FINDINGS

We tested our predictions with 104 consumers ($M_{Age} = 35$, $SD_{Age} = 11.77$; 50% females) who participated in a 2 (type of message: sustainable product vs. unsustainable luxury product) x 2 (cultural orientation: collectivistic vs. individualistic) between-subject experiment. We manipulated cultural orientation through participants' nationality—American vs. Russian—following Hofstede's classification of U.S. and Russia in terms of the individualism versus collectivism. Thus, we administered the questionnaire to a random sample of U.S. ($M_{Age} = 35$, $SD = 9.75$, 64% males) and Russian consumers ($M_{Age} = 34$, $SD = 13.51$; 36% males), who were both extracted from national consumer panels and invited to fill in an electronic questionnaire that assigned them to one of the two experimental conditions.

The questionnaire instructed participants in the sustainable product condition to imagine they were about to purchase a luxury

car able to reduce pollutants drastically and thus to contribute to environmental protection. In contrast, participants in the unsustainable product condition read a message about a luxury car producing more emissions than similar cars and thus contributing to increase environmental pollution. Then, participants answered seven items drawn from Lindsay-Hartz (1984) that measured their sense of (anticipated) shame (e.g. "I feel a sense of blame,"; $\alpha = .88$) and three items that assessed their willingness to share NWOM about the company selling the car (e.g. "I will say negative things about this company to other people"; $\alpha = .95$), all measured on 7-point scales (1 = completely disagree, 7 = completely agree), and provided socio-demographic data.

Participants assigned to the unsustainable scenario (coded as +1) felt a more intense feeling of shame ($M = 3.60$, $SD = 1.68$) than those assigned to the sustainable scenario (coded as -1; $M = 2.66$, $SD = 1.32$, $F(1, 102) = 10.08$, $p < .05$). We regressed willingness to share NWOM on sustainability, shame, and participants' cultural orientation (coded as +1 for Russian consumers and -1 for American consumers), and the interaction between shame and cultural orientation. This analysis returned a significant index of moderated mediation ($b = .49$, 95% CI: .15, 1.02), indicating that cultural orientation moderates the effect of shame on willingness to share NWOM. In particular, type of message had a significant and positive effect on anticipated shame ($b = .47$, $p < .001$). Controlling for type of message and cultural orientation, we found that shame had a significant negative effect on NWOM intentions ($b = -.37$, $p < .05$); controlling for type of message and shame, cultural orientation had a significant negative effect on NWOM intentions ($b = -.423$, $p < .001$). The analysis revealed a positive and significant effect of the interaction between shame and cultural orientation ($b = 1.05$, $p < .001$) on NWOM intentions. The effect of type of message on willingness to share NWOM was negative for American consumers ($b = -.17$, 95% CI: -.43, -.01) and positive for Russian consumers ($b = .32$, 95% CI: .10, .61), thus showing that collectivistic consumers expressed increased NWOM intentions in response to their feelings of anticipated shame. Meanwhile, NWOM intentions decreased among individualistic consumers.

Our study contributes to the research on luxury and sustainability which still lacks an examination of how negative emotions aroused by unsustainable luxury products can shape consumers' responses. By assessing how shame affects WOM intentions, this research also extends the literature on the emotional antecedents of WOM intentions. Moreover, our research investigates the previously unexplored role of consumers' cultural orientation in the relationship between luxury and sustainability. Operationally, our results suggest that managers could deliver messages that emphasize the differences between their firm's sustainable products and their competitors' less-sustainable ones, thus fostering negative buzz around competitors' products. Not-for-profit organizations may use our results to design and diffuse messages aimed at warning consumers against deleterious unsustainable products especially in collectivistic cultures. Finally, for luxury managers interested to introduce their products in international markets, our research points to the need to consider the cultural aspects when designing their communication actions.

REFERENCES

- Achabou, Mohamed, and Sihem Dekhili (2013), "Luxury and Sustainable Development: Is There a Match?," *Journal of Business Research*, 66 (10), 1896–1903.
- Davies, Iain A., Zoe Lee, and Ine Ahonkhai (2012), "Do Consumers Care About Ethical-Luxury?," *Journal of Business Ethics*, 106 (1), 37–51.
- De Angelis, Matteo, Andrea Bonezzi, Alessandro Peluso, Derek Rucker, and Michele Costabile (2012), "On Braggarts and Gossips: A Self-Enhancement Account of Word-Of-Mouth Generation and Transmission," *Journal of Marketing Research*, 49 (4), 551–563.
- Duhachek, Adam, Nidhi Agrawal, and Han DaHee (2012), "Guilt Versus Shame: Coping, Fluency, And Framing in the Effectiveness of Responsible Drinking Messages," *Journal of Marketing Research*, 49 (6), 928–941.
- Hofstede, Geert, Jan Hofstede, and Michael Minkov (2010), *Cultures and Organizations: Software of the mind*. New York, NY: McGraw-Hill.
- Lindsay-Hartz, Janice (1984), "Contrasting Experiences of Shame and Guilt," *The American Behavioral Scientist (pre-1986)*, 27 (6), 689–704.

The Belonging Process: Elements and Enactment within a Consumption Context

Robert Arias, University of Illinois at Urbana-Champaign, USA

Cele Otnes, University of Illinois at Urbana-Champaign, USA

EXTENDED ABSTRACT

Given the centrality belonging is to daily life, it is not surprising that the phenomenon attracts scholars' attention from many disciplines (Maslow 1943). Yet what is notable is that while consumer researchers allude to concepts related to belonging (Schouten and McAlexander 1995), research on the actual construct, and how belonging relates to consumption activities (Mead et al. 2011), remains undertheorized. We believe focused attention to belonging in our discipline is crucial, especially considering it may provide further enlightenment on related and entrenched topics such as power and self-esteem (Rucker, Galinsky, and Dubois 2012).

Most belonging consumer research examines how people fulfill needs to belong after being excluded. Yet this does not account for how people actively *leverage* consumption practices to construct, maintain, or enhance belongingness. Consequently, our overall goal in this paper is to leverage empirical research to delineate a broader conceptualization of belonging than dominant definitions currently reflect, and to offer evidence for a new understanding of belonging, one we term the *belonging process* (referred to as "BP"). This conceptualization reflects the relatively recent assertion that belonging is best understood as a process rather than a state-based construct (Yoval-Davis 2006). Importantly, delineating the process first required us to identify previously unarticulated but focal elements within it. Our overall contribution, therefore, is that we develop and illuminate a broader and more refined lens to facilitate scholars' examination of the role belongingness plays in consumption. More specifically, we shed light on how people engage with various focal elements during the BP, and how that process unfolds, in their attempt to fulfill goals pertaining to social inclusion.

The Need to Belong Construct

Baumeister and Leary (1995) are the first to compile empirical evidence to support the existence of the NTB. They propose the NTB possesses two distinct features: 1) frequent personal contacts or (non-negative, ideally pleasant) interactions with others, and 2) perceptions of "an interpersonal bond or relationship marked by stability, affective concern, and continuation into the foreseeable future" (500). These features distinguish the NTB from other social needs; e.g., the need for attachment or social connection. For example, one's need for attachment can be met by maintaining a stable relationship filled with negative interactions, falling short of the NTB's requirement of pleasant personal contact. Or one may fulfill the need for social connection via brief stranger encounters, but never form a stable relationship, thus eschewing the second feature.

Consumer Behavior and Belonging

We assert that much extant consumer research relates to belonging, although belongingness-related theoretical constructs are often left unarticulated or undeveloped.

Social Exclusion. Consumer research often approaches belonging experimentally, treating social exclusion as an implicit proxy for a heightened NTB. Research finds consumers spend strategically after being excluded, demonstrating increased desires for goods and experiences that aspirational social groups valorize (Dommer et al. 2013). Extant findings suggest people are willing to sacrifice "personal and financial well-being for the sake of social well-being" (Mead et al. 2011, 902). The authors find such sacrifices include tailoring spending preferences to an interaction partner's preferences,

spending money on unappealing food favored by peers, and even an increased willingness to try cocaine, when doing so increases chances of social connections.

Brand Communities. One of the most relevant contexts linking belonging with consumption is the brand community, defined as a "specialized, non-geographically bound [and] based on a structured set of social relations among admirers of a brand" (Muniz and O'Guinn 2001, 412). This research acknowledges the importance of belonging – at least indirectly. McAlexander and colleagues (2002) suggest that one potential barrier to brand community participation is the fear of not belonging. Importantly, newer members' fears are partially alleviated when experienced members initiate interactions with newcomers (McAlexander et al. 2002, 46-7).

Context

Belonging is frequently studied in education-based contexts. In university contexts, research finds students' identities may change, depending on the specific groups, times, and places in which they interact, demonstrating the enacted nature of belonging (Bhopal 2008). Such relocation implies students' social relationships are disrupted, especially for freshmen, transfer students, and international students. Consequently, we follow precedents from social psychology and sociology and consider the university campus a conducive context for examining belonging.

Our context is a large Midwestern university serving over 45,000 students (30,000 undergraduates). Tuition averages approximately \$27,000/year in-state and \$41,000/year out-of-state. Though 73% of undergraduates are in-state, about half come from a large city over 120 miles away. In two phases, we study general college students and then a specific honors program.

Methodology

We employed qualitative methods to understand how students use consumption to pursue belongingness. Two researchers acquired a dataset composed of written narratives pertaining to consumption and belonging by eighty-three undergraduate business students. Narratives require participants to organize experiences in temporally meaningful episodes, framing experiences as "'part' of a whole... and that something is a 'cause' of something else" (Polkinghorne 1988, 6). We recruited these students from two classes, offering extra credit for voluntary participation.

While our initial narrative sample provided breadth, the first author engaged in a longitudinal exploration of a second specific cohort in the college. Specifically, he conducted an ethnography in a college honors program to study how the students selected for this community establish and maintain belongingness. These honor students must enroll in four courses restricted to the cohort during their freshman and sophomore years, and are strongly encouraged to participate in an international immersion experience at the end of their freshman year.

Refined Research Questions

We began with one broad research question: "How do people proactively leverage consumption to enhance their sense of belonging?" We found our analysis demonstrated that consumers' belonging experiences involve constructs previously unidentified in either the NTB or sense of belonging conceptualizations. Furthermore, our longitudinal phase provided deep insights not only into how these

constructs intersect, but how belonging unfolds as a process, and how consumption practices foster and fit into this process. Thus, our analysis necessitated refining our original research question, and breaking it into two, as follows: 1) What elements structure the BP? and 2) How do these elements relate to each other and contribute to the BP?

Findings

Elements and their Enactment in the Belonging Process

Cultural Context. All belonging processes are embedded in a specific cultural context. Ours is a North American university campus in the Midwest, which encourages a broad range of extracurricular activities. It is also embedded within a first-world consumer culture, containing aspirational middle and high income consumption patterns. These characteristics are important as they shape the cultural norms and behaviors, which may be very distinct from a university in a different country or even from different colleges accommodating lower or higher-income consumers. Darryl, a university administrator, articulates how these broad cultural forces may influence the students, "...students don't like to brag about [being] in the honors program because I think we have a little bit of a Midwest value set.... That's a different context than I see in other schools, but they're very supportive of each other..."

Belonging Targets. Belonging targets (hereafter; targets) are the social entities within which one aims to belong. Consistent with prior research on the level of analysis of belonging, targets emerge on three distinct structural levels: macro, meso, and micro (Christenson 2009). Utilizing Christenson's (2009) framework, we describe macro targets as "imagined communities," resembling a concept broader than a specific collective of people (such as national, kinship, religious, or cultural groups). We employ the term meso to describe social entities in which a consumer may interact with other members, but still does not know everyone within the target. Finally, we reserve the term micro targets for social entities in which a consumer knows and interact with everyone in the group; this is usually limited to a small number of individuals. One informant provides an example of how she conceptualizes her university as a macro-level target, and how she belongs in it:

Belonging in a group so vast and diverse happens more in terms of values than relationships. My sense of being a student is similar to the sense of citizenship one feels for their country; there are some shared priorities and behaviors,...but little direct connection with the many subcultures that exist (NARR, WF, 21).

Belonging Conduits. Belonging conduits are the resources both from the marketplace and other sources consumers leverage to facilitate belongingness pursuits. One informant notes that once he bought his Sperry Topsiders, "I felt like I belonged to a group, community, and culture. The group was my fraternity...the community was all of Greek life on campus, and the culture was...Greek culture [as a whole]." (NARR, WM, 21) The plethora of consistent research noting linkages between branded clothing and a strong sense of self, and affiliation with a group supports the salience of this finding (e.g., Chaplin and John 2004; Fernandez 2009). Significantly, we observe that technology products like smartphones and gaming gear can act as both functional and symbolic conduits, while apparel, accessories and jewelry are primarily symbolic. Similar to how a consumer may rely on a symbolic product to reinforce family identity, our consumers leverage these conduits to enhance belongingness within their targets (Epp and Price 2008). One gamer notes he needed an Xbox "to interact with my friends the way I wanted to...[it] helped me

become even closer to [them] and eliminated our distance barrier." (NARR, WM, 21) As such, consumers rely on conduits to transcend limitations rooted in time and space, barriers that otherwise could contribute to the weakening of social ties (Otnes et al. 2014).

Belonging Cues. Alternatively, consumers' selection of conduits may also depend on perceived cues, defined as the signals informants perceive as helping them track their progress toward the ultimate goal of belonging within the target. Extant research finds people often monitor others' actions to assess evidence of their own exclusion (Leary et al. 1995; Loveland et al. 2010). In like fashion, we find evidence of informants monitoring others (and themselves) as they proactively pursue belonging and acceptance. The data suggest two types of cues exist: external and internal. External cues derive from consumers' observations of others' behaviors, while internal cues originate from their own self-realizations.

Belonging Barriers. Lee and Shrum (2012) identify two types of belonging threats: being rejected and being ignored. However, our data support a broader interpretation of hindrances to belonging that extend beyond mere ostracism. We find evidence of belonging barriers, defined as enduring forces that hinder people from achieving belongingness within a target. A participant explicitly indicates how he did not achieve belongingness within the program due to demographic variables:

Our class is primarily White females. And guess what demographic I've had the least contact with? White females.... Asian guys and White girls don't mix. I don't mind, but other people do....I just noticed that they're [students in honors cohort] mostly women."

Zack clearly identifies gender and race as two sociological factors he believes impact his ability to belong in his honors program.

Belonging Outcomes. We use this term to capture the various belonging-related goals consumers desire and proactively pursue. These outcomes relate to their general perceptions and feelings of belonging, and manifest across a broad spectrum, from engaging in simple interactions or establishing strong, stable relationships within a target. In fact, while extant research links positive social interactions to belonging and acceptance (Baumeister and Leary 1995), consumers even express just having non-negative interactions as desirable outcomes. For example, a young African-American woman compares the negative reactions that White people sometimes express toward her natural-state hairstyles, to post-purchase experiences after she undergoes professional hair-straightening:

Although many are unconscious of it, straight hair is more accepted, and less threatening to others in this society; and I would prefer to be unnoticed but accepted than to be ostracized. However, when unnoticed, there are not many affirmations that you are accepted. (NARR, AAF, 21)

As this young woman frequently straightens her hair, she knows the type of reactions she will garner after purchasing a relaxant. More importantly, she understands the (negative) reactions she will avoid. She relies on this particular consumption activity to manage the stigma of "natural" hair (Crosby 2012) and explains how even the absence of negative reactions can serve as a reflection of acceptance.

Importantly, these quotes evidence desired outcomes beyond simply fulfilling the NTB or establishing a sense of belonging. Our data demonstrates consumers may simply aim to belong functionally, or "fit in just enough" to go unnoticed, or, to be accepted (NARR, AAF, 21).

The Belonging Process

This section demarcates the interrelationships among the various elements of the belonging process. The cultural context shapes and influences all of the elements, as it encompasses the entire process. Importantly, this impact includes the social context of a consumer's intended belonging target. Within a target, a consumer may live through a variety of experiences that lead to specific outcomes, and we emphasize those pertaining to consumers' conscious pursuit of belonging outcomes.

The nature of the target will shape how consumers evaluate potential marketplace resources (i.e. conduits) to achieve particular outcomes. Targets can influence the selection of conduits explicitly, directing a consumer's attention toward specific consumption opportunities (e.g., branded shirts of a student club, the honors program strongly encouraging students to participate in the international trip) that can enhance belonging. Conversely, the influence of a target on conduits can be less overt, as a target can merely act as an information source that communicates to the consumer what consumption activities the target (de)values.

Discussion

Our findings demarcate key theoretical constructs to help illuminate the process of consumers' efforts to belong. The identification of these constructs allows scholars to be more precise when designing research studies. More importantly, we theorize how the constructs operate in relation to one another, forming the belonging process. The process we theorize reveals important belonging/consumption issues beyond the scope of NTB and sense of belonging conceptualizations. Thus, we move beyond the compensatory perspective of restoring belonging needs and illuminate a previously overlooked area in consumer/belonging research, that is, consumers' proactive pursuit of belonging. Here, we highlight a variety of marketplace resources that may facilitate belonging, the role targets may play in shaping consumers' preferences, and alternative belonging-laden outcomes beyond attaining a sense of belonging and fulfillment of the NTB.

Conclusion

We find support for emergent constructs and classifications that pertain to consumers' belongingness desires. We discuss five elements essential to the BP: cultural context, targets, conduits, cues, barriers, and outcomes. We offer preliminary theorization of how these emergent constructs relate to each other. Our research contributes to work on identity, belonging, and consumption by advancing understanding on the processual nature of consumers' proactive pursuit of belonging, heretofore unexamined in consumer behavior. The belonging process we propose provides scholars with a theoretical foundation to build upon and advance the nascent research link between belonging and consumption.

REFERENCES

- Baumeister, R. F., & Leary, M. R. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3), 497.
- Bhopal, K. (2008). Shared Communities and Shared Understandings: the Experiences of Asian Women in a British University. *International Studies in Sociology of Education*, 18(3-4), 185-197.
- Chaplin, L.N. and John, D.R., 2005. The Development of Self-Brand Connections in Children and Adolescents. *Journal of Consumer Research*, 32(1), 119-129.
- Christensen, A. D. (2009). Belonging and Unbelonging from an Intersectional Perspective. *Gender, Technology and Development*, 13(1), 21-41.
- Dommer, S. L., Swaminathan, V., & Ahluwalia, R. (2013). Using differentiated brands to Deflect Exclusion and Protect Inclusion: The Moderating Role of Self-Esteem on Attachment to Differentiated Brands. *Journal of Consumer Research*, 40(4), 657-675.
- Fernandez, P. R. (2009). Impact of Branding on Gen Y's Choice of Clothing. *Journal of the South East Asia Research Centre for Communications and Humanities*, 1(1), 79-95.
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Individual differences in the Need to Belong: Mapping the Nomological Network. *Journal of Personality Assessment*.
- Loveland, K. E., Smeesters, D., & Mandel, N. (2010). Still Preoccupied with 1995: The Need to Belong and Preference for Nostalgic Products. *Journal of Consumer Research*, 37(3), 393-408.
- Mahar, A. L., Cobigo, V., & Stuart, H. (2014). Comments on Measuring Belonging as a Service Outcome. *Journal on Developmental Disabilities*, 20(2).
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370.
- McAlexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Building Brand Community. *Journal of Marketing*, 66(1), 38-54.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2011). Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation. *Journal of Consumer Research*, 37(5), 902-919.
- Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning Environment, Interaction, Sense of Belonging and Study Success in Ethnically Diverse Student Groups. *Research in Higher Education*, 51(6), 528-545.
- Muniz Jr, A. M., & O'guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412-432.
- Otnes, Cele C., J.A. Ruth, and Elizabeth Crosby (2014), "Product-Agency Benefits: Consumer Perspectives and Strategic Implications," *European Journal of Marketing*, 48 (5/6), 878-98.
- Polkinghorne, Donald (1988), *Narrative Knowing and the Human Sciences*, Albany: State University of New York Press.
- Sandelowski, M. (1991). Telling stories: Narrative approaches in Qualitative Research. *Image: the Journal of Nursing Scholarship*, 23(3), 161-166.
- Schouten, J. W., & McAlexander, J. H. (1995). Subcultures of Consumption: an Ethnography of the New Bikers. *Journal of Consumer Research*, 22(1) 43-61.
- Yuval-Davis, N. (2006). Intersectionality, Citizenship and Contemporary Politics of Belonging. *Critical Review of International Social and Political Philosophy*, 10(4), 561-574.

Catching the Health Wagon: Consumers' Strategies of Control in Healthy Food Consumption

S. Sinem Atakan, Ozyegin University, Turkey
Meltem Ture, Université de Lille, France

EXTENDED ABSTRACT

Debates about healthy food have once again come to the fore as obesity rates increase in most parts of the world and more people suffer from diet-related illnesses. In the contemporary consumption-scape where meanings assigned to food items and practices of cooking and eating are fluid and ever-changing, it is becoming more and more challenging for consumers to practice healthy food consumption. The current research focuses on this issue and investigates how consumers, in interaction with other actors, establish the practices related to healthy food consumption.

In order to explore the topic, a two-step research methodology was used. First, a multi-sited netnography (Kozinets, 2010), on four websites (discusscooking, cookingbites, SparkPeople, eggheadforum) consisting a total of 4000 consumer posts, was conducted. The sites were chosen due to their high circulation rate and diversity of the posts related to food preparation and consumption. Then, semi-structured in-depth interviews with six consumers and 10 dieticians provided further insights. The consumer informants were chosen among consumers who declared an interest in healthy eating and/or cooking. The interviews with consumers started with general questions about daily eating and meal preparation routines and moved onto more specific inquiries about healthy food, healthy eating, and food preparation. The interviews with dieticians depicted multiple discourses around healthy food consumption and processes of behavioural change.

The data set was coded and analysed with research goals in mind; first separately, then altogether by comparing and contrasting within and between the texts from interviews and netnography. Data analysis followed an iterative process and was in constant dialogue with the literature. Analyses revealed four strategies that consumers use to eat healthily and, ultimately, gain control over their bodies and lives: 1) relocating the locus of control to external actors, 2) shifting the focus away from food, 3) planning in advance, and 4) cooking.

Relocating the locus of control: In a world where people occasionally feel out of control of their own body, well-being, and even their future, some consumers paradoxically find it necessary to temporarily relinquish control in order to regain some power over their life in the long-term. Control is transferred to external parties such as dieticians and renowned experts or even to sports and diet applications. External agency keeps consumers in check by provoking feelings of fear, anticipation, and anxiety:

Pauline: It (seeing a dietician) motivates you, well, you know, when you do not have the willpower. Someone to continuously watch over you, follow you...and you pay, you know, it motivates... cause the fear of not showing any improvements in the next appointment, I mean, it makes you, you know, go...

The interaction with the external agency (e.g., dietician) is not one without any problems. The educative process fails when consumers resist submitting to the authority of the dieticians in the first place. Such resistance is specifically prominent among children and teenage patients as well as when the individual goes to the dietician without her own will.

Shifting the focus away from food: Another strategy through which consumers regain some control over their diet is by forming a more functional relation with food:

Alice: Before, food was priority, a culture. Now the logic is to eat as little as possible. ...I don't eat unless hungry, I avoid occasions to eat...

In some cases, consumers replace eating with activities that further destroy their self-control (e.g., smoking, extreme shopping). However, many find healthier alternatives such as exercising.

Planning in advance: Healthy eating and cooking are associated with a great deal of planning in advance. Planning involves projecting on activities of what to cook and therefore what to buy, cooking ahead in batches and freezing in single-serve portions, as well as daily planning of the ideal balancing of the food intake. Such planning and cooking ahead affects healthy consumption through four positive (availability of healthy food, portion control, efficiency, sense of control/confidence) and two negative (overconsumption due to availability, frustration due to over-planning) routes.

Cooking as a form of control: Cooking provides higher control over the ingredients and the process. However, a complementary explanation that emerges from our dataset is that the effort one invests into preparing a meal make the consumers more committed to the food produced and, consequently, to a dietary regime based on health concerns. Cooking also leads to a healthier diet by enhancing consumers' awareness of what goes into a meal and, consequently, appreciation of the activity. Consumers describe this as a form of education, during which they not only enhance their cooking skills but also "train their taste buds to appreciate healthy food".

This study extends the discussion that consumers try to establish a sense of control by moderating their food consumption when they feel powerless in other domains of life (Rezek and Leary, 1991). We found the pursuit of health to be perpetual, full of uncertainties, and a source of anxiety for consumers. The strategies of control we delineated above help consumers navigate those dynamic discourses. Hence, while the pursuit of healthy eating can add to the feelings of stress, distrust, and confusion – trademarks of postmodern times – it can, at the same time, provide consumers with a sense of control over their lives and hope for their future wellbeing.

Our findings have significant implications for researchers, managers, and policy makers. We observed that high levels of planning may have negative consequences and should be done in moderation to prevent cognitive overload. Furthermore, when consumers give up unhealthy food or try to shift their focus from eating, they usually need other activities to broaden their horizons. Moreover, our analyses hint at tensions between dieticians and consumers as the latter tries to form a balance between submission and autonomy. Future research could focus on such tensions as well as their resolutions to reveal new forms of value co-creation in service environments.

1. Introduction

As obesity rates increase and more people suffer from diet-related illnesses (e.g., diabetes, cancer), food consumption has again become the centre of attention. Consumers, marketers, policy-makers as well as governmental and civil organizations have been debating

over the definition of healthy food and its standards. Considering that people may consume more food when it is presented as healthy (Finkelstein and Fishbach, 2010), these debates are timely and understandable. The current research explores how consumers, in interaction with other actors, establish the practices related to healthy food preparation and consumption.

We draw from a data set collected through a multi-sited netnography (4000 consumer posts) and 16 interviews with dieticians as well as consumers. The findings highlight a constant use of control strategies that involve food, the self, and external agents. Specifically, we find four strategies through which consumers pursue health, regulate their diet, and gain a sense of control over their well-being.

2. Food Consumption and Health

Research from the marketing field mostly focuses on food choice, amount of food intake, and how food consumption is influenced by contextual factors such as plate size, ads, packaging, ambiance in the restaurant (e.g., colour, music), and meal companions (Chandon and Wansink, 2007; Wansink and Cheney, 2005). Other research explores the relation between participation in meal preparation processes and perception of food. These studies find that consumers positively evaluate a meal whose preparation they participated (Troye and Supphellen, 2012). On a more negative note, adults (Dohle, Rall, and Siegrist, 2014) and children (Van der Host, Ferrage, and Rytz, 2014) can eat more when they prepare the meals themselves. This argument is supported by other researchers who have shown that people perceive home-made meals (whether prepared by them or not) as healthier (Costa et al., 2007) and, therefore, likely to consume more of it (Finkelstein and Fishbach, 2010).

From a socio-cultural perspective, symbolic meanings of food have been the centre of attention for researchers. Food items and food preparation and consumption practices help consumers manifest and affirm their commitment to ancestral roots and group identities or facilitate their integration into a new culture (Beagan, Ristovski-Slijepcevic, and Chapman, 2010; Kniازهva and Venkatesh, 2007; Wallendorf and Arnould, 1991). Food preparation techniques (e.g., boiling, fondue) and ability to appreciate and consume specific food items may distinguish consumers and social groups (Levi-Strauss, 1966). Particularly, eating out is a sign of taste and status, a form of entertainment (Warde and Martens, 2000), and a stage to perform social roles (Finkelstein, 1989). From this perspective, health concerns constitute one of the many constraints consumers face in their daily food consumption. That is, consumers negotiate multiple meanings of preparing food at home, buying processed food, or eating out in trying to regain control over their families' and their own well-being and social as well as financial needs.

Food consumption has also been studied more critically. Choices related to food or food preparation practices can be ways for consumers to contest negative aspects of consumerism or broad political issues (Beagan et al., 2010; Press and Arnould, 2011; Sasatelli, 2006). For instance, Beagan et al. (2010) show that for most consumers, who define themselves as committed to eating healthily, this practice is part of a broader concern for ethical consumption. Similarly, abstinence from specific food items helps consumers achieve a healthier lifestyle as well as resist consumer myths and authorities they don't trust (Kristensen, Boye, and Askegaard, 2011). Natural food is viewed as more authentic than fast food and processed alternatives (Levy, 1981). In addition, food preparation practices, especially cooking "from scratch," is defined as a form of craft through which consumers resist the impersonalizing and standardizing effects of the marketplace (Moisio, Arnould, and Price, 2004; Ulver-Sneistrup, Askegaard, and Kristensen, 2011).

Thus consumers, through various food consumption practices, restore their autonomy on others' and their own lives amidst the issues that are normally out of their control. Our research aims to further explore this topic by focusing on consumers' practices of cooking and eating healthily.

3. Methods

This study uses a two-step research methodology. First, a multi-sited netnography (Kozinets, 2010), on four websites (discusscooking, cookingbites, SparkPeople, eggheadforum) consisting a total of 4000 consumer posts, was conducted. These sites were chosen due to their high circulation rate and diversity of the posts on the topic. Then, semi-structured in-depth interviews were conducted with 10 dieticians and six consumers, who declared an interest in healthy eating and/or cooking. Some informants had, at one point of their lives, sought help from dieticians in order to regulate their eating habits. The interviews with consumers started with general questions about daily eating and meal preparation routines and moved onto more specific inquiries about healthy food, healthy eating, and food preparation. The interviews with dieticians revealed multiple discourses around healthy food consumption and processes of behavioural change. They also highlighted the tensions between "the official" notions of healthy food, and consumers' perceptions and actual practices of food preparation and eating.

The data set was coded and analysed with research goals in mind; first separately, then altogether by comparing and contrasting within and between the texts from interviews and netnography. Data analysis followed an iterative process and was in constant dialogue with the literature. The initial data interpretation revealed emerging themes and new questions that guided further data collection and analysis until the saturation.

4. Findings

Our analyses revealed four strategies through which consumers eat healthily and, ultimately, gain control over their bodies and lives: 1) relocating the locus of control to external actors (e.g., dietician, application), 2) shifting the focus away from food, 3) planning in advance, and 4) cooking to control food intake and content.

4.1. Relocating the locus of control

In a world where people occasionally feel out of control of their own body, well-being, and even their future, some consumers paradoxically find it necessary to temporarily relinquish control to regain autonomy over their life in the long term. Control is transferred to external parties such as dieticians and renowned experts or even to diet applications.

Going to a dietician, where consumers regularly write or talk about food, brings subconscious thought and behaviours to the surface, helping consumers to reflect on these. It forms a type of control first by creating a fear for "...what will the doctor say when s/he sees what I have eaten?" Then, it makes consumers think about what or how much to eat and, as such, helps them control their urges in daily life or in social gatherings.

The idea of a dietician frequently activates a control mechanism that keeps consumers in check by provoking feelings of fear, anticipation, and anxiety:

Pauline: It (seeing a dietician) motivates you, well, you know, when you do not have the willpower. Someone to continuously watch over you, follow you...and you pay, you know, it motivates... cause the fear of not showing any improvements in the next appointment, I mean, it makes you, you know, go...

Pauline's narrative illustrates how some consumers willingly submit to a regimen of discipline and punishment (e.g., reducing the amount of some food items) to compensate for their lack of internal control. Yet, dieticians' main goal is to gradually re-establish, in the long term, consumers' autonomy and positive perceptions over their diet, body, and health.

As dietician Haley explains "our aim is to teach them the ways to a healthy life, healthy food...make sure they can maintain this throughout their lives...it's really not about dieting." Yet, this educative process fails when consumers resist dieticians' authority. Such resistance is specifically prominent among children and teenage patients as well as when the person goes to the dietician without her own will.

4.2. *Shifting the focus from eating*

Consumers can also regain some control over their diet - hence their health and well-being - by forming a more functional relation with food:

Alice: Before, food was priority, a culture. Now the logic is to eat as little as possible. ...I don't eat unless hungry, I avoid occasions to eat...

While keeping food out of the focus of their lives comes naturally to some consumers, others may need external motivation and more time. As dietician Haley highlights, food is dangerous when people use it as a crutch to deal with their problems or as a goal to reach. Dieticians can help patients to keep food at bay and, as such, to exert more control on their consumption.

When consumers give up unhealthy food or try to shift their focus from eating, they usually need other activities to broaden their horizons and branch out into other aspects of life. In some cases, consumers replace eating with activities that further destroy their self-control such as smoking or extreme shopping. However, many find healthier alternatives such as exercising:

Amy: I can feel an ornery streak coming my way today. I am already thinking about Oreos. I gotta get outside and do more walking.

4.3. *Planning in advance*

Healthy eating and cooking are associated with a great deal of planning in advance. Especially when dieting, consumers, usually with the help of their dieticians or applications, calculate the necessary daily food intake and plan what to eat in each meal. We observe different types of planning activities such as preparing and taking healthy snacks to business meetings so as not to miss meal times or developing strategic menu alternatives for vacations. Thus, planning activities "re-contextualize" eating in specific consumption situations like vacations (Ostberg, 2003) and help consumers negotiate their urges and requirements of their diet.

Planning is not limited to consumers who are following a strict diet but a part of a daily routine for those who want to eat healthy. For instance, Bella, a housewife responsible for preparing meals at home, synchronizes her shopping and cooking activities:

Bella: I go to farmer's market and walk around a few times to find good stuff, you know...if I bought spinach I would cook it first, potatoes, cabbage, they can wait... Cabbage, like, changes its taste if you keep it long because of sulphur...according to the vegetable and their expiration time, I plan what to cook, buy...

Consumers also cook in advance to increase the availability of healthy meals. This way, when consumers are exhausted and tired, rather than ordering unhealthy meals, they can eat home-made food. Planning and cooking in advance also enables portion control. When consumers cook, they divide the large batch into smaller portion sizes and store in single-serving containers. This enables self-control over consumption later on.

Planning meals in advance and/or cooking in batches enhance efficiency and, hence, leaves more "me" time as Nathalie states: "once you cook it its good for 3 months so you can send more ME time." The extra time can be used to attend to one's own needs and indirectly exercise more autonomy on other aspects of life.

Furthermore, cooking in large batches and freezing in single-use portions creates a sense of readiness and control (or an illusion of it) for what's to come. Through food preparation, one is able to deal with the hardships of daily life - the challenges that the environment or oneself has created. From such readiness and knowledge of being prepared in the best possible way emerges a sense of self-confidence, control, and security:

Oddman: Most of the time I also try to make some dinners ahead that I can freeze and reheat. It's just nice to come home and know that I don't have to start from scratch.

Stacy: I find the more organized my food is (and how clean my house is, for some reason!) the better I do with weight loss!

Paradoxically, for some consumers, existence of food in the fridge creates an adverse effect, tempting them to consume food in large quantities. Such loss of control can be frustrating and lead consumers to invent new tactics such as preparing only specific things in advance for convenience:

Amanda: I don't find that cooking larger portions of meat ahead works for me, because I tend to go back and grab another portion if it's there. The only proteins I keep readily available are boiled eggs, small cheese portions, and nuts.

4.4 *Cooking as a form of control*

As previous research indicates, our data also reveals that cooking provides higher control over the ingredients and the process. However, a complementary explanation that emerges from our dataset is that the effort one invests into preparing a meal make the consumers more committed to the food produced and, consequently, to a dietary regime based on health concerns. The dietician interviews also indicate that among their patients, those who cook and prepare their meals at home have a higher success rate and are better at adapting to their diet for longer terms:

Dietician Marvin: ..those who prepare their meals are more committed to their diets...it's controlling what you eat.... they regard it (their diet) as "my own labor, like hardwork."

Cooking can also lead to a healthier diet by enhancing consumers' awareness of what goes into a meal and, consequently, their appreciation of the activity. Consumers describe this as a form of education, during which they not only enhance their cooking skills but also "train their taste buds to appreciate healthy food".

5. Discussion and Implications

Food items and practices associated with it can become focal to our lives by strengthening our relation with our environment and contextualizing our experiences (Borgmann, 2000). Building on this

view, this study extends the debates that consumers try to establish a sense of control by moderating their food consumption when they feel powerless in other domains of life (Rezek and Leary, 1991). Indeed, attesting to Bauman (2012), we found the pursuit of health – in our case, healthy eating – to be full of uncertainties and a source of anxiety for consumers. Such uncertainty and anxiety is nurtured both by the simultaneous existence of multiple views – and choosing which to follow, integrate or ignore – and by the quick changes in the discourses surrounding health and food. While these emotions may lead some consumers to reject the official notions of health, the strategies of control delineated above help consumers navigate those dynamic discourses. Hence, while the pursuit of healthy eating can add to the feelings of stress, distrust, and confusion it can also enhance consumers' sense of control over their lives and hope for their future wellbeing.

Our findings have significant implications for researchers, managers, and policy makers. We observed that high levels of planning may have negative consequences and should be done in moderation to prevent cognitive overload. Furthermore, when consumers give up unhealthy food or try to shift their focus from eating, they usually need other activities to broaden their horizons. Moreover, our analyses hint at tensions between dieticians and consumers as the latter tries to form a balance between submission and autonomy. Future research could focus on such tensions as well as their resolutions to reveal new forms of value co-creation in service environments.

REFERENCES

- Arnold, S. J. & Fischer E. (1994). Hermeneutics and Consumer Research. *Journal of Consumer Research*, 21(1), 55-70.
- Bauman, Z. (2012). *Liquid Modernity*. Cambridge: Polity Press
- Beagan, B.L., Ristovski-Slijepcevic, S. & Chapman, G.E. (2010). 'People are Just Becoming More Conscious of How Everything's Connected': Ethical Food Consumption in Two Regions of Canada. *Sociology*, 44(4), 751-769.
- Borgmann, A. (2000). The Moral Complexion of Consumption. *Journal of Consumer Research*, 26(4), 418-422.
- Chandon, P., & Wansink, B. (2007). The Biasing Health Halos of Fast-Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-dish Consumption Intentions. *Journal of Consumer Research*, 34(3), 301-314.
- Costa, D.A., Schoolmeester, D., Dekker, M., & Jongen, W. (2007). To Cook or Not to Cook: A Means-end Study of Motives for Choice of Meal Solutions. *Food Quality and Preference*, 18(1), 77-88.
- Dohle, S., Rall, S., & Siegrist, M. (2014). I Cooked it Myself: Preparing Food Increases Liking and Consumption. *Food Quality and Preference*, 33(April), 14-16.
- Finkelstein J., (1989). *Dining Out: A Sociology of Modern Manners*. New York: New York University Press.
- Finkelstein, S., & Fishbach, A. (2010). When Healthy Food Makes You Hungry. *Journal of Consumer Research*, 37(3), 357-367.
- Kniazeva, M., & Venkatesh, A. (2007). Food for Thought: A Study of Food Consumption in Postmodern US Culture. *Journal of Consumer Behaviour*, 6(6), 419-435.
- Kozinets, R. V. (2010). *Netnography: Doing Ethnographic Research Online*. Los Angeles, CA: Sage publications.
- Kristensen, D. B., Boye, H., & Askegaard, S. (2011). Leaving the Milky Way! The Formation of a Consumer Counter Mythology. *Journal of Consumer Culture*, 11(2), 195-214.
- Levi-Strauss, C. (1966). The Culinary Triangle (P. Brooks, Trans.). *The Partisan Review*, 33, 586-595.
- Levy, S.J. (1981). Interpreting Consumer Mythology: A Structural Approach to Consumer Behavior. *Journal of Marketing*, 45(3), 49-61.
- Moisio, R., Arnould, E. J., & Price, L. L. (2004). Between Mothers and Markets: Constructing Family Identity through Homemade Food. *Journal of Consumer Culture*, 4(3), 361-384.
- Jacob O. (2003). Functional Foods: A Health Simulacrum. In P. A. Keller and D.W. Rook (Eds.), *NA - Advances in Consumer Research*, Vol.30, (pp.129-134), Valdosta, GA: Association for Consumer Research.
- Press, M., & Arnould, E. J. (2011). Legitimizing Community Supported Agriculture through American Pastoralist Ideology. *Journal of Consumer Culture*, 11(2), 168-194.
- Rezek, P. J., & Leary, M. R. (1991). Perceived Control, Drive for Thinness, and Food Consumption: Anorexic Tendencies as Displaced Reactance. *Journal of Personality*, 59(1), 129-142.
- Sassatelli, R. (2006). Virtue, Responsibility and Consumer Choice: Framing Critical Consumerism. In J. Brewer and F. Trentmann (Eds.), *Consuming Cultures, Global Perspectives: Historical Trajectories Transnational Changes* (pp. 219-250). Oxford: Berg.
- Troye, S. V., & Supphellen, M. (2012). Consumer Participation in Coproduction: "I made it myself" Effects on Consumers' Sensory Perceptions and Evaluations of Outcome and Input Product. *Journal of Marketing*, 76(2), 33-46.
- Ulver-Sneistrup, S., Askegaard, S., & Kristensen, D. B. (2011). The New Work Ethics of Consumption and the Paradox of Mundane Brand Resistance. *Journal of Consumer Culture*, 11(2), 215-238.
- Van der Horst, K., Ferrage, A., & Rytz, A. (2014). Involving Children in Meal Preparation. Effects on Food Intake. *Appetite*, 79, 18-24.
- Wallendorf, M., & Arnould, E. J. (1991). "We Gather Together": Consumption Rituals of Thanksgiving Day. *Journal of Consumer Research*, 18(1), 13-31.
- Wansink, B., & Cheney, M. (2005). Super Bowls: Serving Bowl Size and Food Consumption. *JAMA: The Journal of the American Medical Association*, 293(14), 1723-1728.
- Warde, A. & Martens, L. (2000) *Eating Out: Social Differentiation, Consumption and Pleasure*. Cambridge: Cambridge University Press.

It Happens Because I'm Watching It: The Effect of Observing an Uncertain Event on Probability Estimation

Amin Attari, University of Kansas, USA
Promothes Chatterjee, University of Kansas, USA
Frank Cabano, University of Kansas, USA

EXTENDED ABSTRACT

Many of decisions that people make deal with assessing the probabilities of uncertain events. For example, people estimate the chance of rain, the odds of their favorite team winning the Super Bowl, or the chances of a company's stock price increasing. Subsequently, people form preferences and make decisions based on their judgments of subjective probabilities. Because of the prevalence and importance of probability estimation, a large body of research has investigated different factors that can influence probability judgments. The findings show that people have biases in estimating the subjective probabilities of uncertain events. These biases can lead individuals to either overestimate or underestimate the subjective probabilities. Examples of these biases include anchoring, availability, and representativeness (Tversky and Kahneman 1974). Moreover, it has been shown that illusion of control is a bias that can lead individuals to overestimate the subjective probabilities (Langer 1975; Hamerman and Johar 2013). For instance, as a result of an illusory sense of control, people make larger bets when they roll the dice themselves (Langer 1975), are less likely to trade their lottery ticket when they choose (vs. are given) the ticket numbers (Langer 1975), and prefer higher speeds as a driver versus a passenger (McKenna 1993).

In this research, we investigate whether observing the occurrence of an uncertain event affects probability estimation of that event. We hypothesize that people overestimate the likelihood of a positive outcome happening when they observe (vs. do not observe) the uncertain event unfolding in front of them. For a similar reason, we expect that individuals underestimate the chances of a negative outcome happening when they observe the occurrence of the event. We rule out alternative explanations (such as involvement and wishful thinking) and show that the results are attributed to individuals' illusion of control. That is, when people observe (vs. do not observe) the occurrence of an event, they have the illusion that they can control the outcome of the event in their own favor. This illusory sense of control leads to a biased estimate of subjective probabilities. We provide support for our hypotheses in four studies.

Study 1 tested the hypothesis that consumers overestimate the likelihood of a positive outcome happening (and similarly, underestimate the chances of a negative outcome occurring) when they observe the uncertain event unfolding in front of them. One hundred and thirty two students participated in the study for course credit. Participants were randomly assigned to a condition in a 2 (valence: positive vs. negative) \times 2 (watching: yes vs. no) between subjects design. Participants were instructed to imagine a scenario in which they had made a bet with a friend that their favorite football team would win (not lose) the upcoming game. The scenario added that the game would start in a few hours. Participants in the watching condition imagined that at the time of the game, they would be at home and would watch the game live on TV. Participants in the not watching condition imagined that at the time of the game, they would not be at home and would not watch the game live on TV. Participants indicated the likelihood that their team would win (lose) the game and therefore they would win (lose) the bet (1 = extremely unlikely; 7 = extremely likely), as well as the chances that their team would win the game (on a 0-100 probability scale). Four participants were

excluded from the analysis since they failed to answer an attention check question.

An ANOVA on the likelihood of winning the game as the dependent variable and valence and watching as factors revealed a main effect of valence ($F(1, 124) = 10.09, p < .001$). Participants indicated higher likelihoods for the occurrence of the outcome when we asked them about chances of winning ($M = 5.02$) versus chances of losing ($M = 3.63$). This finding is in line with prior research on optimistic bias, which argues that people are optimistic in making probability judgments of future events (Chambers, Windschitl, & Suls 2003; Weinstein 1989). More importantly, the main effect of valence was qualified by a significant interaction between watching and valence ($F(1,124) = 10.09, p = .002$). Simple contrasts show that there was an effect of watching for the positive valence ($M_{\text{watching live}} = 5.32$ vs. $M_{\text{not watching live}} = 4.70, t(59) = 2.35, p = 0.02$), as well as an effect of watching for the negative valence ($M_{\text{watching live}} = 3.30$ vs. $M_{\text{not watching live}} = 3.94, t(59) = 2.185, p = .03$). Similarly, an ANOVA on the chances of winning the game (on a 0-100 probability scale) as the dependent variable, and watching and valence as factors revealed a main effect of valence ($F(1, 124) = 51.57, p < .001$). Participants indicated that the likelihood of the occurrence of the outcome was higher when we asked them about the chances of their team winning ($M = 60.36$) versus chances of their team losing ($M = 42.31$). More importantly, there was a significant interaction between watching and valence ($F(1,124) = 5.63, p = .02$). Simple contrasts reveal that there was a directional (although not statistically significant) effect of watching for the positive valence ($M_{\text{watching live}} = 62.00$ vs. $M_{\text{not watching live}} = 58.67, t(59) = .97, p = .34$), and a significant effect of watching for the negative valence ($M_{\text{watching live}} = 37.94$ vs. $M_{\text{not watching live}} = 46.56, t(59) = 2.37, p = .02$). These findings provide support for the hypothesis that individuals who observe (vs. do not observe) the occurrence of an event make biased estimates regarding the likelihood of the occurrence of an outcome in their own favor.

Experiment 2 was designed to rule out a semantic anchoring explanation (related to the use of words "will" or "will not" in the first experiment). Seventy two (42 men) participants recruited from MTurk were randomly assigned to one of the two conditions: watching vs. not watching. A scenario similar to study 1 was used. Participants in both conditions were asked to imagine that their favorite football team was going to play in an important game the next night at 6pm. The description told participants in the watching (not watching) condition that they were going to watch the game live on TV (do some pre-planned activities). To prevent semantic anchoring, no positive or negative words (will or won't) were used. At the end, we asked participants to indicate their opinions on the chances of their team winning the game on a 0-100 scale. Six participants were excluded from the analysis since they failed to imagine the scenario correctly according to an attention check question. As expected, participants assigned significantly higher probabilities to their team winning the game in the watching condition ($M=60.42, SD=15.11$) compared to the not watching condition ($M = 52.31, SD = 21.13, t(64) = 1.72, \text{one-tailed } p < 0.05$).

The objectives of experiment 3 were two-fold: (1) to demonstrate the robustness of our effect with a behavioral manipulation, and (2) to rule out some alternative explanations. The study used a

single factor (watching: live vs. recorded) between participants design. Eighty six students from a major Midwestern university participated in the study for course credit. Participants in both conditions participated in a card game in which the researcher had ten random cards from the deck. The ten cards consisted of different numbers and suits. The participants were told that the researcher would randomly select one of the cards. If the researcher selected a heart, the participant would win and if the researcher selected a card with another suit, the participant would lose the game. Participants in the live condition were told that they would be watching the game unfold in front of their eyes, while participants in the recorded condition were told that they would watch a previously recorded video of the game. After watching the demonstration of the game, participants were asked about the likelihood that they thought they would win the game (1 = extremely unlikely, 7 = extremely likely).

Results show that participants in the live condition indicated higher likelihood to win compared to participants in the recorded condition ($M_1 = 3.24$ vs. $M_2 = 2.71$, $t(84) = 1.69$, one-tailed $p < .05$). Moreover, results indicated that there was no significant difference in the level of wishful thinking ($M_1 = 2.89$ vs. $M_2 = 3.08$; $t(84) = -.79$; $p = .43$), involvement ($M_1 = 3.30$ vs. $M_2 = 3.39$; $t(84) = -.27$; $p = .79$), interest ($M_1 = 3.24$ vs. $M_2 = 2.92$, $t(84) = .91$; $p = .37$), positive affect ($M_1 = 2.45$ vs. $M_2 = 2.57$, $t(84) = -.59$; $p = .56$), and negative affect ($M_1 = 1.34$ vs. $M_2 = 1.49$, $t(84) = -1.26$, $p = .21$) across the two conditions.

In experiment 4, we sought to gain process evidence for the effect of watching on individual's estimation of the likelihood of an event's outcome. One hundred and twenty participants (72 men, $M_{age} = 34.2$) recruited from MTurk were randomly assigned to one of two conditions: watching vs. not watching. In both conditions, participants were instructed to imagine that they would be playing in a game in which winning entailed choosing a blue ball from an urn that contained some blue and some red balls. The scenario added that the game was going to be held in an auditorium and an independent, trustworthy person would pick a ball for each participant. All participants for whom a blue ball was chosen would win and all participants for whom a red ball was chosen would lose. In the watching (not watching) condition, participants were told that they would see (would not be present to see) the game in the auditorium. Next, participants indicated their probability estimate of winning the game on a 1 (very low probability) to 7 (very high probability) scale. Then they responded to a 3-item illusion of control measure (adapted wording from Langens 2007), and the 20-item Desirability of Control Scale (Burger and Cooper 1979). Finally, to rule out an alternative explanation, participants indicated their level of wishful thinking ("To what extent do you wish to win this game?") on a 1 (not at all) to 5 (extremely) scale.

One-way ANOVA revealed that participants in the watching (vs. not watching) condition reported higher expectations of winning the game ($M_1 = 4.03$ vs. $M_2 = 3.53$; $F(1, 118) = 6.33$, $p = .01$) as well as higher levels of illusion of control ($M_1 = 2.95$ vs. $M_2 = 2.24$; $F(1, 118) = 4.72$, $p < .05$). Importantly, a bootstrapping analysis (with 10,000 samples) indicated that the illusion of control emerged as a significant mediator in the relationship between watching and probability estimate (illusion of control: indirect effect = .21, 95% CI: .04 to .46). As expected, the effect of watching on wishful thinking did not reach the conventional level of significance ($M = 4.13$ vs. $M = 3.86$; $F(1, 118) = 2.80$, $p = .10$). When entering wishful thinking as the mediator in a bootstrap analysis (10,000 samples), the results indicated no significant indirect effect of watching through wishful thinking upon expectations of winning the game (wishful thinking: indirect effect = .04, 95% CI: -.01 to .19). In addition, when enter-

ing both the illusion of control and wishful thinking as simultaneous mediators with 10,000 bootstrap samples (model 4; Hayes 2013), only the illusion of control emerged as a significant mediator in the relationship between watching and probability estimate (illusion of control: indirect effect = .20, 95% CI: .04 to .46; wishful thinking: indirect effect = .02, 95% CI: -.03 to .13). Finally, a moderated mediation analysis with 10,000 bootstrap samples (model 8; Hayes 2013) revealed that the illusion of control significantly mediates the relationship between watching and probability estimate at moderate (indirect effect = .19, 95% CI: .03 to .44) and high (indirect effect = .34, 95% CI: .08 to .71), but not low (indirect effect = .04, 95% CI: -.19 to .28) levels of desire for control. The same pattern of results remained when we included wishful thinking as a covariate in the model. Thus, watching the game unfold significantly increased the expectation of winning due to a heightened illusion of control, but only for those individuals who have a moderate or high need to possess a sense of control in their lives.

Taken together, the findings of this paper suggest that the mere observation of an uncertain event increases the subjective probability of the occurrence of a desirable outcome. In addition, the illusion of control emerges as the psychological process underlying this effect. This research adds to the two streams of research on subjective probability judgements and illusion of control by identifying a novel situational variable (the mere observation of an event) that increases the illusory perception of control and leads to a biased subjective probability estimate. Marketers can use the findings of this research by providing consumers with the opportunity to observe the occurrence of uncertain events (for example gambling or stock market). This would lead individuals to overestimate the probability of a desirable outcome and therefore engage in more risk taking behavior. Public policy officials can inform individuals about the downstream consequences of watching uncertain events (such as gambling) on overestimating the likelihood of a desirable outcome and consequently engaging in excessive risky behavior.

REFERENCES

- Burger, Jerry M., and Harris M. Cooper (1979), "The Desirability of Control," *Motivation and emotion*, 3 (4), 381-93.
- Chambers, John R., Paul D. Windschitl, and Jerry Suls (2003), "Egocentrism, Event Frequency, and Comparative Optimism: When What Happens Frequently is 'More Likely to Happen to me'" *Personality and Social Psychology Bulletin*, 29 (11), 1343-56.
- Hamerman, Eric J. and Gita V. Johar (2013), "Conditional Superstition: Desire for Control and Consumer Brand Preferences," *Journal of Consumer Research*, 40 (3), 428-43.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A regression-based approach*, New York: Guilford Press.
- Langer, Ellen J. (1975), "The illusion of control," *Journal of personality and social psychology*, 32(2), 311-28.
- McKenna, Frank P. (1993), "It won't Happen to Me: Unrealistic Optimism or Illusion of Control?" *British Journal of Psychology*, 84 (1), 39-50.
- Tversky, Amos and Daniel Kahneman (1974), "Judgment Under Uncertainty: Heuristics and Biases," *Science*, 185, 1124-31.
- Weinstein, Neil D. (1989), "Optimistic Biases about Personal Risks," *Science*, 246, 1232-33.
- Zhang, Ying, Ayelet Fishbach, and Ravi Dhar (2007), "When Thinking Beats Doing: The Role of Optimistic Expectations in Goal-Based Choices," *Journal of Consumer Research*, 34 (December), 567-78.

Authenticity Under Threat: When Social Media Influencers Need To Go Beyond Passion

Alice Audrezet, Institut Supérieur de Gestion, Paris, France
Gwarlann Caffier de Kerviler, Lille Catholic University, France
Julie Guidry Moulard, Louisiana Tech University, USA

EXTENDED ABSTRACT

Recent research has pointed out the emergence of new online actors, “social media influencers” or SMIs (Etter et al. forthcoming). SMIs are defined as “people who possess greater than average potential to influence others due to such attributes as frequency of communication, personal persuasiveness or size of—and centrality to—a social network.” With the growing success of many SMIs, companies are intensifying their investment in “word-of-mouth marketing” or WOMM (Kozinets et al. 2010). One of the reasons brands partner with SMIs is that they are considered trustworthy and “one of the few forms of real, authentic communication” (Scott 2015, 295). However, sometimes collaborating with brands may question this authenticity as SMIs’ inner desires to focus on products they are passionate about are challenged by commercial opportunities to showcase brands that they would not ordinary like. Despite growing research on influencers and acknowledged pressure of pursuing financial gains, past research has overlooked the challenges to remain authentic when collaborating with brands. As such, this research focuses on the question: What are the strategies of SMIs to maintain authenticity while they are under commercial pressure?

SMIs often start as non-professional contributors who share their daily life and respond to fan comments (Colliander and Erlandsson 2015). However, over time SMIs become professionals with a mass audience of followers and gain competence in generating sophisticated content such as creation of stories, videos, visuals, etc. (McQuarrie, Miller, and Phillips 2013). In turn, SMIs leverage their online influence to partner with brands and negotiate with sponsors. Their credibility might then be questioned as the persuasive effect of their messages is often attributed to their perceived noncommercial nature contrasting with branded advertisements. Recent research started to investigate bloggers’ authenticity under commercial pressure (Savignac, Parmentier, and Marcoux 2012), but the analysis considered solely online self-presentation without considering how influencers communicate about brands, products, and collaborations.

Authenticity is recognized in the marketing literature as an important attribute, as prior research suggests that consumers increasingly desire authenticity in the products and brands they consume (Chronis and Hampton 2008). One particular notion of authenticity has been gaining acceptance, which revolves on whether an individual or brand expresses their true self (Guidry Moulard, Raggio, and Folse 2016). In this body of research, authenticity is linked to the distinction between intrinsic motivations and extrinsic motivations. Holt (2002, 83) notes, “to be authentic, brands must be disinterested; they must be perceived as invented and disseminated by parties without an instrumental economic agenda, by people who are intrinsically motivated by their inherent value”.

We chose the context of fashion, beauty and lifestyle, as it is one of the most successful and visible domains of digital production (Duffy and Hund 2015). We analyze posts from 49 influencers participating in 9 brand campaigns that employed multiple SMIs simultaneously. These observations are complemented with 27 interviews with SMIs varying in audience size to understand “behind the scene” goals pursued to project this authenticity.

From the posts about the campaign, we identified main topics, perspective towards the campaign and rapport with ones’ experience. The analysis allowed for identification of 2 distinct patterns for expressing authenticity under commercial pressure: 1) expressing inner self and be-

ing passionate even when involved in a collaboration; 2) proving what is said, reflects the truth about the partnership, the influencer or the products promoted.

Interviews confirm that SMIs manage authenticity both through communicating passion and giving a true report of reality. We label these two potentially complementary strategies as: passionate authenticity and/or informational authenticity.

The notion of passionate authenticity has been established in the previous literature (Guidry Moulard et al. 2016) but we identify a new form of authenticity, which is about being consistent with the facts and not lying, that we name informational authenticity. It refers to the degree to which what is claimed is consistent with reality about the commercial partnership with the brand, the SMI and the products. These two strategies are sometimes considered as an optimal goal, rather than a systematic rule of conduct. Also, SMI often seem to use them sequentially. SMIs start out of genuine passion but, with growing recognition, they are tempted to accept partnership with brands they are not passionate about. Reflecting on the tension between their inner passions and financial gains, SMIs then implement a strategy of informational authenticity and communicate more transparent information to their audience.

Informational authenticity may have links to Grayson and Martinec indexical authenticity “when an object is believed to be ‘the original’ or ‘the real thing’” (2004, 297) and “it has the spatio-temporal link that is claimed” (2004, 298). However, authors focus on objects as indexically authentic while we show how it applies to individuals. Informational authenticity can be also associated with the notions of having integrity and being professionally ethical. Mohart et al. (2015) suggest that one component of brand authenticity is integrity. We complement their research by adding the notion of sincerity in what is claimed. Napoli et al. (2014) identify a related notion of sincerity, as one component of brand authenticity, but do not offer a definition of their sincerity concept.

Our findings should also help SMIs manage their authenticity under threat as it suggest that they can either use Passion or Information. SMIs should be cautious to report the reality of the partnership and the product in their WOMM contents. Similarly, they should keep producing noncommercial messages about brands they are really passionate about. In the same vein, managers should be attentive to let SMIs selects products in order to increase enthusiasm for the brand and minimize constraints to give room for personalized communication aligned with SMI’s style and opinions.

REFERENCES

- Chronis, Athinodoros and Ronald D. Hampton (2008), “Consuming the Authentic Gettysburg: How a Tourist Landscape Becomes an Authentic Experience,” *Journal of Consumer Behaviour*, 7 (2), 111-26.
- Colliander, Jonas and Susanna Erlandsson (2015), “The Blog and the Bountiful: Exploring the Effects of Disguised Product Placement on Blogs That Are Revealed by a Third Party,” *Journal of Marketing Communications*, 21 (2), 110-24.
- Duffy, Brooke Erin and Emily Hund (2015), ““Having It All” on Social Media: Entrepreneurial Femininity and Self-Branding among Fashion Bloggers,” *Social Media+ Society*, 1 (2), 1-11.

- Etter, Michael, Elanor Colleoni, Laura Illia, Katia Meggiorin, and Antonino D'Eugenio (forthcoming), "Measuring Organizational Legitimacy in Social Media," *Business & Society*.
- Grayson, Kent and Radan Martinec (2004), "Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings," *Journal of Consumer Research*, 31 (2), 296-312.
- Guidry Moulard, Julie, Randle D. Raggio, and Judith Anne Garretson Folse (2016), "Brand Authenticity: Testing the Antecedents and Outcomes of Brand Management's Passion for Its Products," *Psychology & Marketing*, 33 (6), 421-36.
- Holt, Douglas B (2002), "Why Do Brands Cause Trouble? A Dialectical Theory of Consumer Culture and Branding," *Journal of Consumer Research*, 29 (1), 70-90.
- Kozinets, Robert V., Kristine De Valck, Andrea C. Wojnicki, and Sarah J.S. Wilner (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of Marketing*, 74 (2), 71-89.
- McQuarrie, Edward F., Jessica Miller, and Barbara J. Phillips (2013), "The Megaphone Effect: Taste and Audience in Fashion Blogging," *Journal of Consumer Research*, 40 (1), 136-58.
- Morhart, Felicitas, Lucia Malär, Amelie Guevremont, Florent Girardin, and Bianca Grohmann (2015), "Brand Authenticity: An Integrative Framework and Measurement Scale," *Journal of Consumer Psychology*, 25 (2), 200-18.
- Napoli, Julie, Sonia J. Dickinson, Michael B. Beverland, and Francis Farrelly (2014), "Measuring Consumer-Based Brand Authenticity," *Journal of Business Research*, 67 (6), 1090-98.
- Savignac, Benoit-Mykolas, Marie-Agnès Parmentier, and Jean-Sébastien Marcoux (2012), "Consumer-Bloggers Mobilized in Marketing Campaigns: A Study of Opinion Leaders' Authenticity Management in a Streetwear Community," in *Advances in Consumer Research*, Vol. 40, ed. Andrew A. Mitchell and Ann Arbor, MI: Association for Consumer Research, 81-84.
- Scott, David Meerman (2015), *The New Rules of Marketing and P.R.: How to Use Social Media, Online Video, Mobile Applications, Blogs, News Releases, and Viral Marketing to Reach Buyers Directly*, John Wiley & Sons.

WeChat Brands: Communal Interaction and Brand Publicity in Chinese Social Media

Yuxin Bai, Lancaster University, UK
Xin Zhao, Lancaster University, UK
Hayley Cocker, Lancaster University, UK

EXTENDED ABSTRACT

Extant research on communal consumption has previously focused on how brands facilitate communal interaction and the expression of collective identity (Cova, Kozinets, and Shankar 2007; Muñiz and O'Guinn 2001; Schau, Muñiz, and Arnould 2009) to recently how brands also enhance publicity, visibility, and other forms of sociality (e.g., Arvidsson and Caliendo 2016; Kozinets et al. 2010; McQuarrie, Miller and Phillips 2013). This stream of work suggests a changing focus from a brand's "linking value" to its "publicity value", and argues that consumer assemblies are motivated not only by the desire for interaction but also by the desire for visibility and publicity. The essential issue is how varied communication forms shape communication content and communal practices (Kozinets et al. 2010). In this paper, we examine a hybrid form of sociality that conceptually lies between communal interaction and brand publicity.

The context of our study is China's dominant social media platform, WeChat. With more than 846 million monthly active users, WeChat has dominated Chinese social media space since its launch on January 21st 2011. It successfully integrates a variety of social media functions offered only separately by other Western platforms, most of which are not available for Chinese consumers (e.g., Twitter/Facebook/Instagram). WeChat allows users to do instant message, make video-calls, share experiences, pay bills, play games, shop, blog, book hotels and flights, and even to call a taxi. This integrated social media hybrid provides a unique opportunity to examine how technology shapes consumption and how social media form shapes its content (see Kozinets, Patterson, and Ashman 2017).

In this study, we focused on a particular function, WeChat Blog or Public Account. WeChat bloggers create various content including food, health, fashion, travel etc. WeChat blogs often have a large devoted audience, whose comments are routinely integrated by bloggers to create more engaging commercial content. Although everyone can leave a comment, only comments selected by the blogger will be publicly displayed. Filtered comments and the original blog become integrated and contribute to the development of a personal brand but not necessarily a community.

We used netnography (Kozinets 2015) and in-depth interviews (McCracken 1988) to collect data. Online fieldwork focused on WeChat blogs and reader comments. As a WeChat blogger with over 20,000 followers and several brand collaborations to date, the first author also kept notes of her experiences and interactions on WeChat. 30 in-depth interviews were conducted with 20 popular bloggers from various fields and 10 marketers who used WeChat public account for promotions in China. Our analysis took an iterative approach moving between data and theory (Spiggle 1994; Kozinets 2015).

Our findings suggest that WeChat brands represent a markedly different form of sociality to the brand community or brand public discussed in previous studies. WeChat blogs discourage interaction among users and attention is carefully directed toward the communication content. Participants' comments are not immediately displayed but are carefully filtered by bloggers. Promotion is an iterative process, in which the blogger generates a blog entry, elicit comments, then select and use the comments to construe new meanings that are consistent with the blog.

Previous research has noted consumers' dislike of commercial messages on social media (Pashkevich et al. 2012) and has highlighted

the commercial-communal tensions (e.g., Kozinets et al. 2010). However, we found that Chinese users appear more receptive toward commercial content. Although consumers may not necessarily reject or disdain commercial messages on blogs (McQuarrie, Miller, and Phillips 2013), motivations for positive responses are culturally embedded and may go beyond the notions of authenticity that has been offered as an explanation in extant research.

Within this "semi-closed" social media platform, utilizing reader comments is important in sustaining a successful WeChat brand. Four types of comments that illustrate the engagement of devoted readers are identified: loyalty and devotion, blog content extension, inquiries about promoted brands, and opposition to bloggers' views. WeChat bloggers do not change their narrative style or blogger communicative character in their word-of-mouth marketing (WOMM) promotions. Key bloggers strategically select and use comments to build credibility and authenticity, to express connection, to provide empathetic understanding, and to remove unwanted audience and guard their WeChat brand. All these differ from the previous notion of WOMM, in which bloggers adopt varied narrative strategies (e.g., evaluation, explanation, embracing, and endorsement) to justify their promotion of marketing message (Kozinets et al. 2010). We discuss the theoretical implications of our study for our understanding of communal consumption and brand publicity.

REFERENCES

- Arvidsson, Adam and Alessandro Caliendo (2016), "Brand Public," *Journal of Consumer Research*, 42 (5), 727-48.
- Cova, Bernard, Robert V Kozinets, and Avi Shankar (2007), "Tribes, Inc.: The New World of Tribalism," *Consumer tribes*, 3-26.
- Kozinets, Robert, Anthony Patterson, and Rachel Ashman (2017), "Networks of Desire: How Technology Increases Our Passion to Consume," *Journal of Consumer Research*, 43(5), 659-83.
- Kozinets, Robert (2015), *Netnography Redefined*, Sage Publication.
- Kozinets, Robert V, Kristine De Valck, Andrea C Wojnicki, and Sarah JS Wilner (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of marketing*, 74 (2), 71-89.
- Kozinets, Robert V.. (2015), *Netnography: Redefined*: Sage.
- McCracken, G. (1988). *The long interview* (Qualitative research methods ; v. 13). Newbury Park, Calif.: Sage Publications.
- McQuarrie, Edward F, Jessica Miller, and Barbara J Phillips (2013), "The Megaphone Effect: Taste and Audience in Fashion Blogging," *Journal of Consumer Research*, 40 (1), 136-58.
- Muñiz Jr., Albert M. and Thomas C. O'Guinn (2001), "Brand Community," *Journal of Consumer Research*, 27 (4), 412-32.
- Pashkevich, Max, Sundar Dorai-Raj, Melanie Kellar, and Dan Zigmund (2012), "Empowering Online Advertisements by Empowering Viewers with the Right to Choose," *Journal of Advertising Research*, 52 (4), 451-57.
- Schau, Hope Jensen, Albert M. Muñiz Jr., and Eric J. Arnould (2009), "How Brand Community Practices Create Value," *Journal of marketing*, 73 (5), 30-51.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21 (3), 491-503.

What You Are Getting and What You Will Be Getting: Testing Whether Verb Tense Affects Intertemporal Choices

Akshina Banerjee, University of Minnesota, USA
Oleg Urminsky, University of Chicago, USA

EXTENDED ABSTRACT

Since the 19th century, philosophers, linguists and psychologists have wondered about the causal role of language on thought. Perhaps the best known version of this idea, often called the Whorfian hypothesis, is that differences in languages determine or at least influence differences in thought. In this view, the structure of a given language can facilitate some ways of thinking and impede others, leading some cognitions to be more accessible and therefore more prevalent among speakers of that language, in ways that are empirically testable (Hunt and Agnoli 1991). For example, differences in the way languages frame time in spatial terms (horizontally in English vs. vertically in Mandarin) would then lead to differences in how speakers of each language process visual demonstrations of time. This idea, while highly intuitive, has been quite controversial, and seemingly promising empirical demonstrations (Boroditsky 2001) have sometimes failed to prove robust (January and Kako 2006).

This paper tests the effect of linguistic form on decision making, specifically intertemporal choices. We build on Chen (2013), which distinguishes between languages that have strong vs. weak Future Time Reference (FTR) in their verb tense. Weak FTR languages are those which have the same verb forms for present and future events. For example, Finnish uses the same linguistic form (*on kylmä*) to express present and future cold and merely changes the time term to convey “it is cold today” and “it will be cold tomorrow”. In contrast, English uses different verb tenses (is vs. will be) to convey this difference. Chen (2013) relates these linguistic differences to financial behaviors, and finds that speakers of weak FTR languages tend to have higher savings rates and are more likely to report a range of other far-sighted behaviors. This has been widely debated, with some studies finding additional evidence through other means (e.g., experiments with bilingual participants, Perez & Tavits 2017), while others have questioned the robustness of the finding.

In this paper, we investigate one way in which language might influence choice. We test whether in-context linguistic differences (i.e. the wording of choice options) shape intertemporal preferences, either due to priming or inferences.

We leverage an inherent ambiguity in verb use in some strong FTR languages, especially in English. While separate verb tenses do exist for present and future events, English speakers have the option of using the present form when describing a future event. For example, consider a person who is being informed that he or she will receive an amount of money in the future. This can be conveyed in multiple ways:

1. You get \$5 in a week.
2. You are getting \$5 in a week.
3. You would get \$5 in a week.
4. You will get \$5 in a week.
5. You will be getting \$5 in a week.

The above sentences have the same meaning – the only difference is that (1) and (2) use the same form as if discussing the present, (3) uses a neutral form that does not imply a timing, while (4) and (5) use a form reserved for discussing the future.

Across six studies, we test the effect of verb tense framing of choice options on intertemporal preferences, varying the degree to which diagnostic cues are present in the decision context.

Study 1: Direct Inferences from Verb Tense

Online participants (N=222) read 10 scenarios in which two people were getting money, described using different tenses, and chose which person would be getting the money sooner. The verb tense had a substantial effect. For example, 85% of participants thought that “Bob gets \$20” would happen earlier than “John would get \$20”. Of the 10 comparisons, participants were significantly more likely to indicate that one of the options would be earlier than the other in all cases but one.

Based on a combined regression analysis, “gets” was the verb tense seen as occurring the earliest. Compared to the “gets” formulation, all the other verb tenses were seen as occurring later, to varying degrees: “is getting”, $\beta = +.131$; “will get”, $\beta = +.310$; “is going to get”, $\beta = +.408$; “would get”, $\beta = +.501$; all $ps < .001$.

Study 2: Within-Choice Verb Tense Framing

In the next study, we administered intertemporal choices to 112 participants. The survey flow was designed in a way such that every participant first got one set of four initial questions, using the “would get” verb tense.

Then every participant made a series of choices between sooner-smaller, later-larger options, specifying the (randomly determined) amount and time of delay. The verb tense of both the sooner-smaller and later-larger option were independently and systematically varied across questions. The final set of four final questions used the “would get” tense.

Choices of the later-larger option significantly depended only on the sooner smaller ($\beta = -.04$, $p = .043$) and later-larger amounts ($\beta = .05$, $p = .017$). Choices were not affected by the verb tense (all $ps > .11$). Controlling for income, order, interacting with education, gender and age did not change any of the results.

Study 3: Between-Subjects Verb Tense Framing

In the next study (N=259), we varied the tense of both choice options (present, neutral or future) between subjects in an initial round of eight choices. Participants chose between a sooner-smaller and later-larger option (with timing and amounts randomized). After the initial choices, each participant made eight more choices between options presented with neutral tense.

Choices of the later-larger option in the first set (with tense manipulated between subjects) were significantly dependent on only the sooner-smaller amount ($\beta = -.07$, $p < .001$), later-larger amount ($\beta = .07$, $p < .001$), and delay ($\beta = -.03$, $p = .003$), but not verb tense (all $ps > .24$). Furthermore, choices in the second set (same in all conditions) were not affected by the verb tense used in the first set. Controlling for income, interacting with education, gender, age and collapsing across type did not change any of the results significantly.

Study 4: Benchmarking Verb Tense Framing

Thus far, we find no effect of verb tense framing. This is surprising, not only in light of the findings of Chen (2013), but in light of the strong inferences people drew from verb tense alone in Study 1. In this study (N=1460), we test whether this lack of a verb tense effect was explained by inattention or depended on question framing.

Each person made two intertemporal choices (present vs. future, and near future vs. distant future). We independently varied the tense

of each choice option, across subjects (present, future or no tense). We also varied whether the timing was presented as a date or delay (e.g., in 6 weeks vs. on September 2d), which has been found to affect choices in prior research (Read et al 2005; LeBoeuf 2006). Lastly, we varied whether the choice options specified the non-payments (e.g, \$30 today vs. \$30 today and \$0 in six weeks), which has also been shown to shift choice (the “hidden zero effect”; Magen, Dweck & Gross 2008; Read, Olivola & Hardisty 2016). In all, the study included 20 conditions in a 5(verb tense) x 2(date/delay) x 2(hidden zero) design.

Consistent with the prior literature on the date-delay effect, people were less patient when the delays were presented as weeks rather than dates ($\beta = -.15, < .001$). Likewise, we replicated the hidden zero effect, with more patience when the hidden zeros were shown ($\beta = .17, p < .001$). Despite the strong sensitivity of the participants to these aspects of how choice options were communicated, we found no effects of verb tense ($ps > .57$). Furthermore, the null effect of verb tense was robust across the different ways of presenting the options tested (date vs. delay and hidden-zero present vs. absent).

Study 5: Vague Temporal Information

In all the studies thus far, we have used specific monetary amounts and specific delays. The lack of a verb tense effect could be due to redundancy – once people know the exact timing differences between the sooner-smaller and later-larger options, they are not sensitive to verb tense. In the next study (N=246), we test this possibility by using vague temporal cues (“soon”, “later”, “at some point after”) instead of specific timing information. Participants made a series of intertemporal choices, varying the timing words and verb tenses of the options.

While participants were sensitive to the vague temporal cues used to describe the options (all $ps < .001$), there were no significant effects of verb tense ($ps > .14$). Thus, even when participants had scope to make inferences about the timing, because they did not have precise information, the verb tense did not impact their choices.

Study 6: Vague Temporal Information

In the last study (N=184), we test the effect of verb tense in the most extreme case – the complete absence of *any* timing cues. Participants made a series of choices between two options, each specifying a dollar amount and varying in the verb tense. For example, a person might be asked to choose between “You get \$19” and “You are going to get \$21”. The amounts varied randomly between \$19 and \$21, and we tested all five verb tenses.

As in Study 1, the verb tense had a substantial effect when timing cues were entirely absent. For example, 71% of participants preferred an option framed as “You get” rather than an option framed as “You are going to get”, averaging across tested amounts. Of the 10 comparisons, participants’ choices revealed a significant preference for one framing over the other for all but one.

Based on a combined regression analysis, “You get” was the verb tense that made the option most likely to be chosen. Compared to the “You get” formulation, all the other verb tenses were less likely to be the chosen option, to varying degrees: “You are getting”, $\beta = +.09$; “You will get”, $\beta = +.122$; “You are going to get”, $\beta = +.225$; “You would get”, $\beta = +.382$; all $ps < .001$.

Discussion

Across six studies, we tested people’s inferences from verb tense and the effects of verb tense on different kinds of intertemporal choices. We find that people can make consistent inferences from verb tense, seeing events described in present as occurring sooner than events described in future tense or a neutral tense. However, when information about timing is present, we find no effect of verb tense on intertemporal choices. This lack of an effect of verb tense is estimated with high confidence, as the studies use large samples and we do find a strong and highly significant impact of other option framing effects identified in the prior literature. Furthermore, the lack of an effect of verb tense persists even when the available timing cues are vague and only convey incomplete information. We only find an effect of verb tense in the complete absence of *any* timing cues whatsoever.

Overall, we conclude that the underlying psychology of verb tense inference is right – people can and do use verb tense in a consistent manner as a cue for timing. However, in practice, the verb tense of the options is highly unlikely to shape preferences, contrary to at least some interpretations of the Whorfian hypothesis motivating Chen (2013), as some timing information is typically present in choice options.

REFERENCES

- Boroditsky, L. (2001). Does language shape thought?: Mandarin and English speakers’ conceptions of time. *Cognitive psychology*, 43(1), 1-22.
- Chen, M. K. (2013). The effect of language on economic behavior: Evidence from savings rates, health behaviors, and retirement assets. *The American Economic Review*, 103(2), 690-731.
- Hunt, E., & Agnoli, F. (1991). The Whorfian hypothesis: A cognitive psychology perspective. *Psychological Review*, 98(3), 377.
- January, D., & Kako, E. (2007). Re-evaluating evidence for linguistic relativity: Reply to Boroditsky (2001). *Cognition*, 104(2), 417-426.
- LeBoeuf, R. A. (2006). Discount rates for time versus dates: The sensitivity of discounting to time-interval description. *Journal of Marketing Research*, 43(1), 59-72.
- Magen, E., Dweck, C. S., & Gross, J. J. (2008). The hidden-zero effect representing a single choice as an extended sequence reduces impulsive choice. *Psychological Science*, 19(7), 648-649.
- Pérez, E. O., & Tavits, M. (2017). Language Shapes People’s Time Perspective and Support for Future-Oriented Policies. *American Journal of Political Science*.
- Read, D., Frederick, S., Orsel, B., & Rahman, J. (2005). Four score and seven years from now: The date/delay effect in temporal discounting. *Management Science*, 51(9), 1326-1335.
- Read, D., Olivola, C. Y., & Hardisty, D. J. (2016). The value of nothing: Asymmetric attention to opportunity costs drives intertemporal decision making. *Management Science*.

Pain of Payment and the Moral Tax: the Neural Basis of the Credit Card Effect

Sachin Banker, University of Utah, USA

Derek Dunfield, Massachusetts Institute of Technology, USA

Alex Huang, Massachusetts Institute of Technology, USA

Drazen Prelec, Massachusetts Institute of Technology, USA

EXTENDED ABSTRACT

When people shop while using credit cards, they generally tend to loosen their restraints on spending relative to using cash. One reason as to why people may spend more when using credit cards is that the payment method may blunt the negative subjective feeling people experience when giving up hard earned dollars. In other words, credit cards may diminish the *pain of payment* relative to using cash.

Yet, little evidence has been offered in support of this mechanism, in part due to methodological limitations. Only a few attempts to measure differences in the pain of payment between payment methods have been reported in the literature (Shah et al. 2015; Thomas, Desai, and Seenivasan 2011). While results from these experimental studies are consistent with the pain of paying hypothesis, the self-reported measures of pain of payment pose interpretive challenges. Because previous research has established that paying with credit card leads people to place less attention on cost attributes (Chatterjee and Rose 2012) and that paying with credit impairs recall of cost information (Soman 2001), higher self-reported displeasure of paying in cash conditions may simply reflect the relative ease with which negative cost information came to mind rather than the actual pain of paying associated with the transaction. We applied fMRI methods to directly observe changes in neural activity during the purchase decision and thus overcome the many limitations inherent in self-report measurements.

To investigate how payment methods influence these neural mechanisms involved in making purchase decisions, we scanned human subjects ($n = 27$) using fMRI while they viewed products and made shopping decisions. The shopping task was designed to simulate a retail shopping experience where participants browsed through different products. We first collected a database of over 22,000 top selling products on Amazon.com, hierarchically organized into categories. Prior to entering the scanner participants indicated the departments they were most interested in shopping within. For each participant, half of the products shown were randomly determined to be available with credit card only while half were available with cash only. Participants browsed products in sequence, and for each item they were asked whether they were interested in purchasing it. If so, the product was added to the participant's shopping basket, and if not, no additions were made to the basket. After participants indicated whether or not they wanted to buy, they were shown a confirmation page and then signed off on their decision. At the end of the study, participants were asked to pay out-of-pocket using the specified payment method for one randomly selected trial.

We examined how neural activation in each *a priori* determined region of interest (ROI) differed between purchase and non-purchase decisions. ROI anatomical coordinates were chosen using meta-analytical studies (Bartra, McGuire, and Kable 2013; Kelly et al. 2012). When participants were shopping with credit, we observed that their purchase decisions were distinguished from non-purchase decisions by activity in reward networks, including the striatum and ventromedial prefrontal cortex (VMPFC). When participants were making purchase decisions using cash, we observed a price-dependent pattern of activity distinguishing purchase trials from non-purchase trials. Under low prices, purchase decisions were associated with heightened activity in the striatum and VMPFC. Purchases of high-

price items when using cash were more strongly associated with lowered right anterior insula cortex (rAIC) activity.

These findings imply that credit cards change the evaluative criteria consumers use when making a purchase decision. Consumers may be asking simply "do I like it?" rather than stopping to question "is it worth it?" when they decide whether or not to buy (Karmarkar, Shiv, and Knutson 2015). In addition, we found that shopping with credit did not lead to exaggerated deactivation in the rAIC, inconsistent with the idea that credit cards lower the pain experienced during a transaction. Instead, credit cards appeared to generally facilitate greater reward sensitivity, rendering consumers less sensitive to price information. Overall, our findings advance theoretical accounts of the mechanisms by which payment methods influence spending behavior.

REFERENCES

- Bartra, Oscar, Joseph T. McGuire, and Joseph W. Kable (2013), "The Valuation System: A Coordinate-Based Meta-Analysis of BOLD fMRI Experiments Examining Neural Correlates of Subjective Value," *Neuroimage*, 76, 412–427.
- Chatterjee, Promothesh and Randall L. Rose (2012), "Do Payment Mechanisms Change the Way Consumers Perceive Products?," *Journal of Consumer Research*, 38(6), 1129–1139.
- Karmarkar, Uma R., Baba Shiv, and Brian Knutson (2015), "Cost Conscious? The Neural and Behavioral Impact of Price Primacy on Decision Making," *Journal of Marketing Research*, 52(4), 467–481.
- Kelly, Clare, Roberto Toro, Adriana Di Martino, Christine L. Cox, Pierre Bellec, F. Xavier Castellanos, and Michael P. Milham (2012), "A Convergent Functional Architecture of the Insula Emerges across Imaging Modalities," *Neuroimage*, 61(4), 1129–1142.
- Shah, Avni M., Noah Eisenkraft, James R. Bettman, and Tanya L. Chartrand (2015), "'Paper Or Plastic?': How We Pay Influences Post-Transaction Connection," *Journal of Consumer Research*, ucv056.
- Soman, Dilip (2001), "Effects of Payment Mechanism on Spending Behavior: The Role of Rehearsal and Immediacy of Payments," *Journal of Consumer Research*, 27(4), 460–474.
- Thomas, Manoj, Kalpesh Kaushik Desai, and Satheeshkumar Seenivasan (2011), "How Credit Card Payments Increase Unhealthy Food Purchases: Visceral Regulation of Vices," *Journal of Consumer Research*, 38(1), 126–139.

I Don't Care if You're Committed, But "We" Do: How Group Brand Connections Affect Access-Based Brand Extension Evaluations

Aaron J. Barnes, University of Illinois at Urbana-Champaign, USA
Tiffany White, University of Illinois at Urbana-Champaign, USA

EXTENDED ABSTRACT

Analysts expect the sharing economy's revenue potential to reach \$300B by 2025 (Geron 2013; Price Waterhouse Cooper 2015). To leverage this growing trend, many firms have begun to extend their brands into sharing spaces by introducing brand extensions that offer consumers access to, but not complete ownership of, their goods and services (i.e., access-based brand extensions). Examples include manufacturer-based car-sharing offerings (e.g., Ford2go; Baumeister, Scherer, and Wangenheim 2015) and online degree programs from physical universities (e.g., online MBA).

Among other factors (most notably, the perceived fit or similarity between the parent and the extended brand; Aaker and Keller 1990; Park, Milberg, and Lawson 1991), the success of brand extensions also depends on the nature of the consumer brand relationship. Not surprisingly, brand attachment has been linked to more favorable reactions to brand extensions (Fedorikhin, Park, and Thomson 2008; Kirmani, Sood, and Bridges 1999; Park and Kim 2001), even when the extension is unsuccessful (Cheng, White and Chaplin 2012, Swaminathan, Page and Gurhan-Canli 2007).

This research builds upon prior research, but offers two important points of departure. First, we theoretically differentiate access-based brand extensions (hereafter ABE) from traditional brand extensions (TBE) and, in so doing, highlight why the nature of consumers' prior brand connections may differentially influence (and, specifically, lower) their evaluations of ABEs versus TBEs. Second, we examine the impact of group-brand connections (hereafter GBC). In so doing, we acknowledge that brands can be instrumental in helping consumers shape and reflect who they are as individuals (e.g., a savvy Apple owner), but also as members of important groups (e.g., a fiercely loyal member of the Chicago Cubs fan club). Indeed, a person's group identities reflect a fundamental need to affiliate with others and are equally important to their self-concept as their individual identity (Kleine, Kleine and Allen 1995, Tajfel and Turner 1979). Yet, whereas much of the extant research focuses on consumer-brand attachments that are based on a brand's perceived ability to shape and reflect consumers' individual identities (e.g., self-brand connections (SBC); Escalas and Bettman 2005, Fournier 1988), relatively less is known about group-brand connections (GBC), those that are based on a brand's perceived ability to facilitate and reflect a consumer's identity as a member of a group (e.g., brand country-of-origin connections; Gurhan-Canli and Maheswaran 2000, Swaminathan, Page and Gurhan-Canli 2007).

Using the sharing economy as our context, we theorize and find that when consumers believe that a brand is instrumental in reflecting or facilitating their connection with an important group (i.e., high GBC consumers), they are more likely to: a) negatively evaluate those who use that brand's ABEs (hereafter "accessors") based on commitment perceptions and b) rate ABEs less favorably than TBEs.

Theoretical Framework

We define an ABE as a type of brand extension in which a firm offers modified goods or services that limit the user's ownership. Our conceptualization of ABEs includes offerings that either limit consumers' ownership of the good entirely (e.g., short-term car rentals; Baumeister et al. 2015) or limit ownership of some integral product attribute (e.g., forgoing the on-campus experience when earning an

online degree). Thus, whereas TBEs typically involve stretching the parent brand by introducing an innovation or extending into a new product category, ABEs extend the brand into a new business model in which consumers have access to, but not complete ownership of, their branded products or services. We argue that this distinction is associated with fundamental differences in user imagery (Keller 1993), or consumers' beliefs about the typical user, of ABEs vs TBEs and, therefore, their evaluations of these extensions.

We propose that perceived commitment is the critical element of user imagery comparison between owners versus accessors. Commitment is commonly defined as the degree to which an individual views a relationship from a long-term perspective even when things are difficult (Ahluwalia, Burnkrant, and Unnava 2000; Drigotas and Rusbult 1992). Prior research has associated ownership with commitment to the owned object (Bardhi and Eckhardt 2012; Palamar, Le, and Friedman 2012). Additional work found that consumers use perceived differences in commitment among other users to make overall evaluations (Love, Staton, and Rotman 2015; Schouten and McAlexander 1995). Moreover, accessors in the sharing economy have acknowledged lower personal commitment toward objects that they access versus those that they own (Bardhi and Eckhardt 2012). Taken together, these findings suggest that commitment perceptions may comprise an unexplored, but important part of user imagery in brand extensions. Next, we discuss for whom commitment perceptions are most likely to matter.

From social identity theory, we know that the self can be conceptualized as composed of personal and group identities (Tajfel and Turner 1979). Just as material possessions can help owners express group identity (Kleine, Kleine, and Allen 1995; Wallendorf and Arnould 1988), brands can also facilitate this expression. Thus, group-brand connection (GBC) is the extent to which a brand is used to express one's social identity. Prior work suggests that GBC may influence attitudes when there is greater focus on relationships with others. For example, when others were made salient in participants' construal of self (Markus and Kitayama 1991), Swaminathan and colleagues (2007) found that attitude change depended on GBC (e.g., brand country-of-origin), not SBC. According to Markus and Kitayama (1991), people are more attentive and sensitive to the norms and expectations of the in-group when others are salient. In the current work, we suggest that the fundamental differences in user imagery make others more salient when evaluating ABEs and TBEs. Building on these findings, we expect observers' GBC to determine the extent to which evaluations differ between ABEs and TBEs. Specifically, we expect high (vs. low) GBC consumers' attitudes to reflect a concern with others' adherence to group norms and expectations when a brand extension (i.e., an ABE) allows users to access the brand without commitment.

In summary, our prior arguments imply that attitudes toward accessors and owners should vary based on consumers' GBC, such that high GBC consumers evaluate accessors (vs. owners) less favorably because of lower commitment perceptions. In contrast, low GBC consumers should be less sensitive to accessors' commitment-norm violation and evaluate them similarly to owners. Prior work has found that user imagery influences extension evaluations (Desai and Keller 2002; Ferraro, Kirmani, and Matherly 2013; Keller 2003),

hence we expect commitment perceptions to mediate high GBC consumers' ABE (vs. TBE) evaluations.

Study 1

204 adults (51% male, $M_{age} = 36$) were recruited from MTurk to participate in a brand extension type (TBE vs. ABE) \times group-brand connection (measured) experiment for money. Participants indicated their GBC on three items ($\alpha = .88$; Swaminathan et al. 2007) and their self-concept connection on two items ($r = .86$; Fournier 1994; Kleine et al. 1995). After the short survey, participants saw descriptions of one of two Chevrolet brand extensions. The ABE was a car-sharing program called Chevy2go and the TBE was a Chevrolet Bike. Participants evaluated the extension, the users' perceived commitment, and general user imagery on 3-item, 7-point scales. Participants then completed a manipulation check measure, indicated their perceived similarity with the users (single item), and whether they currently owned a Chevrolet vehicle. We analyzed the data from the 172 non-owners to rule out ownership effects (Kirmani et al. 1999). Note: We measure and control for perceived user similarity in this and all subsequent studies and manipulation checks were successful in all studies.

Results

A regression model that included brand extension type (dummy coded), GBC (mean-centered) and their interaction revealed a main effect of GBC that was qualified by the predicted extension type \times GBC interaction ($\beta = .26$, $se = .12$, $p = .03$). Spotlight analysis revealed that when GBC to Chevy was 1SD above the mean, participants evaluated the ABE ($M = 5.1$) less favorably than the TBE ($M = 5.7$; $\beta = -.61$, $se = .24$, $p = .01$). In contrast, evaluations did not differ when GBC to Chevy was 1SD below the mean ($M_{ABE} = 5.2$, $M_{TBE} = 5.1$, $p = .62$). Notably, there were no significant effects when we used self-concept connection instead of GBC ($t < 1$, $p = .35$).

Mediation analyses. We tested whether commitment perceptions mediated evaluations when GBC was high (vs. low) using bias-corrected moderated mediation analysis (model 7, Hayes 2013). The results confirmed our predictions, revealing a significant indirect effect of commitment perceptions when GBC was high ($\beta = -.21$, Boot SE = .14, 95% CI: -.59, -.0092), but not when it was low ($\beta = -.11$, Boot SE = .10, 95% CI: -.30, .08). We also conducted a serial mediation analysis to confirm our expectation that commitment perceptions influence overall user imagery and ultimately extension evaluations. In support of our hypothesized process, this serial mediation was significant ($\beta = -.09$, Boot SE = .05, 95% CI: -.23, -.01). These results suggest that commitment perceptions are the critical aspect of general user imagery that mediates the accessor effect.

Study 2: Priming Group Connection

203 adults ($M_{age} = 36$) participated in a 2 (extension type: TBE vs. ABE) \times 2 (GBC: high vs. low) between-subjects factorial design. Group connection was manipulated by adapting a procedure from prior brand country-of-origin and self-construal research (Brewer and Gardner 1996; Swaminathan et al. 2007). Participants in the high (low) GBC condition were asked to write about how they were similar to (different from) Chevrolet owners. A separate pretest with 50 adults confirmed the success of our manipulation ($M_{high} = 4.0$, $M_{low} = 2.6$, $M_{control} = 2.7$; $F(2, 47) = 3.9$, $p < .05$). After the priming procedure, the study continued as in Study 1.

Results and Discussion

We analyzed the data using a two-way ANCOVA. We found the predicted brand extension type \times GBC interaction ($F(1, 198) = 3.5$, $p = .06$). Specifically, participants in the high GBC condition evalu-

ated the ABE ($M = 5.0$) less favorably than the TBE ($M = 5.5$, $p < .05$). However, no differences emerged among participants in the low GBC condition ($M_{ABE} = 5.5$, $M_{TBE} = 5.4$, $F < 1$, ns).

The results from moderated mediation analysis again confirmed our predictions, revealing a significant indirect effect of commitment perceptions in the high GBC condition ($\beta = -.13$, Boot SE = .07, 95% CI: -.30, -.03), but not in the low condition ($\beta = -.09$, Boot SE = .07, 95% CI: -.29, .02). The serial mediation analysis also replicated prior results such that commitment perceptions influenced overall user imagery and ultimately extension evaluations ($\beta = -.11$, Boot SE = .05, 95% CI: -.21, -.03). Using a priming paradigm, this study replicated the findings obtained with the Chevrolet extensions in Study 1.

Study 3: Ruling Out Fit Perceptions

Study 3 was designed to replicate the accessor effect and examine the extent to which user imagery affects extension evaluations over and above fit perceptions. We operationalized GBC via brand country-of-origin, by sampling participants who owned two brands: Ford and Toyota. Pretest results confirmed that Ford (vs. Toyota) owners felt a higher brand country-of-origin connection.

114 Ford and Toyota owners completed the online survey for monetary compensation ($M_{age} = 35$). Participants were randomly assigned to an ABE or TBE condition. Participants in the ABE (TBE) conditions read about Ford2go (Ford Flex eBike) or Toyota2go (Toyota Prius Bike). Extensions and the users were evaluated as in Studies 1 & 2. Respondents also rated perceived fit between the extension and parent brand.

Results

We analyzed an extension type \times GBC ANCOVA. Moreover, a significant effect of extension type was qualified by a group connection \times extension type interaction ($p < .01$). Ford owners' evaluations in for the ABE ($M = 4.0$) than the TBE ($M = 6.2$, $p < .001$). In contrast, Toyota owners' responses were statistically similar in both conditions ($M_s = 5.7$).

Mediation analyses. To reveal the unique effects of perceived commitment over fit, we simultaneously tested both potential mediators in a single model. Using the procedure developed by Preacher and Hayes (2008), we bootstrapped the indirect effects of brand extension type on evaluation through both mediators. Taken together as a set, fit and commitment perception did mediate the link between extension type and evaluations ($\beta = -.41$, 95% CI: -.76, -.07). However, the specific indirect effects indicated that only perceived commitment was a unique mediator ($\beta = -.48$, 95% CI: -.76, -.24); fit with the parent brand did not contribute to the indirect effect above and beyond perceived commitment ($\beta = .07$, 95% CI: -.04, .24). The results from moderated mediation analysis again confirmed our predictions, revealing a significant indirect effect of commitment perceptions when group connection was high (Ford owners; $\beta = -1.0$, 95% CI: -1.5, -.56), but not low (Toyota owners; $\beta = -.28$, 95% CI: -.65, .08). Finally, results from the serial mediation analysis were again significant ($\beta = -.22$, Boot SE = .10, 95% CI: -.47, -.08), supporting our conceptualization.

Study 4: Ruling Out Self-Implications

Prior work has found that out-groups influence consumer behavior through self-presentation concerns (Escalas and Bettman 2005; White and Dahl 2006, 2007). However, we proposed that when consumers have a GBC, relatively less focus is placed on preserving self-identity. Thus, we expect the accessor effect to persist even when consumers have the opportunity to repair their self-concept (e.g., self-affirm). We tested this proposition in Study 4. We used university affiliation to manipulate GBC. 193 undergradu-

ates (42% female) participated in a 2 (brand extension type: ABE vs. TBE) x 2 (GBC: high vs. low) x 2 (self-affirmation: present vs. absent) between-subjects experiment. We found a significant brand extension type x GBC interaction that was not further moderated by self-affirmation ($F < 1, p > .65$). These findings demonstrate the robustness of the accessor effect and rule out self-identity threat as alternative mechanism for the accessor effect.

Summary

This research provides a framework for understanding when and which consumers' brand evaluations will be differentially sensitive to (and adversely affected by) the perceived commitment of other brand users. Compared to TBE users, ABE users are perceived to be less committed to the brands they access, and this lack of commitment is associated with lower user and brand extension evaluations for consumers with a high (vs. low) GBC. These effects occur over and above those associated with brand extension fit or self-identity threat. Results provide insights into important boundary conditions of consumers' brand attachments.

REFERENCES

- Aaker, David A and Kevin Lane Keller (1990), "Consumer Evaluations of Brand Extensions," *Journal of Marketing*, 54(1), 27–41.
- Ahluwalia, Rohini, Robert E Burnkrant, and H R Unnava (2000), "Consumer Response to Negative Publicity: The Moderating Role of Commitment," *Journal of Marketing Research*, 37(2), 203–14.
- Bardhi, Fleura and Giana M. Eckhardt (2012), "Access-Based Consumption: The Case of Car Sharing," *Journal of Consumer Research*, 39(4), 881–98.
- Baumeister, Christoph, Anne Scherer, and Florian V. Wengheim (2015), "Branding Access Offers: The Importance of Product Brands, Ownership Status, and Spillover Effects to Parent Brands," *Journal of the Academy of Marketing Science*, <http://link.springer.com/10.1007/s11747-015-0440-y>.
- Brewer, Marilynn B. and Wendi Gardner (1996), "Who Is this 'We'? Levels of Collective Identity and Self Representations.," *Journal of Personality and Social Psychology*, 71(1), 83–93.
- Desai, Kalpesh Kaushik and Kevin Lane Keller (2002), "The Effects of Ingredient Branding Strategies on Host Brand Extendibility," *Journal of Marketing*, 66(1), 73–93.
- Drigotas, Stephen M. and Caryl E. Rusbult (1992), "Should I Stay or Should I Go? A Dependence Model of Breakups.," *Journal of Personality and Social Psychology*, 62(1), 62–87.
- Escalas, Jennifer Edson and James R. Bettman (2005), "Self-construal, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32(3), 378–89.
- Fedorikhin, Alexander, C. Whan Park, and Matthew Thomson (2008), "Beyond Fit and Attitude: The Effect of Emotional Attachment on Consumer Responses to Brand Extensions," *Journal of Consumer Psychology*, 18(4), 281–91, <http://dx.doi.org/10.1016/j.jcps.2008.09.006>.
- Ferraro, Rosellina, Amna Kirmani, and Ted Matherly (2013), "Look at Me! Look at Me! Conspicuous Brand Usage, Self-Brand Connection, and Dilution," *Journal of Marketing Research*, 50(4), 477–88, <http://journals.ama.org/doi/abs/10.1509/jmr.11.0342>.
- Fournier, Susan (1994), *A Consumer-Brand Relationship Framework for Strategic Brand Management*, Gainesville, FL 32611.
- Geron, Tomio (2013), "Airbnb and the Unstoppable Rise of the Share Economy," *Forbes*, <http://www.forbes.com/sites/tomiogeron/2013/01/23/airbnb-and-the-unstoppable-rise-of-the-share-economy/>.
- Keller, Kevin Lane (2003), "Brand Synthesis: The Multidimensionality of Brand Knowledge," *Journal of Consumer Research*, 29(4), 595–600.
- Keller, Kevin Lane (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57(1), 1–22.
- Kirmani, Amna, Sanjay Sood, and Sheri Bridges (1999), "The Ownership Effect in Consumer Responses to Brand Line Stretches," *Journal of Marketing*, 63(1), 88–101, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=1490385&site=ehost-live>.
- Kleine, Susan S., Robert E. Kleine, and Chris T. Allen (1995), "How Is a Possession 'me' or 'not Me'? Characterizing Types and an Antecedent of Material Possession Attachment," *Journal of Consumer Research*, 22(5), 1131–56.
- Love, Edwin, Mark Staton, and Jeff D. Rotman (2015), "Loyalty as a Matter of Principle: The Influence of Standards of Judgment on Customer Loyalty," *Marketing Letters*, 661–74, <http://dx.doi.org/10.1007/s11002-015-9371-0>.
- Markus, Hazel R and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98(2), 224.
- Palamar, Max, Doan T. Le, and Ori Friedman (2012), "Acquiring Ownership and the Attribution of Responsibility," *Cognition*, 124(2), 201–8, <http://dx.doi.org/10.1016/j.cognition.2012.04.006>.
- Park, C. Whan, Sandra Milberg, and Robert Lawson (1991), "Evaluation of Brand Extensions: The Role of Product Feature Similarity and Brand Concept Consistency," *Journal of Consumer Research*, 18(2), 185.
- Park, Jong-Won and Kyeong-Heui Kim (2001), "Role of Consumer Relationships with a Brand in Brand Extensions: Some Exploratory Findings," *NA-Advances in Consumer Research Volume 28*.
- Price Waterhouse Cooper (2015), *The Sharing Economy*, PWC Consumer Intelligence Series.
- Schouten, John W. and James H. McAlexander (1995), "Subcultures of Consumption: An Ethnography of the New Bikers," *Journal of Consumer Research*, 22(1), 43–61.
- Swaminathan, Vanitha, Karen L Page, and Zeynep Gürhan-Canli (2007), "'My' Brand or 'Our' Brand: The Effects of Brand Relationship Dimensions and Self-Construal on Brand Evaluations," *Journal of Consumer Research*, 34(2), 248–59.
- Tajfel, Henri and John C Turner (1979), "An Integrative Theory of Intergroup Conflict," *The social psychology of intergroup relations*, 33(47), 74.
- Wallendorf, Melanie and Eric J. Arnould (1988), "'My Favorite Things': A Cross-Cultural Inquiry into Object Attachment, Possessiveness, and Social Linkage," *Journal of Consumer Research*, 14(4), 531.
- White, Katherine and Darren W. Dahl (2007), "Are All Out-Groups Created Equal? Consumer Identity and Dissociative Influence," *Journal of Consumer Research*, 34(4), 525–36.
- White, Katherine and Darren W. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Psychology*, 16(4), 404–14.

When Words Hurt – Emotional Contagion in a Company’s Facebook Apology

Madeline Barth, University of Mannheim, Germany
Elisa Konya-Baumbach, University of Mannheim, Germany

EXTENDED ABSTRACT

Corporate crises constitute a severe threat to a company’s reputation and performance by causing negative customer emotions and reactions (Coombs 2007; McDonald, Sparks, and Glendon 2010). Hence, a major goal of corporate crisis communication is to protect an organization’s reputation and avert financial damage (Utz, Schultz, and Glocka 2013). Corporate apologies have been identified as an effective strategy to mitigate the negative consequences of a crisis (Coombs and Holladay 2008; Robbenolt 2003). Interestingly, the expression of negative emotions like sadness appears to be an injunctive norm for apologies (Cialdini 2003). However, it is unclear how consumers process and react to such negative emotions. The socio-psychological process of emotional contagion (EC) supposes that individuals can “catch” the emotions of others (Hatfield, Cacioppo, and Rapson 1994). Based on the notions of the feelings-as-information theory (Schwarz 1990), consumers might rely on transferred negative emotions as information causing them to make valence-congruent evaluations. To date, there is a deficiency in literature on the possible consequences of EC, particularly with regard to negative emotions. The present study addresses this research gap by investigating EC in corporate apologies in a social media context. In doing so, we additionally consider the role of potential influencing factors (i.e., the authenticity of displayed emotions and susceptibility to EC). To this end, we conduct an online experiment and an eye tracking experiment.

Experiment one examines the effects of (authentic) negative emotions expressed in corporate apologies on consumers’ sadness and willingness to forgive. Overall, 194 participants (59% female, $M_{age} = 27.1$) were randomly assigned to a 2 (extent of negative emotion: low, high) \times 2 (extent of authenticity: low, high) between-subjects design. We manipulated the extent of negative emotion by the number of affective cues such as the word “saddened” (one vs. seven negative affective cues) and the authenticity of negative emotions by the use of emoticons (none vs. two emoticons). Participants first viewed a newspaper report on a fictive corporate crisis that was identified via a pretest. Consumers’ sadness was measured at three points in time: T0 (before corporate crisis), T1 (after corporate crisis), and T2 (after corporate apology). Additionally, participants were asked to indicate their willingness to forgive the company and answered manipulation checks. Overall, consumers’ sadness increased after reading about the crisis (T1). The analysis revealed a significant change in participants’ sadness from T1 to T2. The extent of emotion, authenticity, and susceptibility show significant effects on the change in sadness from T1 to T2. The results of a mediation analysis further indicate that the effect of the extent of expressed negative emotions on consumers’ willingness to forgive is fully mediated by customer sadness after reading the apology (T2). The extent of negative emotions in the apology positively affected participants’ sadness, which in turn, negatively influenced their willingness to forgive the company. In contrast to susceptibility, authenticity did not significantly moderate the contagion of negative emotions.

Experiment two uses physiological measures (i.e., pupillometry) to investigate negative EC in a company’s Facebook apology. Pupil size is endogenously affected by emotion and cognition (e.g., Bradley et al. 2008, Fox 2015). Specifically, the pupil diameter is assumed to vary depending on the extent of (negative) emotions (i.e., the number of affective cues). Cognitive processing was manipulated

by syntactic complexity which causes the disruption of smooth processing (Gordon, Hendrick and Johnson 2001; Davison et al. 1980) and higher processing costs (Gibson 1998). Overall, 30 participants (70% male, $M_{age} = 22.4$) were randomly assigned to a 3 (extent of negative emotion: low, medium, high) \times 2 (syntactic complexity: low, high) experimental within-subjects design. Participants first saw a newspaper cover illustrating the crisis for nine seconds followed by a fixation cross. They were then presented with the corresponding Facebook apology which varied in the extent of negative emotions and syntactic complexity. The timeline analysis of the pupil size data indicates a similar pattern for most apologies. There is an initial increase in pupil size, followed by a pupil constriction, followed by a steep pupil dilation. The final dilation initiates later for apologies with a higher complexity and higher extent of emotions. This is in line with participants’ dwell time, the time participants’ eyes spend on the Facebook apology, which increased with complexity and partly with emotion. The final pupil dilation seems to be in accordance with a proposed delayed pupillary response to emotions. For further analyses, we considered three points in time: 1) data in second two as here the initial peak occurred, 2) data in second 13 as here the final dilation for low complexity apologies and the lowest point for high complexity apologies occurred, 3) data in second 20 as here the final peak had already been reached in all groups. At second two, there was a significant interaction effect for emotion and complexity on pupil size change. Similarly, at second 13, the analysis revealed a significant interaction of emotion and complexity. At second 20, pupil change did not significantly differ across the apologies.

The present research shows that negative emotions expressed in corporate apologies in a social media setting can be contagious. While apologies largely reduce sadness triggered by the crisis, this reduction varies depending on the extent of negative emotions communicated and consumers’ susceptibility to EC. Interestingly, the effect of the extent of negative emotion on consumers’ willingness to forgive is fully mediated by participants’ sadness. Authenticity did not significantly moderate the contagion process. Using physiological measures of emotions, the second experiment provides an innovative approach to investigate EC and validate the findings of experiment one. This research illustrates that affective cues suffice for companies to transfer emotions to consumers online and to thereby influence consumers’ willingness to forgive. While a corporate apology can mitigate the negative emotions of consumers in a social media environment, managers must pay attention to the extent of negative emotions communicated in a corporate apology since the contagion of negative emotions can attenuate consumers’ willingness to forgive the company.

REFERENCES

- Bradley, Margaret M., Laura Miccoli, Miguel A. Escrig, and Peter J. Lang (2008), “The Pupil as a Measure of Emotional Arousal and Autonomic Activation,” *Psychophysiology*, 45 (4), 602-607.
- Cialdini, Robert B. (2003), “Crafting Normative Messages to Protect the Environment,” *Current Directions in Psychological Science*, 12 (4), 105-109.

- Coombs, W. Timothy (2007), "Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory," *Corporate Reputation Review*, 10 (3), 163-176.
- Coombs, W. Timothy and Sherry J. Holladay (2008), "Comparing Apology to Equivalent Crisis Response Strategies: Clarifying Apology's Role and Value in Crisis Communication," *Public Relations Review*, 34 (3), 252-257.
- Davison, Alice (1980), "Linguistics and the Measurement of Syntactic Complexity: The Case of Raising," Technical Report 173, University of Illinois.
- Fox, Alexa (2015), "A Multi-Method Examination of the Effects of Online Reviews on Consumer Information Processing and Firm Performance: A Linguistic Perspective," unpublished dissertation, University of Memphis.
- Gibson, Edward (1998), "Linguistic Complexity: Locality of Syntactic Dependencies," *Cognition*, 68 (1), 1-76.
- Gordon, Peter C., Randall Hendrick, and Marcus Johnson (2001), "Memory Interference During Language Processing," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 27 (6), 1411-1423.
- Hatfield, Elaine, John T. Cacioppo, and Richard L. Rapson (1994), *Emotional Contagion: Cambridge Studies in Emotion and Social Interaction*, Cambridge: Cambridge Univ. Press.
- McDonald, Lynette M., Beverley Sparks, and A. Ian Glendon (2010), "Stakeholder Reactions to Company Crisis Communication and Causes," *Public Relations Review*, 36(3), 263-271.
- Robbenolt, Jennifer K. (2003), "Apologies and Legal Settlement: An Empirical Examination," *Michigan Law Review*, 102 (3), 460-516.
- Schwarz, Norbert (1990), "Feelings as Information. Informational and Motivational Functions of Affective States," in *Handbook of Motivation and Cognition*, ed. E. Tory Higgins and Richard M. Sorrentino, New York: Guilford Press.
- Utz, Sonja, Friederike Schultz, and Sandra Glocka (2013), "Crisis Communication Online. How Medium, Crisis Type and Emotions Affected Public Reactions in the Fukushima Daiichi Nuclear Disaster," *Public Relations Review*, 39 (1), 40-46.

Are Dark and Frightening Story Worlds Inspirational?

An Analysis of the Narrative Persuasion Process

Kerstin Barth-Strieder, Johannes Gutenberg University, Germany

Frank Huber, Johannes Gutenberg University, Germany

EXTENDED ABSTRACT

The rising tide of media broadcasts, misinformation, public persuasion knowledge and the extreme polarization of opinions, as challenges of the information age, heighten the need for an effective social marketing. Against the background of the striving for entertainment (Singhal & Rogers, 2002), narratives become increasingly important to open human eyes and minds across various areas of social and health problems (Slater, 2002; Hinyard & Kreuter, 2012). Narratives are “(...) a way of organizing spatial and temporal data into a cause-effect chain of events with a beginning, middle, and end that embodies a judgement about the nature of the events as well as demonstrates how it is possible to know, and hence to narrate, the events” (Branigan, 1992) and meet higher audience acceptance than overtly persuasive argument-based messages (Dal Cin et al., 2004). Scholars increasingly try to explain the mysterious background of narrative persuasion by using the phenomenon of perceptual illusion that a mediated experience is not mediated (nonmediation, Lombard & Ditton, 1997). Transportation, as a central element of nonmediation, is defined by Green and Brock as “a convergent process, where all of the person’s mental systems and capacities become focused on the events occurring in the narrative” (Green et al., 2003). It seems to be particularly crucial, since this mental process regulates the subsequent phase of the narrative persuasion procedure, capturing the readers’ discovery of the deeper story message and its projection into their individual future (e.g., Moyer-Gusé & Nabi, 2010). The most important subsequent intermediary, in this context, can be summarized as reflection, which involves cognitions and emotions evoked by the narrative, as well as reflections about the reader and the world external to the reader (Hamby, 2014). Nevertheless, there are only a limited number of studies available analyzing the driving forces that increase transportation, reflection and set the narrative persuasion procedure in motion (Appel & Malečkar, 2012; Hamby, 2014).

In this respect, research suggests the power of threatening and creepy content in narratives. Findings in the field of fear appeals, traditional persuasion (e.g., Dillard & Anderson, 2004; Cauberghe et al., 2009) and narratives (e.g., McQueen et al., 2011; Nabi, 2015; Bartsch et al., 2014) particularly provide evidence for the power of dark stimulating emotions, which may lead to the journey into a narrative world, representing the secret key to the inspiration mechanism of narratives, which has never been analyzed before. Therefore, we attempt to uncover the capability and the workflow of fear-inducing stories to arouse story-related reflections. Thereby, we contribute to the existing findings by addressing four important issues. First, we reassess the debate towards the relevance of fear in relation to a) fear appeals (Tannenbaum et al., 2015) and in relation to b) reflective cognitions (Bartsch et al., 2014). Second, the paper furthers the effort of Green and Brock (Green et al., 2003) to understand the emergence of transportation. Third, we broaden the knowledge regarding the steps in the narrative persuasion process (Appel & Malečkar, 2012) and recover transportation as an intermediate process between story reception and reflection (Hamby et al., 2014). Finally, we add to the discussion regarding the role of personality traits in the persuasion process (Weibel et al., 2010; Bartsch et al., 2010; Zwarun & Hall, 2012; Green et al., 2008).

Narrative Persuasion Process

In comparison to argument and data-based evidence, narratives are completely different communication vehicles. This implies distinct ways of mental processing, including distinct moderators and mediators (Slater & Rouner, 2002).

While dual-process models, normally applied in the context of traditional argument-based messages, deal with the elaboration likelihood, narratives concentrate on image sequences. Moreover, there is no need to separate between a central and a peripheral route of mental processing, since the cognitive and affective stimuli of narratives are simultaneously processed (Slater & Rouner, 2002). If a compelling story succeeds to completely absorb the individual’s cognitive resources, the audience immerses into the story and feels present in the imagined world. Thus, no capacity for counterarguments is available (Hofer, 2013). In this matter, considerable attention has been paid to the concept of transportation, which is very similar to *presence* (Lombard & Ditton, 1997) but includes also the engaging “journey” into the story world (Kim & Biocca, 1997). Green and Brock (Green et al., 2003) argue in the Transportation-Imagery-Model that distance to the real world increases by being mentally drawn into a narrative world such that story claims are no longer called into question. Thus, after the immersion into the story world, the audience is more prone to support the story-consistent beliefs due to the emotional experience and the missing cognitive resources. In this respect, far-reaching effects on emotions, self or other-centered cognitions (Dunlop et al., 2010; Escalas, 2007; Banerjee & Greene, 2012, Green & Brock, 2000) and behavior (van Laer et al., 2012) were identified.

Overall, there is evidence that transportation is a promising precondition of narrative persuasion. However, little is known on how the transition between reception and persuasion proceeds and which key determinants beside transportation join in the process (Appel & Malečkar, 2012). Cognitive and emotional post-story-message evaluations, which can be described as upstream processes of change in attitude and behavior (Dunlop et al., 2010; Moyer-Gusé & Nabi, 2010) are important intermediaries. They can also be summarized as the phenomenon of reflection, resembling Oatley’s (1999) idea of the reader’s and storyteller’s meeting of minds. Hamby (2014) similarly defines reflection as “...a process related to integrating elements encountered in the story world into one’s understanding of the real world“. Whereas transportation corresponds to the immersion into and the presence in the story world, the secondary process of reflection covers the “return trip to the real world“. As Hamby (2014) suggests, reflection involves three types of successive opinion-forming evaluations, including cognitive, emotional responding and reflections about the reader’s self and the reader’s social surrounding.

Overall, reflection was found to be a very central mechanism in the persuasion process, subsequent to the experience of transportation (Hamby, 2014). It is, however, still an open issue regarding how the causal chain of transportation and reflection is activated. Recent research in this context explored the power of emotionally charged media experiences to stimulate reflective thoughts directly (Bartsch et al., 2014). But research also reflects signs of an indirect pathway, since scary story contents were uncovered to be incredibly absorbing (Hoffner & Levine, 2005), fascinate the audience through the sensation of fear (Sparks & Sparks, 2000) paired with inspiration

(Merchant et al., 2010). As the following discoveries of fear appeals and associated works demonstrate, fear is a very effective device in provoking deep message processing and message acceptance - potentially in terms of narrative persuasion.

Fear Appeal Research

Initial research on fear appeals primarily shed light on the role of fear for persuasion (Janis, 1967; Mc Guire, 1968). In contrast to anxiety, fear represents a short-term reaction towards an identifiable stimulus (Sutton, 1982) and is explained as "(...) a negatively valenced emotion, accompanied by a high level of arousal" (Witte & Allen, 2000).

In contrast to the previous models (Janis, 1967; McGuire, 1968), the central role of fear dwindled in successive models and was gradually replaced by danger and fear control appraisals (Witte, 1992). But the decisiveness of fear in terms of the effectivity of fear appeals on persuasion outcomes is still an ongoing debate (Dillard et al., 2016). Inspired by drive theories, recent research highlights the major importance of fear in the persuasion process (Dillard et al., 2016) and supports the direct and linear link between fear and persuasion-related outcomes (Dillard & Anderson, 2004; Roskos-Ewoldsen et al., 2004). Besides the direct impact channel, there is also evidence for an indirect mechanism (Cauberghe et al., 2009), running through elements mirroring the phenomenon of transportation recovered in narrative persuasion research (e.g. Keller & Block, 1996; LaTour & Rotfeld, 1997; Tanner et al., 1991; LaTour & Rotfeld, 1997; Panić et al., 2011).

Packaged in an entertaining tale, fear-inducing storytelling seems to be a suitable stage to transfer compelling visions in terms of educational work and social marketing. Therefore, we suggest that the identified indirect and direct power of fear identified by persuasion research might be recovered and applied in the field of narrative communication, especially in the area of transportation and subsequent evaluations like reflection.

Direct and Indirect Pathways to Reflection

For two reasons stories are very favorable to set the receivers into an absorbing reflection mode. Stories firstly provide a high entertainment value for the receiver (Green et al., 2004). Secondly, narratives are unconsciously educationally valuable (Hoffner & Levine, 2005; Kniveton, 1978). Both characteristics of narratives, which demonstrate important preconditions of narrative persuasion in terms of transportation and reflection, are especially valid for fear-inducing stories. Since frightening stories include unforeseeable, new, surprising, sensational and destructive contents (Allen & Greenberger, 1978), which address life beyond social rules (McCaulley, 1998) they are very arousing and suspenseful for us, as long as we feel safe (Nell, 2002). Thereby, these contents are very entertaining. Alongside their role regarding entertainment, emotional arousal and pleasurable suspense represent core components of transportation, as research has disclosed, and increase the receiver's emotional engagement to follow the storyline (McQueen et al., 2011). These insights reveal more strongly the direct impact of fear-inducing content on transportation as well as reflection.

Second, threatening stories offer the opportunity to address controversial issues that are avoided in everyday life (Moyer-Gusé, 2008; Sparks & Sparks, 2000). This explains the educational value of that kind of story influencing the audience to become transported, resulting in reflection (Hamby, 2014; Hamby et al., 2014). Therefore, we suspect that fear, which can be enjoyable in terms of the experience of a frightening narrative, while feeling safe (Nell, 2002), might be a vitalizing avenue to enhance entertainment-educational effects

(Nabi, 2015; Bartsch et al., 2014) by increasing transportation and reflection. Thus, we predict that:

Hypothesis 1: Higher levels of fear evoked by a narrative will result in a higher level of transportation.

Hypothesis 2: Higher levels of transportation will result in a higher level of reflection.

Literature reviews alert that negative emotions like fear may affect information processing negatively, which occur particularly at higher levels of arousal (Lang, 2000; Sanbonmatsu, 1988). But this observation also suggests that arousing stories provoke the receiver to become "lost in the story", weakening the processing of real world information but strengthening the focus on the narrative. Due to the equivalence to transportation, we conclude that this subsequent process makes the aroused receiver enter the phase of reflection (Hamby et al., 2014). Hence, we assume:

Hypothesis 3: Transportation mediates the impact of fear on reflection.

According to the aforementioned findings of persuasion research, we additionally suppose that activating fear might be an important immediate driver of reflection and narrative persuasion. Therefore, we hypothesize:

Hypothesis 4: Higher levels of fear evoked by the narrative will result in a higher level of reflection.

Previous research has shown the link between specific personality traits and transportation, as well as persuasive outcomes (Weibel et al., 2010; Bartsch et al., 2010; Zwarun & Hall, 2012; Green et al., 2008). Hence, we also controlled for extroversion, neuroticism, openness for experiences, conscientiousness, agreeableness and need for cognition.

Study 1

Particularly in the field of the meat industry and the heightened consumption of food produced by factory farming, consumer education in adulthood regarding the dangerous consequences for human health and animal welfare is needed (Chemnitz & Becheva, 2014; Stehfest et al., 2009; Hughner et al. 2007). Thus, our study concentrates on the capability and the procedure of fear-inducing narratives to make consumers reflect on those issues to promote better consumption decisions.

180 respondents (132 females; mean age: 30.44 years, SD: 10.574) participated in the online and paper-based quasi-experimental survey voluntarily, anonymously and individually. After the participants were shortly briefed about the topic of factory farming, the participants were invited to carefully read a narrative and to answer some questions regarding their feelings (fear) and their mental processes during and after story reception (transportation and reflection). In our survey, we utilized an adapted translation of the experimental text material *Murder at the Mall* (provided by Appel & Richter, 2010, originally used in Green & Brock, 2000). Modelled after selected episodes of a well-known German TV crime series (*Tatort, 2014*), we inserted the issue of the consumption of meat produced by factory farming in the initial version of the scary narrative (due to the German speaking sample, this method seems to be reasonable). In conjunction with this issue, we embedded argumentation lines towards the environmental and personal threats of factory farming (animal welfare and personal health status), as well as educational

handling recommendations. An online-performed Delphi-interview (12 experts) served to correct misleading and disturbing story passages (c.f. narrative description in the appendix).

Multi-item measures extracted from peer-reviewed studies were used for the operationalization of the variables (cf. appendix).

Results

This study aims to analyze whether transportation fully or partially mediates the relationship between fear and reflection. To validate the effects, we include the covariates of *need for cognition*, *extroversion*, *agreeableness*, *conscientiousness*, *emotional stability* and *openness to experience* (Hayes, 2013). The results of the analysis of linear regression revealed that fear significantly provokes transportation ($\beta = 0.351$, $SE = 0.039$, $p < 0.01$), providing support for H 1. Additionally, we find a significant impact of the covariate *extroversion* on transportation ($\beta = 0.094$, $SE = 0.037$, $p < 0.05$). In line with our expectations, we observe that a higher level of transportation results in significantly higher levels of reflection ($\beta = 0.589$, $SE = 0.097$, $p < 0.01$) (H 2). Moreover, we find significant positive effects of the covariates *emotional stability* ($\beta = 0.099$, $SE = 0.047$, $p < 0.05$) and *openness to experience* ($\beta = 0.116$, $SE = 0.068$, $p < 0.1$), as well as negative effects of *agreeableness* ($\beta = -0.169$, $SE = 0.079$, $p < 0.05$) and *conscientiousness* ($\beta = -0.104$, $SE = 0.059$, $p < 0.01$). We applied the bootstrapping method proposed by Preacher & Hayes (2004) using Hayes's PROCESS macro (2012) in order to analyze the mediation effect. The computation of the bias corrected 95% confidence intervals for the indirect effects was based on 10,000 bootstrap samples (Hayes, 2013). The results disclosed that the impact of narratively induced fear on reflection is mediated by transportation ($\beta = 0.207$, $SE = 0.048$, 95% CI = .122 to 0.310) (H3). Beyond the indirect effect, we observe fear as a significant direct predictor of reflection ($\beta = 0.220$, $SE = 0.061$, $p < 0.01$) (H4), providing evidence for a partial mediation. The results of the total effect model revealed a total impact of fear on reflection ($\beta = 0.428$, $SE = 0.055$, $p < 0.01$) (c.f. appendix).

Study 2

In order to validate the findings of Study 1, Study 2 aims to analyze the proposed effects in the context of a narrative dealing with a more serious fear (e.g. the consequences of a life-threatening disease) solely on human-based reflections. More precisely, in Study 2, we explore the effects on reflections associated with blood cancer prevention and social motivations to donate to leukemia patients. 186 respondents (131 females; mean age: 27.90 years, SD: 9.066) attended the online and paper-based survey. Except for the contextual changes into a health-related narrative addressing the issue of leukemia prevention and support (similar to an episode of *Tatort*, 2013), we applied the same procedure as in Study 1 (c.f. appendix).

Results

The linear regression analysis reveals our first hypothesis that fear affects transportation ($\beta = 0.321$, $SE = 0.038$, $p < 0.01$). A positive effect of extroversion ($\beta = 0.099$, $SE = 0.0359$, $p < 0.01$) and a negative effect of emotional stability ($\beta = -0.064$, $SE = 0.037$, $p < 0.1$) on transportation is also found. Moreover, transportation is a significant predictor for reflection ($\beta = 0.403$, $SE = 0.091$, $p < .01$) (H 2). Negative effects of emotional stability are also again obtained ($\beta = -0.078$, $SE = 0.045$, $p < 0.1$). Mediation analysis again suggests a significant indirect effect of fear on reflection, providing support for the mediating role of transportation ($\beta = 0.123$, $SE = 0.031$, 95% CI = .077 to 0.199) (H 3). Beside the indirect effect, we also find the direct effect of fear on reflection, suggesting a partial mediation as proposed in H4 ($\beta = 0.251$, $SE = 0.055$, $p < 0.01$). In summary, we

find a significant total effect of fear on reflection ($\beta = 0.380$, $SE = 0.048$, $p < 0.01$).

General Discussion

As in Study 1, the supposed steps in the narrative persuasion process reemerge: half of the fear effect operates through transportation, which is again identified to be an important upstream process of reflection. Besides these factors, a minor part of the narrative effect might be attributed to specific personality characteristics (Weibel et al., 2010; Bartsch et al., 2010; Zwarun & Hall, 2012; Green et al. 2008), as both studies reflect. These findings, implying the power of fear-provoking narratives to vitalize the persuasion process, show that insights of fear appeal research (Dillard et al. 2016; Dillard & Anderson, 2004; Roskos-Ewoldsen et al., 2004) and related study fields assuming an indirect relationship (Cauberghe et al., 2009; Keller & Block, 1996; LaTour & Rotfeld, 1997) might also be valid in the field of narrative persuasion. Furthermore, we find that fear-inducing stories provoke transportation, which contributes to the understanding of the emergence of transportation. Consistent with the literature, we again demonstrate the significance of transportation toward evoking persuasion-related outcomes (e.g., Green et al., 2003; Murphy et al., 2011).

Furthermore, our study could respond to the recent call to research (Appel & Malečkar, 2012; Hamby, 2014). Both studies provide evidence for the supposed and partially uncovered sequence of elements in the persuasion process. As previously supposed (Nabi, 2015; Bartsch et al., 2014; McQueen et al., 2011; Moyer-Gusé, 2008; Sparks & Sparks, 2000), fear is identified to be a crucial emotional arousal, which directly initiates transportation and successively evokes reflection. We therefore strongly recommend practitioners to predominately use fear as a stimuli in narratives, which directly or subsequent to the compelling process of transportation promises that readers transform the narratively simulated experience into cognitions and emotions, which may have suggestive impact on their own lives.

Overall, the outcomes also demonstrate that further work needs to be done in order to identify relevant emotional factors introducing transportation, as well as reflection, and in particular the causal-chain of transportation and reflection as well as other valuable upstream mechanisms of narrative persuasion outcomes (e.g., reception of stories transmitted by other media channels, purely experimental setting, and measurement of covariates).

REFERENCES

- Allen, V. L., & Greenberger, D. B. (1978). An aesthetic theory of vandalism. *Crime & Delinquency*, 24(3), 309-321.
- Appel & Malečkar, B. (2012). The influence of paratext on narrative persuasion: Fact, fiction, or fake? *Human Communication Research*, 38(4), 459-484.
- Appel, M. & Richter, T. (2010). Transportation and need for affect in narrative persuasion. a mediated moderation model. *Media Psychology*, 13(2), 101-135.
- Banerjee, S. & C.; Greene, K. (2012). Role of transportation in the persuasion process: Cognitive and affective responses to antidrug narratives. *Journal of Health Communication*, 17(5), 564-581.
- Bartsch, A., Appel, M., & Storch, D. (2010). Predicting emotions and meta-emotions at the movies: The role of the need for affect in audiences' experience of horror and drama. *Communication Research*, 37(2), 167-190.
- Bartsch, A, Kalch, A., & Oliver, M. B. (2014). Moved to think. *Journal of Media Psychology*, 26(3), 125-140.

- Branigan, E. (1992). Narrative comprehension and film. Oxfordshire, UK: Routledge.
- Cauberghe, V., Pelsmacker, P. de, Janssens, & W., Dens, N. (2009). Fear, threat and efficacy in threat appeals: message involvement as a key mediator to message acceptance. *Accident; Analysis and Prevention*, 41(2), 276–285.
- Chemnitz, C., & Becheva, S. (Eds.). (2014). Meat atlas: Facts and figures about the animals we eat. Heinrich-Böll-Foundation.
- Dal Cin, S., Zanna, M., & Fong, G. (2004). Narrative persuasion and overcoming resistance. In E. Knowles, J. Linn (Eds.) *Resistance and persuasion (175-191)*. New York, London: Routledge.
- Dillard, J., & Anderson, J. W. (2004). The role of fear in persuasion. *Psychology & Marketing*. 21(11), 909–926.
- Dillard, J. P., Li, R.; Meczkowski, E.; Yang, C., & Shen, L. (2016). Fear responses to threat appeals: Functional form, methodological considerations, and correspondence between static and dynamic data. *Communication Research* (February).
- Dunlop, S. M., Wakefield, M., & Kashima, Y. (2010). Pathways to persuasion: Cognitive and experiential responses to health-promoting mass media messages. *Communication Research*, 37(1), 133–164.
- Escalas, J. E. (2007). Self-referencing and persuasion: Narrative transportation versus analytical elaboration. *Journal of Consumer Research*, 33(4), 421–429.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the big-five personality domains. *Journal of Research in Personality*. 37(6), 504–28.
- Green, M. C. & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79(5), 701–721.
- Green, M. C., Brock, T. C., & Kaufman, G. F. (2004). Understanding media enjoyment: The role of transportation into narrative worlds. *Communication Theory*, 14(4), 311–327.
- Green, M. C., Kass, S., Carrey, J., Herzig, B., Feeney, R., & Sabini, J. (2008). Transportation across media: Repeated exposure to print and film. *Media Psychology*, 11(4), 512–539.
- Green, M. C., Strange, J. J., & Brock, T. C. (2003). Narrative impact. *Social and cognitive foundations*. New York/ Hove, UK: Psychology Press.
- Hamby, A. (2014). Tell me about your experience: How consumer narratives persuade (unpublished dissertation). Virginia Polytechnic Institute and State University.
- Hamby, A.; Brinberg, D.; Daniloski, K. (2014). Transportation Back: Reflecting on the Journey. *Advances in Consumer Research*, 42, 504–505.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford Press.
- Kreuter, M. (2012). Narratives in cancer prevention: a review of a 10 year research program. *NA-Advances in Consumer Research*, 40, 191–194.
- Hofer, P. M. (2013). Präsenzerleben und Transportation [Presence and Transportation]. In W. Schweiger & A. Fahr (Eds.), *Handbuch Medienwirkungsforschung [Handbook of research of media effects]*(279–294). Wiesbaden: Springer.
- Hoffner, C. A. & Levine, K. J. (2005). Enjoyment of Mediated Fright and Violence: A Meta-Analysis. *Media Psychology*, 7 (2), 207–237.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2-3), 94.
- Janis, I. L. (1967). Effects of fear arousal on attitude change: Recent developments in theory and experimental research. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (166-225). New York, Academic Press.
- Keller, P. & Block, L. (1996). Increasing the persuasiveness of fear appeals: The effect of arousal and elaboration. *Journal of Consumer Research*, 22(4), 448–459.
- Kim, T., & Biocca, F. (1997). Telepresence via television: Two dimensions of telepresence may have different connections to memory and persuasion. *Journal of Computer-Mediated Communication*, 3(2).
- Kniveton, B. H. (1978). Angst statt Aggression – eine Wirkung brutaler Filme? [Fear instead of aggression – An effect of violent films?] *Fernsehen und Bildung*, 12(1-2), 41–47.
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of Communication*. 50(1), 46–71.
- Laer, T., van , Ruyter, K., de , & Wetzels, M. (2012). Effects of narrative transportation on persuasion: A meta-analysis. *NA-Advances in Consumer Research*, 40, 579–581.
- LaTour, M.S. & Rotfeld, H.J. (1997). There are threats and (maybe) fear-caused arousal: Theory and confusions of fear appeals to fear and fear arousal itself. *Journal of Advertising*, 26(3), 45–59.
- Lombard, M. & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of Computer-Mediated Communication* 3(2).
- Maddux, J. E. & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479.
- McCauley, C. (1998). When screen violence is not attractive. In J. Goldstein (Ed.), *Why we watch: The attractions of violent entertainment*, (144-162). New York: Oxford University Press.
- McGuire W. J. (1968). Personality and susceptibility to social influence. In E. Borgatta, W. Lambert (Eds.), *Handbook of personality theory and research* (1130-1187). Chicago, Rand McNally.
- McQueen, A., Kreuter, M. W., Kalesan, B., & Alcaraz, K. I. (2011). Understanding narrative Effects: The impact of breast cancer survivor stories on message processing, attitudes, and beliefs among african american women. *Health Psychology*, 30(6), 674.
- Merchant, A., Ford, J. B., & Sargeant, A. (2010). Charitable organizations’ storytelling influence on donors’ emotions and intentions. *Journal of Business Research*, 63(7), 754–762.
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-education messages. *Communication Theory*, 18(3), 407–425.
- Moyer-Gusé, E. & Nabi, R. L. (2010). Explaining the effects of narrative in an entertainment television program: Overcoming resistance to persuasion. *Human Communication Research*, 36(1), 26–52.
- Nabi, R. L. (2015). Emotional flow in persuasive health messages. *Health Communication*, 30(2), 114–124.

- Nell, V. (2002). Mythic structures in narrative: The domestication of immortality. In M. C. Green, J. J. Strange, & T. C. Brock (Eds.), *Narrative impact: Social and cognitive foundations* (17–37). New York: Psychology Press.
- Oatley, K. (1999). Meetings of minds: Dialogue, sympathy, and identification, in *Reading fiction. Poetics*, 26(5), 439-454.
- Panić, K., Cauberghe, V., & Pelsmacker, P. de (2011). Impact of an interactive anti-speeding threat appeal: How much threat is too much? *Cyberpsychology, Behavior, and Social Networking*, 14(5), 281-289.
- Preacher, K. J. & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Rippetoe, P. A. & Rogers, R. W. (1987). Effects of components of protection-motivation theory on adaptive and maladaptive coping with a health threat. *Journal of Personality and Social Psychology*, 52(3), 596.
- Roskos-Ewoldsen, D. R., Yu, J. H., & Rhodes, N. (2004). Fear appeal messages affect accessibility of attitudes toward the threat and adaptive behaviors. *Communication Monographs*, 71(1), 49-69.
- Sanbonmatsu, D. M. & Kardes, F. R. (1988). The Effects of physiological arousal on information processing and persuasion. *Journal of Consumer Research*, 15(3), 379–85.
- Singhal, A., & Rogers, E. M. (2002). A theoretical agenda for entertainment—education. *Communication Theory*, 12(2), 117-135.
- Slater, M. D. (2002). Entertainment education and the persuasive impact of narratives. In M. C. Green, J. J. Strange, T. C. Brock (Eds.), *Narrative impact. Social and cognitive foundations*. (157-181). New York/ Hove, UK: Psychology Press.
- Slater, M., & Rouner, D. (2002). Entertainment-education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12(2), 117-244.
- Sparks, G. G. & Sparks, C. W. (2000). Violence, mayhem, and horror. In D. Zillmann, P. Vorderer, *Violence, mayhem, and horror. media entertainment: The psychology of its appeal* (73-92). Mahwah, NJ, L: Lawrence Erlbaum Associates.
- Stehfest, E., Bouwman, L., van Vuuren, D. P., Elzen, M. G. den , Eickhout, B., & Kabat, P. (2009). Climate benefits of changing diet. *Climatic Change*, 95(1-2), 83-102.
- Sutton, S. R. (1982). Fear-arousing communications: A critical examination of theory and research, in Eiser JR (Ed.), *Social Psychology and Behavioral Medicine* (303-337). London, Wiley, 1982.
- Tannenbaum, M. B., Hepler, J.; Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to fear: A Meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, 141(6), 1178–1204.
- Tanner, J., Hunt, J. & Eppright, D., (1991). The protection motivation model: A normative model of fear appeals. *Journal of Marketing*, 55(3), 36–45.
- Tatort (2014). *Der sanfte Tod*. In *Wikipedia: The free encyclopedia*. Retrieved June, 2015, from http://de.wikipedia.org/wiki/Tatort:_Der_sanfte_Tod
- Tatort (2013) *Machtlos* (2013). In *Wikipedia: The free encyclopedia*. Retrieved June, 2015, from http://de.wikipedia.org/wiki/Tatort:_Machtlos
- Weibel, D., Wissmath, B., & Mast, F. W. (2010). Immersion in mediated environments: The role of personality trait. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 251-256.
- Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communications Monographs*, 59(4), 329-349.
- Witte, K. & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education & Behavior* 27(5), 591–615.
- Wood, S. L. & Swait, J. (2002). Psychological indicators of innovation adoption: Cross-classification based on need for cognition and need for change. *Journal of Consumer Psychology*, 12(1), 1-13.
- Zwarun, L., & Hall, A. (2012). Narrative persuasion, transportation, and the role of need for cognition in online viewing of fantastical films. *Media Psychology*, 15(3), 327–355.

\$100 a month or \$1,200 a year: Impact of Regulatory Focus on the Evaluation of Temporally Framed Attributes

Shankha Basu, University of Leeds, UK
Sharon Ng, Nanyang Technological University, Singapore

EXTENDED ABSTRACT

Consumers often encounter benefits and costs which recur over time framed at different levels of aggregation. For example, a weight loss program may advertise either in an aggregate (“Lose 10 pounds in 10 weeks”) or a disaggregate (“Lose 1 pound per week over 10 weeks”) frame. In using this strategy, marketers hope that consumers will utilize the largeness of the numeric expression as a heuristic for making magnitude judgments. Indeed, some research suggests that this may be the case. An aggregate frame makes the consumers perceive the benefit or cost to be higher in magnitude leading to a greater weightage being assigned during evaluation and choice (Burson, Larrick, and Lynch, 2009; Goldstein, Hershfield, and Benartzi, 2016; Gourville 1998). However, not much is known about the way in which consumer characteristics may impact the evaluation of such frames. Further, research is needed on means to reduce consumers’ reliance on this erroneous heuristic. In this research, we aim to accomplish these objectives by examining how consumers’ goal pursuit strategies affect the evaluation of such frames.

In any decision process, one of the two primary goals of a human being, the need for advancement and that for security (Bowlby, 1969), may be salient. Regulatory focus theory (Higgins, 1997) posits that these goals lead to two distinct motivational states in a consumer – a promotion and a prevention focus, respectively. We contend that temporal framing of attributes will affect the evaluation of only promotion focused (but not prevention focused) consumers. We base our predictions on the distinct information processing strategies elicited by these regulatory goals (Forster and Higgins, 2005; Lee, Aaker, and Gardner, 2010; Pham and Chang, 2010). Promotion focused consumers, who pay greater attention to the most salient aspect of any information, may be easily swayed by the largeness of the numeric expression in an aggregate frame. However, prevention focused consumers, who pay attention to all aspects of any information, may be immune to the effect of temporal reframing.

In Study 1 (N = 152), we primed regulatory focus using an anagram task (Jain et al., 2007). Next, participants in the aggregate (disaggregate) condition, read that their salary post graduation was “\$36,000 a year” (“\$3,000 a month”). A two-way ANOVA revealed a significant interaction effect, $F(1,148)=7.0, p=.01$. Promotion focused participants evaluated the salary more positively in the aggregate condition ($M_{\text{aggregate}}=4.84, M_{\text{disaggregate}}=4.29, F(1,148)=5.39, p=.02$). No such difference emerged for prevention focused participants ($M_{\text{aggregate}}=4.40, M_{\text{disaggregate}}=4.73, F(1,148)=2.02, p=.16$).

Study 2 (N = 148) examined a downstream effect. We primed regulatory focus using a goals task (Li et al, 2011). Next, in the aggregate (disaggregate) condition, participants read that they had a job offer which paid \$42,000 a year (\$3,500 a month). Participants intention to join a retirement saving plan offered by their employer serves as the dependent measure. A two-way ANOVA revealed a significant interaction effect ($F(1, 144)=4.00, p=.047$). Promotion focused participants were more likely to save in the disaggregate condition ($M_{\text{disaggregate}}=6.95, M_{\text{aggregate}}=5.51, F(1,144)=7.92, p=.005$). No difference emerged for prevention focused participants ($M_{\text{disaggregate}}=6.49, M_{\text{aggregate}}=6.51, F(1,144) < 1$).

In Study 3, female participants (N=121) indicated their evaluation of a weight loss program where the calorie loss was expressed as 6,400 Calories (800 Calories per week) over 8 weeks in the ag-

gregate (disaggregate) condition. Regulatory focus was measured (Lockwood, Jordan, & Kunda, 2002). Interaction between regulatory focus and frame was significant ($B=.38, t(116)=2.01, p<.05$). Promotion focused participants evaluated the program more positively in the aggregate ($M_{\text{Aggregate}}=4.91$) as compared the disaggregate ($M_{\text{Disaggregate}}=3.49, t(116)=2.37, p=.02$) condition. However, no such difference emerged for prevention focused participants ($M_{\text{Aggregate}}=4.88, M_{\text{Disaggregate}}=5.16, t(116)=-.49, p=.62$).

Study 4 provided evidence for the underlying process. After a priming task similar to Study 1, participants (102) evaluated a lottery which was expressed as \$4,500 (\$160 a month) over 2 years and 4 months in the aggregate (disaggregate) frame. They also indicate their perception of magnitude for the reward. Both measured followed similar patters as previous studies. More interestingly, A moderated mediation analysis revealed that frame affected the magnitude perception of the reward amount only for promotion focused participants and led to different evaluation of the lottery based on frame ($B=-1.35, SE=.38, 95\% CI [-2.18, -.69]$). However, the frame did not affect the magnitude evaluation of amount for prevention focused participants ($B=0, SE=.38, 95\% CI [-.79, .74]$).

Finally, in Study 5, we examined costs. After a priming task similar to Study 2, female participants (N = 182) indicated their intention to join a health club where the cost was framed as \$1,560 (\$65 a month) for a 2 year membership. They also indicated their magnitude perception of the cost. Promotion focused participants indicated a greater intention to join when they viewed the price in disaggregate ($M_{\text{disaggregate}}=3.81$) as compared to the aggregate frame ($M_{\text{aggregate}}=2.04, F(1,177)=23.55, p<.0001$). This effect was only marginally significant for prevention focused participants ($M_{\text{aggregate}}=2.70, M_{\text{disaggregate}}=3.5, F(1,177)=3.64, p=.06$). More importantly, as in the previous study, moderated mediation analysis revealed an indirect effect of magnitude perception. This indirect effect was significant only in the promotion focus condition ($B=-1.02, SE=.30, 95\% CI [-1.61, -.43]$) and not significant in the prevention focus condition ($B=-.22, SE=.30, 95\% CI [-.80, .37]$).

Across five studies, spanning multiple domains and different operationalization of regulatory focus, we show that promotion focused consumers evaluate an aggregate frame more extremely as compared to a disaggregate frame. However, no such difference in evaluation based on frame emerged for prevention focused consumers. This research contributes to the area of temporal framing and numerosity heuristic by introducing an important moderator, the decision makers’ regulatory focus. Future research may explore other factors which may affect the perception of such frames such as processing styles and cross cultural differences.

REFERENCES

- Bowlby, J. (1969). *Attachment and Loss: Attachment. V. Basic Books.*
- Burson, K. A., Larrick, R. P., and Lynch, J. G. (2009). Six of one, half dozen of the other expanding and contracting numerical dimensions produces preference reversals. *Psychological Science, 20*(9), 1074-1078.
- Förster, J., and Higgins, E. T. (2005). How global versus local perception fits regulatory focus. *Psychological science, 16*(8), 631-636.

- Goldstein, D. G., Hershfield, H. E., and Benartzi, S. (2016). The illusion of wealth and its reversal. *Journal of Marketing Research*.
- Gourville, J. T. (1998). Pennies-a-day: the effect of temporal reframing on transaction evaluation. *Journal of Consumer Research*, 24(4), 395-403.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, 52(12), 1280.
- Jain, S. P., Lindsey, C., Agrawal, N., and Maheswaran, D. (2007). For better or for worse? Valenced comparative frames and regulatory focus. *Journal of Consumer Research*, 34(1), 57-65.
- Lee, A. Y., Aaker, J. L., and Gardner, W. L. (2000). The pleasures and pains of distinct self-construals: the role of interdependence in regulatory focus. *Journal of personality and social psychology*, 78(6), 1122.
- Li, A., Evans, J., Christian, M. S., Gilliland, S. W., Kausel, E. E., and Stein, J. H. (2011). The effects of managerial regulatory fit priming on reactions to explanations. *Organizational Behavior and Human Decision Processes*, 115(2), 268-282.
- Pham, M. T., and Chang, H. H. (2010). Regulatory focus, regulatory fit, and the search and consideration of choice alternatives. *Journal of Consumer Research*, 37(4), 626-640.

I've Got the Power: Investigating Dynamic Brand Logos

Stacey Baxter, University of Newcastle, Australia

Jasmina Ilicic, Monash University, Australia

EXTENDED ABSTRACT

Henderson and Cote (1998) highlight the importance of active brand logo designs (those that give the impression of motion) for increasing consumer interest. One approach to creating an active brand logo is through the inclusion of a human figure in motion, for example, *Johnnie Walker* (walking figure), *Interflora* (running figure), or *Air Jordan* (jumping figure). Drawing on Newtonian principles in physics, we employ a 'dynamics' in classical human mechanics lens to examine active brand logo effects through the *causes* of motion in human movement (i.e., force). Scientific research has demonstrated that when a force is applied in the opposite direction of a human figure in motion (e.g., gravitational force when running up a hill) the figure is exerting greater work (e.g., Zatsiorsky 2002). Cues to hard work align with perceptions of brand competence (Aaker 1997), which increases brand attitude and behavioral intentions (Eisend and Stokburger-Sauer 2013). As such, we propose that a *dynamic* brand logo featuring human work (motion along with a force), results in more positive brand-based attitudes and behavioral judgments than a *kinematic* logo featuring less work (motion without a force applied).

Study 1 demonstrates that a dynamic brand logo (i.e., greater work exerted due to the inclusion of force) results in more positive brand attitude and purchase intention than a kinematic brand logo (i.e., less work exerted in a logo with only motion and no force applied). In Study 2, we demonstrate that the indirect effect of brand dynamism on brand attitude is explained through our developed brand energy construct, not by brand engagement, which previous research suggests. We also empirically reveal the bounds of our brand work-energy effect in Study 3. Specifically, the results provide evidence to suggest that the effectiveness of brand logo dynamism (work exerted through applied force) on perceptions of brand energy is attenuated when positive work is undertaken (thrust force in the direction of motion).

Active Dynamic Brand Logos

Active brand logo designs are those that "give the impression of motion" (Henderson and Cote 1998, p. 17). To date, only one study has examined active brand logos and their effects on brand engagement and attitude (Cian et al. 2014). Cian's et al. (2014) study focuses only on the use of motion in brand logos, which they term dynamic. However, we argue that their study examines brand logos from a kinematic perspective. Kinematics is the study of motion without regard for the cause (Beggs 1983). We, on the other hand, take the physics perspective of dynamics, which is the study of forces that produce motion (Beggs 1983).

When force is applied to a human in motion, both the force and the human are doing work (Zatsiorsky 2002). A human moving against a force expends greater work (negative force; Zatsiorsky 2002). For example, when walking uphill the increasing incline and negative gravitational push force results in positive work on behalf of the body in motion (as they must compensate by doing the work themselves; Margaria 1968). We argue that a dynamic brand logo (depicting a human figure in motion), with a force applied in the opposite direction to the human figure in motion (negative force), creates the perception of greater work, whereas a kinematic brand logo, with no force applied, creates less perceived work. Based on research that finds evidence to suggest that hard working brands are perceived to be reliable and competent (Aaker 1997), and result in

positive attitude towards the brand and willingness to buy the brand (Aaker, Vohs, and McGilner 2010; Eisend and Stokburger-Sauer 2013), we suggest that dynamic brand logos (negative force) will enhance consumer attitudinal and behavioral judgments. Formally, our hypothesis is:

Hypothesis 1: Dynamic (kinematic) brand logos will result in heightened (reduced) a) brand attitude and b) purchase intention.

Brand Work-Energy

According to the work-energy principle, the work done by a force on a particle equals the change in the particle's kinetic energy (Young and Freedman 2008). When walking uphill, the negative gravitational push force results in the body undertaking greater work, which results in an increase in the energy level of the body in order to accomplish the work (Margaria 1968). As such, we argue that the dynamic brand logo phenomenon manifests due to a brand work-energy effect, whereby dynamic brand logos influence attitudinal and behavioral judgments via perceptions of brand energy.

Brand Energy and Brand Engagement

Research demonstrates that active brand logos result in more positive brand attitudes due to brand engagement, whereby motion in the logo encourages consumers to play with the image in their minds (Cian et al. 2014). We argue, however, that the differential effect of kinematic versus dynamic brand logos on attitudinal and behavioral judgments is not driven by brand engagement. Both kinematic and dynamic brand logos include movement and should both equally result in brand engagement. Conversely, we propose a brand work-energy effect, whereby perceptions of brand energy result from active dynamic brand logos, which include force and, as a result, greater work, resulting in more positive brand attitudes and purchase intentions. We expect that the effect of dynamic brand logos on attitudinal and behavioral judgments will manifest through brand energy not via brand engagement. As such, the following hypothesis is proposed:

Hypothesis 2: The indirect effect of dynamic brand logos on a) brand attitude and b) purchase intention will manifest via brand energy not brand engagement.

Brand Dynamism and Force

Whilst a force applied in the opposite direction of motion results in positive work and, subsequently, greater energy exerted, a force applied in the direction of motion results in negative work and less energy expended (Margaria 1968). For example, when a thrust force (e.g., air propulsion) is applied in the direction of motion, the force assists human motion and, therefore, results in less work exerted by the human. We argue that a brand logo depicting a thrust force (air propulsion) and drag force (air resistance) will have differential effects on consumer attitudinal and behavioral judgments. We expect that a thrust force, which signifies less work, will result in attenuation of the brand work-energy effect, reducing perceptions of the brand's energy, and subsequently diluting brand attitudes and purchase intentions. We, therefore, propose:

Hypothesis 3: Thrust (drag) dynamic brand logos will result in reduced (heightened) brand energy and subsequent a) brand attitude and b) purchase intention.

Study 1

A sample of two hundred members of the Australian general public (90 male, 110 female; $M_{Age} = 42.88$, $SD_{Age} = 16.07$) were recruited through an Australian research panel company. A between subjects design was employed, with participants randomly allocated to one of the two experimental conditions: kinematic logo (less gravitational force, $n = 100$) or dynamic logo (greater gravitational force, $n = 100$).

First, participants were shown a logo for the fictitious brand, *Onik*. The logo was presented either horizontally (kinematic; 0° inclination) or inclined (dynamic; 45° inclination). Next, employing measures drawn from Mitchell and Olsen (1981), participants were asked to rate their attitude towards the brand (Cronbach $\alpha = .937$) and their intention to purchase the brand (Cronbach $\alpha = .861$). Finally, participants were asked to report the degree of work ("How much work is shown in the logo for this company?" none at all/a lot) and motion ("How much motion is shown in the logo for this company?" none at all/a lot) depicted in the logo, and report simple demographic information.

Manipulation Check

A significant main effect was observed for brand logo work ($F(1, 198) = 31.00$, $p < .001$, $\eta^2 = .135$), however, not brand logo motion ($F(1, 198) = 2.19$, $p = .140$, $\eta^2 = .011$). The inclined brand logo was perceived as depicting significantly more work ($M_{work} = 4.80$, $SD_{work} = 1.44$) when compared to the horizontally presented brand logo ($M_{work} = 3.82$, $SD_{work} = 1.02$), with no difference in perceived motion observed (incline: $M_{motion} = 4.80$, $SD_{motion} = 1.44$; horizontal: $M_{motion} = 4.80$, $SD_{motion} = 1.44$).

Results

Effect of Brand Logo Dynamism on Attitude towards the Brand and Purchase Intention.

An ANOVA model was estimated with attitude towards the brand and purchase intention included separately as dependent variables. Results showed that brand logo dynamism has a significant effect on both brand attitude ($F(1, 198) = 23.95$, $p < .001$, $\eta^2 = .108$) and purchase intention ($F(1, 198) = 12.25$, $p < .001$, $\eta^2 = .061$). Participants who viewed the dynamic brand logo reported a more positive attitude towards the brand and greater purchase intention ($M_{Abrand} = 4.89$, $SD_{Abrand} = .89$; $M_{Purchase} = 4.47$, $SD_{Purchase} = .88$) when compared to those who viewed the kinematic brand logo ($M_{Abrand} = 4.27$, $SD_{Abrand} = .90$; $M_{Purchase} = 3.97$, $SD_{Purchase} = 1.07$), supporting Hypothesis 1.

Study 2

A sample of two hundred and four members of the Australian general public (100 male, 104 female; $M_{Age} = 46.67$, $SD_{Age} = 17.03$) were recruited through an Australian research panel company. A between subjects design was employed, with participants randomly allocated to one of the two experimental conditions: kinematic logo (no tension force, $n = 102$) or dynamic logo (tension force, $n = 102$).

First, participants were shown a logo for the fictitious brand, *Fipple*. The brand logo included a figure that was depicted either with, or without tension force. Participants then rated their attitude towards the brand (Cronbach $\alpha = .957$) and purchase intention (Cronbach $\alpha = .933$). Next, participants reported how engaging the brand logo was (Cian et al 2014; Cronbach $\alpha = .947$) and rated brand energy, using our developed scale (*energy, power, drive, momentum*;

Cronbach $\alpha = .954$). Finally, participants were asked to report the degree of work and motion depicted in the logo, and report simple demographic information.

Manipulation Check

A significant main effect was observed for brand logo work ($F(1, 202) = 22.86$, $p < .001$, $\eta^2 = .102$), however, not brand logo motion ($F(1, 202) = 1.26$, $p = .264$, $\eta^2 = .006$). As intended, the brand logo depicting tension force was perceived as portraying significantly more work ($M_{work} = 4.68$, $SD_{work} = 1.51$) when compared to the no tension force brand logo ($M_{work} = 3.68$, $SD_{work} = 1.48$), with no difference in perceived motion observed (tension force: $M_{motion} = 4.12$, $SD_{motion} = 1.42$; no tension force: $M_{motion} = 4.40$, $SD_{motion} = 1.13$).

Results

Mediating Role of Brand Engagement and Brand Energy on Attitude towards the Brand and Purchase Intention.

Results ($n = 10000$, Model 4, Preacher et al. 200) show that brand logo dynamism is a positive and significant predictor of brand energy, yet not brand engagement. Results demonstrate that exposure to a dynamic (kinematic) brand logo results in stronger (weaker) perceptions of brand energy. Further, both brand energy and brand engagement are positive predictors of attitude towards the brand and purchase intention. The 95% bootstrapped confidence interval for the indirect effect of brand logo dynamism on both attitude towards the brand ($\beta = .19$, 95% CI = .07 to .39) and purchase intention ($\beta = .12$, 95% CI = .01 to .30) through brand energy did not include zero, demonstrating a significant mediating effect. A significant indirect effect was not observed via brand engagement (brand attitude: $\beta = .09$, 95% CI = -.06 to .28; purchase intention: $\beta = .08$, 95% CI = -.05 to .25), supporting Hypothesis 2.

Study 3

A sample of two hundred and fifteen members of the Australian general public (101 male, 114 female; $M_{Age} = 42.27$, $SD_{Age} = 15.18$) were recruited through an Australian research panel company. A between subjects design was employed, with participants randomly allocated to one of the two experimental conditions: dynamic thrust logo (propulsion air force, $n = 107$) or dynamic drag logo (air resistance force, $n = 108$).

First, participants were shown a dynamic logo for the fictitious brand, *Videx*. The brand logos included a figure and the depiction of air blowing either behind the figure (thrust force) or towards the figure (drag force). Participants then rated their attitude towards the brand (Cronbach $\alpha = .955$), their intention to purchase the brand (Cronbach $\alpha = .916$) and the perceived energy of the brand (Cronbach $\alpha = .917$). Finally, participants were asked to report the degree of motion and work depicted in the logo, and report simple demographic information.

Manipulation Check

A significant main effect was not observed for brand logo motion ($F(1, 213) = 2.00$, $p = .158$, $\eta^2 = .009$; thrust: $M_{motion} = 4.93$, $SD_{motion} = 1.45$; drag: $M_{motion} = 4.69$, $SD_{motion} = 1.00$). As intended, a significant main effect was observed for brand logo work ($F(1, 213) = 41.17$, $p < .001$, $\eta^2 = .162$). Results show that the dynamic drag logo was perceived as portraying significantly more work ($M_{work} = 4.63$, $SD_{work} = 1.17$) when compared to the dynamic thrust brand logo ($M_{work} = 3.50$, $SD_{work} = 1.40$).

Results

Mediating Role of Brand Engagement and Brand Energy on Attitude towards the Brand and Purchase Intention

Results ($n = 10000$, Model 4, Preacher et al. 2007) show that brand logo dynamism is a positive and significant predictor of brand energy and brand energy is positive and significant predictor of attitude towards the brand and purchase intention. Results demonstrate that exposure to a dynamic drag force (dynamic thrust force) brand logo results in stronger (weaker) perceptions of brand energy, with heightened brand energy increasing attitude towards the brand and purchase intention. As the 95% bootstrapped confidence interval for the indirect effect of brand logo dynamism on both brand attitude ($\beta = .52$, 95% CI = .36 to .73) and purchase intention ($\beta = .50$, 95% CI = .33 to .72) did not include zero, a significant mediating effect is demonstrated, supporting Hypothesis 3.

General Discussion

We introduce brand energy, a construct distinguishable from brand engagement and one that can be influenced by work depicted through force and motion in an active brand logo (i.e., gravitational force, tension force, and air resistance force). The results of our studies provide evidence to suggest that force and motion in a dynamic brand logo heightens perceptions of brand energy by increasing perceived work, which we term the brand work-energy effect. We also propose and demonstrate that dynamic brand logos enhance brand attitudes and behavioral judgments. We show that the indirect effect of dynamic brand logos on brand attitudinal and behavioral judgments are significant via perceived brand energy not via brand engagement (as proposed as tested by Cian et al. 2014). We postulate that the motion in a kinematic brand logo results in more work and, therefore, more perceived brand energy when compared to a static brand logo with no motion. It is, therefore, possible that the effects observed by Cian et al. (2014) can be explained by our brand work-energy effect. Future research is needed in order to test this assertion.

This research is not without limitations. Our stimuli comprise of unknown brands. While we would expect the observed effect to hold within a real brand context, a comparison of the effect of work in brand logos for known brands (e.g., Wella (air resistance force), or *Coach* (tension force)) is needed to assess the rigor of the brand work-energy effect.

REFERENCES

- Aaker, Jennifer L. (1997), "Dimensions of brand personality," *Journal of Marketing Research*, 347 – 356.
- _____, Kathleen D. Vohs, and Cassie Mogilner. (2010), "Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter," *Journal of Consumer Research*, 37(2), 224 – 237.
- Beggs, Joseph Stiles. (1983), *Kinematics*. CRC Press.
- Cian, Luca, Aradhna Krishna, and Ryan S. Elder. (2014), "This logo moves me: dynamic imagery from static images," *Journal of Marketing Research*, 51(2), 184 – 197.
- Eisend, Martin, and Nicola E. Stokburger-Sauer. (2013), "Measurement characteristics of Aaker's brand personality dimensions: Lessons to be learned from human personality research," *Psychology & Marketing*, 30(11), 950 – 958.
- Henderson, Pamela W., and Joseph A. Cote. (1998), "Guidelines for selecting or modifying logos," *The Journal of Marketing*, 14 – 30.
- Margaria, Rodolfo (1968), "Positive and negative work performances and their efficiencies in human locomotion," *European Journal of Applied Physiology*, 25, 339 – 351.
- Mitchell, Andrew A., and Jerry C. Olson. (1981), "Are product attribute beliefs the only mediators of advertising effects on brand attitudes?" *Journal of Marketing Research*, 18 (3), 318 – 322.
- Newton, Sir Issac (1729), *The mathematical principles of natural philosophy*. Benjamin Motte; London.
- Preacher, Kristopher J., Derek D. Rucker, and Andrew F. Hayes. (2007), "Addressing moderated mediation hypotheses: Theory, methods, and prescriptions," *Multivariate Behavioral Research*, 42(1), 185 – 227.
- Young, Hugh D. and Roger A. Freedman (2008), *University Physics* (12th ed.). Addison-Wesley: Dunfermline, United Kingdom.
- Zatsiorsky, Vladimir M. (2002), *Kinetics of human motion*. Human Kinetics: Pennsylvania.

Special Memories Require Special Protection

Kara Bentley, Chapman University, USA

Priyali Rajagopal, University of South Carolina, USA

EXTENDED ABSTRACT

Research has found that memories of special experiences (e.g. vacations, weddings) can be viewed as assets because of their importance for self-definition (Elster and Loewenstein 1992), and consumers often protect such memories in order to safeguard them from contamination by avoiding repetitions of the experience (Zauberman, Ratner, and Kim 2009). For example, it was found that following a special resort vacation with friends, participants did not want to return the resort for a work conference.

Our research aims to expand the memory protection literature in three specific ways. One, we suggest that consumers do not avoid all repetitions of special experiences, but only avoid *non-special* repetitions. We argue that consumers avoid repeating a special experience under ordinary, but not special circumstances (e.g. will not return to the resort for a work trip but will return for an anniversary trip). In other words, the type of interference cue (special versus non-special) moderates memory protection such that only non-special cues trigger memory protection.

Two, we explore the process underlying memory protection and find contamination of a special memory by a non-special cue is perceived as a self-concept threat, leading consumers to avoid this type of contamination. Memories of special experiences are more important for self-definition than are memories of non-special experiences, thus special memories are strongly linked to the self-concept (Belk 1988). We suggest that contaminating a special memory with a non-special cue devalues the memory (by making it seem less special), and consequently also devalues the self, by making the individual feel as though they are less special. This threat to the self-concept triggers the desire to protect the memory and results in avoidance of repeating the experience.

Third, we expand current theorizing on how memories can be contaminated by documenting that marketing communications can be perceived as non-special cues, and make the advertised brand seem less special, thereby making an individual consumer's own personal experience seem less special. This reduction in the specialness has significant negative downstream implications for brand attitudes (less special = less favorable attitudes). These are especially intriguing findings since they suggest that memory contamination and protection may be far more pervasive than originally envisioned, and also because they point to a specialness-contamination tradeoff for marketers.

Study 1 was conducted with 28 participants recruited via an online sample. Participants described a special dinner they had experienced and then rated their likelihood of going back to the same restaurant for another special versus ordinary occasion and likelihood of going back with a different person if it was for a special versus ordinary occasion.

A repeated measures analysis revealed that participants were more likely to return to the restaurant when the follow-up experience was special ($M_{special}=6.00$) than when it was ordinary ($M_{ordinary}=4.82$; $F(1,27)=12.49$, $p<.01$). Further, even when going back with a different person, participants were more likely to return when the follow-up experience was special ($M_{special}=5.29$) than when it was ordinary ($M_{ordinary}=4.54$; $F(1,27)=6.72$, $p<.05$).

Study 2 utilized a 2(initial: special vs. non-special) x 2(follow-up: special versus non-special) mixed design in which the initial (follow up) experience was a between (within) subjects factor. 141

undergraduates imagined going to dinner for a special or ordinary occasion and then rated their likelihood of going back to the restaurant for another special versus ordinary dinner.

An ANOVA revealed a significant interaction between the specialness of the initial and follow-up experiences on willingness to return to the restaurant ($F(1,139)=56.84$, $p<.001$). Following a special experience, participants were more likely to return when the follow-up experience was special ($M_{special}=6.52$) than when it was ordinary ($M_{ordinary}=5.68$; $F(1,70)=66.60$, $p<.001$).

Study 3 utilized a 2(initial: special versus non-special) x 2(experience: special versus non-special) between-subjects design. 192 undergraduate students imagined going out to dinner for either a special or ordinary occasion and were told they had worn a new item of clothing that was described to them. Participants then imagined a follow-up scenario (special vs. non-special) at which they again wore the clothing item and then reported attitudes towards the item.

An ANOVA revealed a significant interaction between the initial and follow-up conditions ($F(1,111)=6.71$; $p=.01$). Following a special experience, attitudes were more positive when subsequently worn to another special event ($M_{initial_special_followup_special}=6.11$) than an ordinary ($M_{initial_special_followup_ordinary}=5.18$; $F(1,113)=9.36$; $p<.01$).

Study 4 used an online sample of 192 participants and utilized a 2(initial: special vs. non-special) x 2(follow-up: special vs. non-special) between-subjects design. The initial and follow-up scenarios were similar to those used in study 3. In order to explore the underlying process, participants reported perceptions of a self-concept threat after reading the follow-up scenario.

An ANOVA revealed a significant interaction between the initial condition and the follow-up condition on perceptions of self-concept threat ($F(1,188)=4.38$; $p<.05$) and on evaluations of the restaurant ($F(1,188)=2.74$; $p=.10$). Participants in the non-special follow-up condition felt more threatened ($M_{initial_special_followup_nonspecial}=4.59$) than those in the special follow-up condition ($M_{initial_special_followup_special}=5.15$; $F(1,188)=4.16$; $p<.05$) and evaluated Firefly more positively ($M_{initial_special_followup_special}=5.83$) than those in the non-special follow-up condition ($M_{initial_special_followup_nonspecial}=5.19$; $F(1,188)=10.17$; $p<.01$). Mediation analysis using the PROCESS SPSS macro (Model 7; Preacher and Hayes 2004) with specialness of the follow-up as the IV, of the initial condition as the moderator, threat as the mediator, and satisfaction as the DV provided support for moderated mediation (95% CI=.0123 to .2830).

Study 5 utilized a 2(initial: special vs. non-special) x 2(control vs. ad) between subjects design. 135 undergraduates imagined either a special or ordinary dinner, and were then either shown an ad for the restaurant before filling out the dependent measures or taken directly to the dependent measures (control condition). The main dependent measures were perceptions of how special the dinner was and evaluations of the restaurant.

An ANOVA revealed a significant interaction between the initial experience and marketing communication on specialness perceptions ($F(1,131)=3.82$; $p=.05$) and attitudes ($F(1,131)=4.41$; $p<.05$). Following a special experience, participants in the control condition perceived their experience as more special ($M_{control}=6.28$) than those who had viewed an ad ($M_{ad}=5.63$; $F(1,131)=6.52$; $p<.05$), and had more positive attitudes ($M_{control}=6.36$) than those who viewed the ad ($M_{ad}=5.74$; $F(1,131)=7.49$; $p<.01$).

REFERENCES

- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September), 139-68.
- Elster, Jon, and George Loewenstein (1992), "Utility from Memory and Anticipation," in *Choice over Time*, ed. George Loewenstein and Jon Elster, New York: Russell Sage Foundation, 213-34.
- Goode, Miranda R., Kendra Hart, and Matthew Thomson (2015), "Say no more! The liability of strong ties on desire for special experiences," *Journal of Consumer Psychology*, 26 (1), 91-97.
- Preacher, Kristopher J., and Andrew F. Hayes (2004), "SPSS and SAS procedures for estimating indirect effects in simple mediation models," *Behavior Research Methods, Instruments, and Computers*, 36, 717-31.
- Zauberman, Gal, Rebecca K. Ratner, and B. Kyu Kim (2009), "Memories as Assets: Strategic Memory Protection in Choice over Time," *Journal of Consumer Research*, 35 (5), 715-28.

The Implications of Self-regulation Difference Between Heavy Versus Light Media Multitaskers For Advertising Effectiveness

Emma Beuckels, Ghent University, Belgium
Snezhanka Kazakova, Ghent University, Belgium
Verolien Cauberghe, Ghent University, Belgium
Liselot Hudders, Ghent University, Belgium
Patrick De Pelsmacker, University of Antwerp, Belgium

EXTENDED ABSTRACT

Media multitasking, is broadly defined as the act of consuming two or more media simultaneously, using a single or multiple media device(s) (Yeykelis, Cummings, & Reeves, 2014). Consistent to previous media multitasking research the first study of this paper predicts that engaging in multitasking behavior would deplete ones self-regulatory resources. Furthermore, recent studies have shown that people differ in how often they engage in media multitasking, distinguishing heavy (HMMs) from light (LMMs) media multitaskers. Although it seems counterintuitive that people who often engage in media multitasking are more distracted by their environment and less efficient at navigating it, research suggest that HMMs have a deficit in self-regulation (Cardoso-Leite et al., 2016; Ophir, Nass, & Wagner, 2009). Based on dual processing theories, the present paper explores whether the difference in self-regulatory resources between HMMs and LMMs is due to a lower *ability* (i.e., capacity to perform a task) or a lower *motivation* (i.e., willingness to perform a task) to optimally control their attention. The allocation of one's attention may be driven by both external and internal factors. In some contexts, the opportunity to freely allocate one's attention is high. Media multitasking contexts fit well into this category. In situations where perceived autonomy is high, attention allocation is not only driven by ability but also by internal factors such as goals or motivation. If attention allocation is driven by external factors, however, the free allocation of attention is limited and no longer driven by motivation. Manipulating the level of autonomy over one's attention allocation would, therefore, allow us to determine the role of motivation to exert attentional control in driving the observed performance differences between HMMs and LMMs. If an inherently lower motivation to self-regulate indeed drives the different approach of attention allocation, HMMs would not be as motivated as LMMs to apply cognitive control over how they allocate their attention when given high autonomy over their attention allocation. Instead, they would allow distracting stimuli to interfere more. Ralph, Thomson, Cheyne, and Smilek, (2014), however, found no correlation with actual cognitive errors (long-term memory failures) in support of the premise that HMMs' deficits does not stem from problems of inability. Therefore study one hypothesized the following:

Hypothesis 1: Engaging in a multitasking compared to a non-multitasking context will deplete self-regulatory resources.

Hypothesis 2: Media multitasking frequency will have a negative effect on self-regulatory resources after engaging in multitasking with high autonomy over attention allocation. This difference will be less apparent after multitasking with low autonomy over attention allocation.

Consequently, the second study of this paper investigated whether HMMs (vs. LMMs) respond differently to advertising in a media multitasking context, due to these self-regulatory differences.

People with low self-regulatory resources have been shown to be more likely to yield to temptation and to buy impulsively (e.g. Vohs & Faber, 2007). Hence, we expect that their purchase intentions towards products advertised within the media content will be higher. Therefore, we expect the following:

Hypothesis 3: High levels of autonomy when media multitasking will lead to lower self-regulatory resources when media multitasking frequency is higher (versus lower) and consequently to higher purchase intentions for the advertised brand.

To investigate the role of motivation versus ability, the autonomy with which respondents could allocate their attention between two media tasks was manipulated in our two studies. In one condition they could freely switch their attention (as internally motivated) across two media streams (television and internet), whereas in the other condition respondents were forced to switch their attention guided by the sign of the researcher (motivation to switch no longer plays a role). If a motivational aspect is indeed at play, then HMMs should experience stronger cognitive deficits compared to LMMs when attention switching is internally driven.

For the first study (N= 85, 69% women, Mage = 21.93), we conducted a between subjects factorial design with three conditions (sequential, multitasking under low autonomy over attention allocation and multitasking under high autonomy over attention allocation). This study tested the moderating impact of autonomy over attention allocation on the effect of media multitasking frequency on self-regulatory resources in a very controlled multitasking setting. The moderation was tested by model 1 of the process macro of Hayes (2013 ; 5,000 bootstraps; 95% bias-corrected confidence intervals). The interaction term was statistically significant indicating that the effect of media multitasking frequency on self-regulatory resources changes across different levels of autonomy, $B = 14.29$, $SE = 5.94$, $t(48) = 2.41$, $p = .02$. This analysis shows us that *only* under conditions of high autonomy, thus when motivation is at play, HMMs needed more time to complete the Stroop Task compared to LMMs. Under low autonomy conditions, so when only ability is expected to be at play, no significant difference between HMMs and LMMs in Stroop performance and thus self-regulatory resources could be found.

The aim of study II study (N = 91, 56% women, Mage = 22.64) was to replicate the findings of study I in a more naturalistic media multitasking environment and to test the implications of self-regulatory differences for advertising effectiveness. Therefore, the same between subjects factorial design as in study I was conducted. The results of study II reveal that the interaction term stays statistically significant within a more naturalistic media multitasking setting, $B = 1.36$, $SE = .44$, $t(5) = 3.09$, $p = .003$. A thereafter conducted spotlight analysis, confirmed the findings of study I, showing that the effect of media multitasking frequency on self-regulatory resources was only significant under conditions of high autonomy, thus when motivation was at play. Further on, a moderated mediation analysis (Hayes,

2013, Model 8, 5,000 bootstraps; 95% bias-corrected confidence intervals), $ab = .266$, $SE = .18$, 95% LLCI = .013, 95% ULCI = .752, revealed that the effect of media multitasking frequency on purchase intentions was mediated by self-regulatory resources depending on the level of autonomy. When autonomy was high, we found a significant positive indirect effect of media multitasking frequency on purchase intentions through self-regulatory resources. On the contrary, when autonomy was low, this indirect effect was eliminated.

Summarized, our data suggests that HMMs are more depleted than LMMs under conditions of high autonomy over attention allocation, most likely because of lower motivation to exert attentional control. This proposition is further supported by the finding that, under conditions of low autonomy of attention allocation, HMMs were *equally depleted* compared to LMMs. The results also supported the assumption that the fewer self-regulatory resources for HMMs under conditions of high autonomy impaired their ability to resist persuasive attempts.

REFERENCES

- Cardoso-Leite, P., Kludt, R., Vignola, G., Ma, W. J., Green, C. S., & Bavelier, D. (2016). Technology consumption and cognitive control: Contrasting action video game experience with media multitasking. *Attention, Perception, & Psychophysics*, *78*(1), 218–241.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Press. Retrieved from <http://www.guilford.com/books/Introduction-to-Mediation-Moderation-and-Conditional-Process-Analysis/Andrew-Hayes/9781609182304>
- Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences*, *106*(37), 15583–15587.
- Ralph, B. C., Thomson, D. R., Cheyne, J. A., & Smilek, D. (2014). Media multitasking and failures of attention in everyday life. *Psychological Research*, *78*(5), 661–669.
- Vohs, K. D., & Faber, R. J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. *Journal of Consumer Research*, *33*(4), 537–547.
- Yeykelis, L., Cummings, J. J., & Reeves, B. (2014). Multitasking on a single device: Arousal and the frequency, anticipation, and prediction of switching between media content on a computer. *Journal of Communication*, *64*(1), 167–192.

Can Concern for the Disadvantaged Promote Disadvantage? Neglecting the Benefits of Exploitation

Amit Bhattacharjee, Erasmus University Rotterdam, The Netherlands
Gabriele Paolacci, Erasmus University Rotterdam, The Netherlands

EXTENDED ABSTRACT

In 2013, hundreds died when a clothing factory in Bangladesh collapsed, provoking an international outcry over unsafe working conditions and meager wages in the developing world. Companies like Nike, H&M, Gap, and Disney have been heavily criticized for employing low-wage labor, and have often abandoned these factories in response. For instance, Nike “decided to reduce [their] Bangladesh footprint” as a result of these concerns (Powell 2014). But does banning these labor practices actually help disadvantaged workers?

People in the developing world often elect to work under conditions that are morally outrageous to those in the developed world, such as low wages, long hours, and poor safety conditions. The increasing prevalence of outsourced production has spurred varied forms of resistance from ethically minded consumers, including boycotts of exploitative companies and petitions to improve wages and standards in labor exchanges. Though the desire to improve the lives of disadvantaged people in developing countries is nearly universal, many advocates warn that anti-sweatshop initiatives might harm the very people they mean to help by threatening the existence of their best or only available opportunities, leaving them with even worse alternatives (Kristof 2009; Powell and Skarbek 2006). In other words, “bad jobs at bad wages are better than no jobs at all” (Krugman 1997).

This article investigates how consumers in the developed world react to exploitative labor practices that are beneficial to the disadvantaged. We suggest that the moral outrage provoked by exploitation can divert consumers’ attention away from the benefits of exploitative practices for disadvantaged workers. This has downstream consequences for consumer behavior in the first world (e.g., intentions to engage with exploitative companies) and the persistence of disadvantage in third world (e.g., support for policies that might eliminate opportunities to earn).

Moral Outrage and Beneficial Exploitation

An exchange can be called *exploitative* when one party takes advantage of its position to obtain most of the value created through the exchange. However, the imbalance between the benefits obtained by the two parties is unrelated to whether the exchange is *harmful* or *mutually beneficial* (Wertheimer and Zwolinski 2016). In other words, the consequences for the disadvantaged party are crucial: are they worse off or better off than they were before the exchange? When parties are not coerced but voluntarily opt into a labor exchange, this signals that the relatively disadvantaged party still finds it better than the available alternatives. Disadvantaged workers often find earning by working under exploitative conditions far better than the other alternatives they face: either unemployment or working under even worse conditions. Because restricting the range of opportunities for a labor exchange (e.g., by demanding that companies pay higher wages) can impair the very existence of the exchange (e.g., by inducing companies to relocate), consumer resistance to exploitative practices can ultimately harm the disadvantaged (Powell and Zwolinski 2012, Zwolinski 2007). Because workers in the developing world lack better alternatives (Powell and Skarbek 2006), human rights campaigns in countries like Indonesia have resulted in massive unemployment and harmed disadvantaged workers (Harrison and Scorse 2010).

People’s attitudes towards sweatshops may not account for these consequences to the disadvantaged. Moral outrage over unfair or exploitative work conditions may drive consumers to reinstate fairness by punishing advantaged exploiters through boycotts or petitions to improve labor conditions through legislation (Garret 1987, Kozinets and Handelman 2004), but these actions may not actually promote the welfare of exploited workers (Darley and Pittman 2003). In other words, consumers’ moral outrage may lead them to neglect how exploited workers benefit from exploitative exchanges and thereby neglect their voluntary, mutually beneficial nature (cf., Baron, Bazerman and Shonk 2006; Bazerman, Magliozzi and Neale 1985; Caplan 2007). This paper examines whether moral concern for the disadvantaged can make consumers insensitive to the benefits of exploitation for the disadvantaged.

Six studies investigate how consumers in the developed world react to exploitative labor practices that benefit the disadvantaged. We show that consumers do not consistently view low-wage employment as a means to benefit those most in need (Study 1A-1B). Providing materially irrelevant information about the wages of more privileged workers (Study 2A) or executives (Study 2B) provokes moral outrage and greater resistance to exploitative labor that benefits disadvantaged workers. On the contrary, directing consumers’ attention to the alternatives faced by disadvantaged workers reduces resistance (Study 3A-3B). Our studies were conducted with US residents through Amazon Mechanical Turk, using between-subjects designs with a target sample size of 100 participants per condition. All study materials are available here: <https://tinyurl.com/sweatshopsappendix>.

Study 1A: Employment Decisions are Less Need-Based Than Donations

Study 1A (N = 201) tested whether consumers view employment as a means of helping the disadvantaged by comparing this decision to an otherwise equivalent donation decision. Respondents read about a wealthy businessman planning to allocate resources to either a developed country (the US) or a fictional developing country (Sangala), where the same amount could have 20 times more impact due to a lower cost of living. We manipulated whether the resources to allocate were monetary donations or employment opportunities. Participants indicated whether the businessman should allocate resources to people in the US or Sangala.

When allocation was framed as a donation, 71% of participants felt it was appropriate to allocate resources to Sangala, but this percentage decreased to 48% when the decision was framed as employment ($\chi^2(1) = 11.11, p < .001$). Participants were thus less prone to allocate employment opportunities to those most in need, indicating that many do not view employment as a means to create social welfare.

For participants in this study, choosing not to allocate resources to a third-world country entailed benefiting their home country. We conducted Study 1B to examine whether these results depend on participants’ preferences for allocating resources to their home country.

Study 1B: Insensitivity to Need is Robust to Home-Country Preferences

Study 1B ($N = 202$) compared donation and employment decisions using the same scenario and cost-of-living information as Study 1A but used a fictional developed country, Norland, in place of the US. To disentangle participants' own preferences for allocation from beliefs about what would strategically benefit the businessman, we reworded our dependent variable question as "How would you like the businessman to allocate his money?"

When framed as a donation decision, 94% of respondents favored allocating resources to Sangala, indicating a nearly unanimous desire to help the most disadvantaged. However, only 78% wanted the businessman to employ Sangalians, a significant difference ($\chi^2(1) = 10.99, p < .001$). The shift in allocations relative to Study 1A indicates the presence of home-country effects in both conditions in Study 1A. However, these effects cannot explain the difference between conditions.

These two studies suggest that consumers do not consistently view employment opportunities as resources to benefit those most in need. Studies 2A and 2B investigated how the salience of workers' disadvantage relative to others affects consumers' resistance to exploitation and appreciation of its benefits.

Study 2A: Salient Worker Disadvantage Increases Resistance

Study 2A ($N = 202$) used a sweatshop scenario in which a clothing company from Norland opened a factory in Sangala and improved its financial performance through reduced labor costs. We tested whether consumer resistance to exploitative labor conditions depends on their disadvantage relative to workers in first-world countries. Participants in the control condition only learned that workers in the Sangalian factory "make the equivalent of \$1200 per year, on average." In the disadvantageous comparison condition, participants also read about the company's Norlandian factory where workers "make the equivalent of \$24,000, on average."

We measured consumer resistance using seven items to capture purchase avoidance intentions (e.g., "I would rather buy from a Domino's competitor than from Domino's"; "I would support a boycott of Domino's products") and policy judgments ("Domino's factory in Sangala should be closed"). In accordance with our conceptualization of beneficial exploitation, we also measured moral outrage towards the company and perceived benefits for disadvantaged workers (i.e., whether the factory leaves them worse off or better off) to explain these effects.

Making this wage disparity salient made participants significantly more resistant ($M = 4.54$ vs. $3.97, p = .005$). This effect was explained by both increased moral outrage at the company's practices (indirect effect = $0.59, SE = .14, 95\% CI [0.33, 0.88]$) and though decreased perceptions that the factory benefited Sangalian workers (indirect effect = $0.10, SE = .06, 95\% CI [0.02, 0.23]$). Study 2B sought to conceptually replicate these findings by providing a comparison that was arguably even less relevant: the salary gap between exploited workers and the company CEO.

Study 2B: Salient Ceo-Worker Disparity Increases Resistance

Study 2B ($N = 204$) used the same scenario, design, and measures as Study 2A. In the disparity condition, however, participants read that thanks to the company's performance, the CEO's income "increased to \$12,000,000 from \$6,000,000 in the previous year."

Conceptually replicating Study 2A, considering the disparity between parties significantly increased consumer resistance ($M =$

4.33 vs. $3.73, p = .007$). This effect was mediated by moral outrage (indirect effect = $0.35, SE = .15, 95\% CI [0.08, 0.68]$) and by decreased perceptions of benefits for disadvantaged Sangalians (indirect effect = $0.10, SE = .05, 95\% CI [0.01, 0.23]$).

Though the salaries of workers in Norland or the company CEO are irrelevant to judgments about whether exploitative labor opportunities leave Sangalians better off than the alternatives, these findings show that highlighting the relative disadvantage of Sangalians can reduce consideration of their welfare. Since the benefits of exploitative exchange depend on its superiority to available alternatives, Study 3A examined if prompting this alternate comparison could reduce resistance.

Study 3A: Prompting Consideration of Alternatives Reduces Consumer Resistance

In Study 3A ($N = 205$), we examined whether resistance to exploitation is attenuated when consumers are prompted to consider the alternatives faced by disadvantaged workers. We used the same scenario and measures as in Study 2A-2B. Across two conditions, we noted that although conditions and wages in the factory were much worse than those in the company's Norlandian factories, these jobs were in great demand among the Sangalians. In the treatment condition we prompted respondents to consider the alternatives to factory labor available to Sangalians, including unemployment or employment under even worse conditions.

Relative to the control condition, considering Sangalians' alternatives reduced resistance ($M = 4.87$ vs. $4.34, t(203) = 2.36, p = .019$). Though participants were outraged at the company across conditions, the prompt reduced consumer resistance by increasing participants' appreciation of the benefits for Sangalians (indirect effect = $-.195, SE = .069, 95\% CI [-.343, -.068]$).

These findings further support the notion that people naturally neglect to consider how disadvantaged workers can benefit from exploitative practices. But is it really the case that people neglect to consider disadvantaged workers in particular, rather than counterfactual scenarios in general? Study 3B tested this possibility.

Study 3B: Consumers Focus on Advantaged Parties and Neglect the Disadvantaged

To assess whether consumers neglect to consider disadvantaged parties in particular, Study 3B ($N = 307$) included a third condition with a separate prompt. In particular, we prompted respondents to consider the alternatives faced by either the disadvantaged parties (Sangalian workers) or an advantaged party (the clothing company CEO, who would earn less without operating the factory). We also directly asked people how much they focused on the advantaged versus disadvantaged party when reporting their resistance to the company.

These prompts significantly affected consumer resistance ($F(2, 304) = 8.97, p < .001$). Compared to the control condition, considering the alternatives faced by the Sangalians significantly reduced resistance ($M = 5.02$ vs. $4.21, p < .001$), an effect that was mediated by greater perceived benefits for Sangalians (indirect effect = $.40, SE = .140, 95\% CI [.11, .66]$) and reduced outrage at the company (indirect effect = $.15, SE = .051, 95\% CI [.07, .29]$). In contrast, considering the alternatives faced by the CEO had no effect on consumer resistance ($M = 5.02$ vs. $4.79, p = .245$).

Compared to the control condition, considering Sangalian workers also reduced focus on Domino's CEO ($M = 3.56$ vs. $2.88, p = .009$), while prompting consideration of the CEO had no effect ($M = 3.56$ vs. $3.44, p = .647$). Together, these findings indicate that consumers may naturally focus on punishing advantaged parties when

evaluating unfair labor practices, but focus less on the welfare of disadvantaged parties.

General Discussion

We live in a world of limited and imperfectly distributed resources. Despite the unprecedented prosperity enjoyed by many in the developed world, about a tenth of the world's population still lives in extreme poverty. Though sympathy and moral concern for the disadvantaged is nearly universal, prosocial efforts are often misguided. For instance, people fail to allocate donations to the most effective charities (Berman et al. 2015), and humanitarian aid in response to natural disasters depends more on the number of fatalities than on the number of people in need (Evangelidis and Van den Bergh 2013).

Our results show that people might fail to benefit the disadvantaged *because* of their moral concerns. By the standards of the developed world, work conditions and wages in the developing world are outrageously poor. In light of the advantages of other parties (e.g., workers in developed countries and company executives), consumers are right to label these labor practices as unfair and exploitative. However, unfair or not, banning these exchanges may eliminate workers' only means of remedying their disadvantage. Just as sympathy for those in need may lead to suboptimal allocations of charitable resources (Loewenstein and Small 2007; Small 2010), moral outrage over the poor conditions and inequities faced by disadvantaged populations may thus harm them more.

These findings join recent warnings that moral concerns often restrict the acceptability of the solutions we consider to create social welfare (Bloom 2016). People often view profit-seeking as fundamentally incompatible with societal good, regarding those who personally benefit from charitable behaviors as worse than those who do nothing to help others (Newman and Cain 2014). Restrictions on these exchanges may have steep societal costs. For instance, moral objections to exchanging organs may be costing hundreds of lives every day (Roth 2007), and keeping for-profit firms from participating in charitable enterprises may dramatically reduce charitable funds available to those in need (Pallotta 2008). However, our findings suggest that the costs of moral outrage can be mitigated. Considering workers' (lack of) alternatives increases consumers' support for employment in the developing countries and increases their appreciation of the benefits of these exploitative exchanges despite their persistent moral concerns (cf., Newman and Cain 2014).

Though helping the disadvantaged is an admirable goal, doing so effectively may require confronting realities that are shocking to first-world consumers yet obvious to third-world workers themselves. Hence, workers' own choices, and the enormous unmet demand for more sweatshop jobs (Kristof 2009; Powell and Zwolinski 2012), may reflect better awareness of these realities. Where no perfect solutions are likely to appear, even deeply flawed, imperfect solutions may merit consideration. Solving persistent social problems like global poverty may require us to use all the tools at our disposal.

REFERENCES

- Baron, J., Bazerman, M. H., & Shonk, K. (2006). Enlarging the societal pie through wise legislation: A psychological perspective. *Perspectives on Psychological Science, 1*(2), 123-132.
- Bazerman, M. H., Magliozzi, T., & Neale, M. A. (1985). Integrative bargaining in a competitive market. *Organizational behavior and human Decision Processes, 35*(3), 294-313.
- Berman, J., Barasch, A., Levine, E. & Small, D. (2015). Limits of Effective Altruism. In: Diehl, K. & Yoon, C. (eds). *Advances in Consumer Research, 43*, 85 - 89. Duluth: Association for Consumer Research.
- Bloom, P. (2016). *Against empathy: The case for rational compassion*. New York: Ecco.
- Campbell, M. C. (2007). "Says who?!" How the source of price information and affect influence perceived price (un) fairness. *Journal of Marketing Research, 44*(2), 261-271.
- Caplan, B. (2007). *The myth of the rational voter*. Princeton: Princeton University Press.
- Darley, J. M., & Pittman, T. S. (2003). The psychology of compensatory and retributive justice. *Personality and Social Psychology Review, 7*(4), 324-336.
- Evangelidis, I., & Van den Bergh, B. (2013). The number of fatalities drives disaster aid: Increasing sensitivity to people in need. *Psychological science, 24*(11), 2226-2234.
- Garrett, D. E. (1987). The effectiveness of marketing policy boycotts: Environmental opposition to marketing. *The Journal of Marketing, 46*-57.
- Goossens, A., & Méon, P. G. (2015). The belief that market transactions are mutually beneficial: A comparison of the views of students in economics and other disciplines. *The Journal of Economic Education, 46* (2), 121-134.
- Harrison, A., & Scorse, J. (2010). Multinationals and anti-sweatshop activism. *The American Economic Review, 100*(1), 247-273.
- Kozinets, R. V., & Handelman, J. M. (2004). Adversaries of consumption: Consumer movements, activism, and ideology. *Journal of Consumer Research, 31*(3), 691-704.
- Kristof, Nicholas D. (2009). Where Sweatshops are a Dream. *The New York Times*, January 15.
- Krugman, Paul (1997). In Praise of Cheap Labor. *Slate*, March 21.
- Loewenstein, G., & Small, D. A. (2007). The Scarecrow and the Tin Man: The vicissitudes of human sympathy and caring. *Review of General Psychology, 11*(2), 112.
- Newman, G. E., & Cain, D. M. (2014). Tainted Altruism When Doing Some Good Is Evaluated as Worse Than Doing No Good at All. *Psychological science, 25*(3), 648-655.
- Olivola, C. Y., & Shafir, E. (2013). "The Martyrdom Effect: When Pain and Effort Increase Prosocial Contributions," *Journal of Behavioral Decision Making, 26*, 91-105.
- Pallotta, Dan (2008), *Uncharitable: How Restraints on Nonprofits Undermine Their Potential*, Tufts University Press: Lebanon, NH.
- Powell, B. (2014). *Out of poverty: Sweatshops in the global economy*. Cambridge University Press.
- Powell, B., & Skarbek, D. (2006). Sweatshops and third world living standards: Are the jobs worth the sweat?. *Journal of Labor Research, 27*(2), 263-274.
- Powell, B., & Zwolinski, M. (2012). The ethical and economic case against sweatshop labor: A critical assessment. *Journal of business ethics, 107*(4), 449-472.
- Roth, A. E. (2007). Repugnance as a Constraint on Markets. *The Journal of Economic Perspectives, 21*(3), 37-58.
- Small, D. A. (2010). Reference-dependent sympathy. *Organizational behavior and human decision processes, 112*(2), 151-160.
- Wertheimer, A., & Zwolinski, M. (2016). Exploitation. *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.)
- Zwolinski, M. (2007). Sweatshops, choice, and exploitation. *Business Ethics Quarterly, 17*(04), 689-727.

Consuming the Streets: Story of a Street Peddler

Ayşe Binay Kurultay, Kadir Has University, Turkey

EXTENDED ABSTRACT

Informal retailers are described as “dealers whose shops consist solely of portable stalls or modified vehicles, whose cachement areas are determined by whatever market circuits the vendor chooses to travel, whose income may or may not be reported accurately to tax authorities” (Sherry, 2001). Street vendors contribute to the overall economic activity, to sustaining themselves as well as their dependents, to the expansion of the range of places and times where goods and services are provided. They are also seen as manifestations of a peaceful and informal revolution of hard-working poor people against a regulatory state promoting the interests of big businesses. Informal commerce has become a lifesaving income opportunity for the unemployed in many countries. As an alternative consumption space in informal commerce, street peddlers provide an immediate service to passers by either using creative product presentations or social performances such as street cries or demonstrations. Individual accounts of street vendors have been a neglected area in consumption research and this study will try to invite the reader to take a glimpse into the life of a street vendor to introduce the reader to the behind-the-scenes of the informal market retailing, consumption. The article aims to make a contribution to the marketplaces cultures domain (Arnould and Thompson, 2005) and provides a case study of a vendor in Istanbul to demonstrate the interactions between the buyers and seller as well as map his consumption space in terms of human interaction, space allocation and advertising practices.

Literature suggests that peddling has developed in Turkey as a result of internal migration from rural areas especially in the last 30 years (Akgeyik, Yavuz, Ersoz, Ozdemir, & Senocak, 2004). As internal rural-urban migrants are unable to find formal employment in urban settings, they are inclined to work informally as street peddlers. Peddling has turned into a social reality characterizing the income dimension of a certain lifestyle (p.20). One of the most striking qualities of informal commerce jobs is the fact that these jobs are found hastily and as means of income, not as a career step. People who are involved in informal sector jobs in Istanbul are mainly interested in finding a source of income for themselves and their families. Without the fixed costs of taxes, store rent, electricity or water bills, street peddlers are able to offer lower priced yet lower quality products or services compared to their formal settled competitors. In the Turkish context, lower priced products satisfy the demands of many low-income consumers. As the internal migration continues from rural to urban areas resulting in low-income consumer masses, demand for street peddling sector increases. Thus, street peddling and informal commerce are guaranteed to be long lasting (Baştaymaz, 1999, p.3) in Istanbul. Another factor supporting street peddling in urban areas is the fact that establishing a formal business is a costly and a long procedural process. Starting a business by completing the legal procedures creates significant limitations for low-income people and it becomes a discouraging construct for individual entrepreneurs. As a result, those who want to be producers or sellers with their individual initiative opt for the easiest way, namely street peddling (Akgeyik, Yavuz, Ersoz, Ozdemir, & Senocak, 2004, p.52). In times of economic crises, major businesses and stores opt for using peddlers as subcontractors in order to ride out fiscal crises with minimal loss. The peddlers involved in such an alliance either share the profits with businesses or are used as wholesale buyers (Yildiz, 2008). The customer-seller relationship has become an important factor in peddling. The hundreds of thousands of people working as

street peddlers virtually create a new employment culture (Akgeyik, Yavuz, Ersoz, Ozdemir, & Senocak, 2004, p.50). This study utilizes qualitative methods of participant observation, semi-structured and unstructured interviews with the peddler, introducing the reader to behind the scenes. The study focuses on a single peddler, Xalo, in Istanbul, Turkey to whom I had access to, thus developing this research into a case study mapping his consumption space in terms of human interaction, space allocation and advertising practices.

Findings include fluidity of the consumption place, competitive yet cooperative behavior between sellers and lack of social performance in advertising practices. Nakanishi's (1990) argument on segmentation based on mutually beneficial interpersonal relationships and uncompetitive markets in the informal sector finds support in this study. As Price and Arnould (1999) suggest, friendships among competitors are characterized by intimacy, loyalty and social support. As a retail service, peddling depends highly on product presentation. Without the formal marketing developments such as packaging, advertising or promotion, peddlers in the informal sector are forced to find creative solutions for presentation of products they sell through street shows (Akbulut, 2009) in Istanbul. Thus, it is possible to see peddlers who do not use performances or other means of unsophisticated advertising solutions to sell their products. Similar to the young man selling flashlight batteries in Ankara mentioned in Uysal's (1968) research, Xalo does not use street cries or performances when he sells his products. None of the peddlers on the street use street cries, street shows or other means of social performance contrary to what Akbulut (2009) suggests. The findings support Varman and Costa (2009) that vendors do not try to steal each others' customers by “calling out”.

As important yet neglected actors of commerce in many developing and developed countries, peddlers create an innovative and convenient new geography of consumption. Street cars that peddlers sell their products on can be thought of as a fluid yet enduring consumption space where consumers can find items of interest. In this context, space should be thought of as socially produced as Lefebvre's space involving the production of social relations and new forms of spatialities (Mansvelt, 2005). As creators of such fluid consumption spaces, this study intended to invite the reader to take a glimpse into the life of a street vendor and introduce the reader to the behind-the-scenes of the informal market retailing and consumption.

REFERENCES

- Akbulut, Dilek (2009), “Informal Service Offer: Peddling” *Proceedings from ServDes.2009, DeThinking Service, ReThinking Design*. Linkopings Universitet: Linkoping University Electronic Press. Retrieved from http://www.ep.liu.se/ecp_article/index.en.aspx?issue=059;article=002
- Akgeyik, Tekin, Arif Yavuz, Halis Y. Ersoz, Suleyman Ozdemir, and Hasan Senocak (2004), “*Istanbul'da Enformel Sektor Isportacilar: Eminonu Ilcesinde Bir Alan Arastirmasi*”, Istanbul: Erguvan Yayınevi.
- Arnould, Russel and Craig Thompson (2005), “Consumer Culture Theory (CCT): Twenty Years of Research,” *Journal of Consumer Research*, 31 (March), 868-82.
- Bastaymaz, Tahir (1999), “Isportacilik: Gunumuz Kentlerinde Cankurtaran Meslek”, *Is Guc: Endustri Iliskileri ve Insan Kaynaklari Dergisi*, 1(1), 1-3.

- Belk, Russell, John F. Sherry and Melanie Wallendorf (1988), "A Naturalistic Inquiry into Buyer and Seller Behavior at a Swap Meet", *Journal of Consumer Research*, 14 (March), 449–68.
- Bromley, Ray (2000), "Street Vending and Public Policy: A Global Review", *The International Journal of Sociology and Social Policy*, 20(1/2), 1-28.
- Crewe Louise (2000), "Geographies of Retailing and Consumption", *Progress in Human Geography*, 24 (2), 275-290.
- Cross, John C. (2000), "Street Vendors, Modernity and Postmodernity: Conflict and Compromise in the Global Economy", *The International Journal of Sociology and Social Policy*, 21(1/2), 29-51.
- Ertugrul, Cemil and Hicran Serel (2010), "Turkiye'de Kayit Disi Bir Sektor: Seyyar Saticilik ve İsportacilik", *Mevzuat Dergisi*, 13(150).
- Greenberg, Jerome, Elaine Sherman, Martin T. Topol, and Kenneth Cooperman, (1980), "The Itinerant Street Vendor: A Form of Nonstore Retailing", *Journal of Retailing*, 56(2), 66-80.
- Jones, Yvonne V. (1988), "Street Peddlers as Entrepreneurs: Economic Adaptation to an Urban Area", *Urban Anthropology*, 17(2-3), 143-170.
- Lincoln, Martha (2008), "Report From the Field: Street Vendors and the Informal Sector in Hanoi", *Dialect Anthropol*, 32, 261-265.
- Lincoln, Yvonna S. and Egon G. Guba (1985), *Naturalistic Inquiry*, Beverly Hills, CA: Sage.
- Maisel, Robert (1974), "The Flea Market as an Action Scene", *Journal of Contemporary Ethnography*, 2(4), 488–505.
- Mansvelt, Juliana (2005), *Geographies of Consumption*, London: Sage Publications.
- McGrath, Mary Ann, John F. Sherry Jr. and Deborah D. Heisley (1993), "An Ethnographic Study of an Urban Periodic Marketplace: Lessons from the Midville Farmers' Market," *Journal of Retailing*, 69 (3), 280–31.
- Nakanishi, Toru (1990), "The Market in the Urban Informal Sector: A Case Study in Metro Manila, the Philippines", *The Developing Economies*, 28(3), pp. 271-301.
- NTVMSNBC (2009, February 23). Istanbul'da seyyar satıcı 500 bini asti. *NTVMSNBC*. Retrieved from <http://arsiv.ntvmsnbc.com/news/144050.asp>
- Price, Linda L. and Eric J. Arnould (1999), "Commercial Friendships: Service Provider–Client Relationships in Context," *Journal of Marketing*, 63 (October), 38–56.
- Pyle, Jane (1971), "Farmers' Markets in the United States: Functional Anachronisms", *Geographical Review*, 61 (2), 167-197.
- Sherry, John F. Jr. (1988), "Market Pitching and the Ethnography of Speaking," In *Advances in Consumer Research*, Volume 15, Houston Micheal J. ed. Provo, UT: Association for Consumer Research, 543–7.
- Sherry, John F. Jr. (1990), "Dealers and Dealing in a Periodic Market: Informal Retailing in Ethnographic Perspective", *Journal of Retailing*, 66(2), 174-200.
- Sherry, John F. Jr. (1990a), "A Sociocultural Analysis of a Midwestern Flea Market," *Journal of Consumer Research*, 17 (June), 13–30.
- Sherry, John F. Jr. (2008), "Ethnography Goes to Market", *American Anthropologist*, 110(1), 3–6.
- TUIK (2013), Hanehalki Isgucu Istatistikleri. Turkiye Istatistik Kurumu Haber Bulteni, 13420. Retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=13420>
- Uysal, Ahmet E. (1968), "Street Cries in Turkey", *The Journal of American Folklore*, 81(321), 193-215.
- Varman, Rohit, & Costa, Janeen A. (2009), "Competitive and Cooperative Behavior in Embedded Markets: Developing an Institutional Perspective on Bazaars", *Journal of Retailing*, 85(4), 453–467.
- vom Lehn, Dirk (2014), "Timing is money: managing the floor in sales interaction at street-market stalls", *Journal of Marketing Management*, 30 (14), 1448-1466.
- Wakeeman, Ann, John R. Light, Dan Chalmers and Anirban Basu (2011), "Deploying Pervasive Advertising in a Farmers' Market" in *Pervasive Advertising*, J. Müller et al. (eds.), 247-267.
- Yildiz, Cengiz M. (2008), "Kent Yasaminin Degismeyen Marjinalleri: Seyyar Saticilar ve İsportacilar", *Firat Universitesi Journal of Social Science*, 18(2), 343-366.

Sneakers Made of Used Plastic? How Consumers' Implicit Theories Affect Buying Recycled Products

Alessandro Biraglia, University of Leeds, UK

J Joško Brakus, University of Leeds, UK

Ambra Brizi, Sapienza University of Rome, Italy

Lucia Mannetti, Sapienza University of Rome, Italy

EXTENDED ABSTRACT

In recent times, the reduction of waste and the practice of recycling have become two major topics in the societal debate. While the issue of garbage disposal has been affecting the Western World for the past decades, the global scenario has recently exacerbated due to the increased consumption volume (and related waste) of developing nations. In the past, scholars and policy makers have tried to educate as well as incentivize practices like recycling to avoid reduce land-fill stocks and create new objects from past used materials (Reid, 1990). Such products have been commercialized more and more by big brands (i.e. Adidas and Levi's) and by famous fashion designers (i.e. Stella McCartney).

While more academic literature has focused on drivers for consumers motivations to engage in recycling activities (Trudel, Argo, and Medel 2016), there has been little research investigating consumers' underlying psychological factors to favour recycled products over standard ones (Mobley, Painter, Untch, and Unnava 1998). In this study we address this issue by experimentally testing consumer evaluation and intention to adopt recycled products through an implicit theory – or mind-sets- framework on.

Implicit theories are beliefs individuals have about the human characteristics (Dweck, 1999). Some individuals maintain a fixed mind-set (or entity theory), believing that human traits—such as intelligence, personality, and morality—are relatively fixed. According to this mind-set, characteristics are stable and there is not much that can be changed about them (Dweck, 1999). Conversely, people with a growth mind-set (or incremental theory), believe that people can substantially modify their characteristics and that these characteristics are malleable. Learning and experience can in fact foster development and change even basic traits of a person together with its behaviour. In other words, incremental theorists suggest that those who strive to change an aspect of their nature can do so. Implicit theories also shape the way people think about effort (Grant and Dweck, 2003). As entity theorists believe traits are innate and unchangeable, they also tend to minimize role of effort. Achievements are in fact based on traits rather than experience and learning. In contrast, incremental theorists view effort as an important element of human nature as it allows to improve and develop, realizing their greater potential. Indeed, if things come too easily, it means they are staying in their comfort zone and not realizing their full potential. Transferring these views in the domain of recycled products, these kind of items are usually manufactured through a sometimes complicated and highly effortful process, bringing for example a plastic water bottle to become fabric for a t-shirt or a pair of trousers. We therefore believe that individuals beholding an incremental theory will be showing a higher intention to purchase a recycled (vs. non-recycled) product when they perceive the manufacturer to have put a high amount of effort to create the object. Hence, we hypothesize that perceived effort in creating the product mediates the relationship between product type and purchase intention, and that this effect is stronger when an individual is an incremental theorists.

In a set of three experiments we test the effect of implicit theories to consumers' intention to adopt recycled products. In the first experiment we asked participants to evaluate their intention to pur-

chase a standard product or one made from recycled plastic, measuring their implicit theory type. The results showed a significant higher purchase intention for incremental theorists, (i.e. individuals who believe traits are malleable and can change) than for entity theorists (who instead believe traits are fixed and unchangeable). In a second laboratory experiment we manipulated implicit theories product type (recycled vs. non-recycled) measuring individuals' level of appreciation through a single category implicit association test. We found out that incremental theorists preferred the recycled product more than entity theorists. In our third experiment we found how this effect is mediated by consumers' perception of the effort invested by the company to create the product. Specifically, the role played by the effort invested by the company in creating the recycled product mediated the effect on the type of product (recycled vs. non-recycled) on consumers' intention to purchase it. This result was stronger in the case on individuals in the incremental condition than in the entity condition.

Taken together, the results of these studies contribute to the literature on implicit theory by investigating another area in consumer psychology (intention to adopt recycled products) so far unexplored, responding to the call for more research made by John and Park (2016). On a managerial point of view, this study suggests how highlighting the effort spent by a company in creating the product (for example by mentioning the hard work done by their R&D department before the official launch) can attract consumer (especially incremental theorists) to intend to buy the product. Some limitations of this study (i.e. testing the effect on more product categories or ways to make recycled products more appealing to entity theorists) can be investigated by future research.

REFERENCES

- Dweck, Carol S. (1999). *Self-theories: Their role in motivation, personality, and development*. Psychology Press.
- Grant, Heidi, and Carol S. Dweck (2003), "Clarifying achievement goals and their impact," *Journal of personality and social psychology*, 85(September), 541-553.
- John, Deborah Roedder, and Ji Kyung Park (2016), "Mindsets matter: Implications for branding research and practice," *Journal of Consumer Psychology*, 26(January), 153-160.
- Mobley, Amy S., Todd S. Painter, Eric M. Untch, and H. Rao Unnava, (1995), "Consumer evaluation of recycled products," *Psychology & Marketing*, 12(May), 165-176.
- Reid, E. (1990). "Old paper enters new markets," *Business First*, 15.
- Trudel, Remi, Jennifer J. Argo, and Matthew D. Meng (2016), "The Recycled Self: Consumers' Disposal Decisions of Identity-Linked Products," *Journal of Consumer Research*, 43(August), 246-264.

Putting on a Show or Showing My True Self? Exploring Consumers' Desire to Signal Accurate versus Enhanced Identities

Daniel Brannon, University of Northern Colorado, USA

Naomi Mandel, Arizona State University, USA

EXTENDED ABSTRACT

Research has shown that consumers use self-enhancing products to compensate for negative self-views, especially in the domain of public consumption (e.g. Berger and Heath 2007; Rucker and Galinsky 2008; Escalas and Bettman 2005; White and Dahl 2006). For instance, Rucker and Galinsky found that powerless individuals are more likely to consume status-related products than those who feel powerful (Rucker and Galinsky 2008). However, anecdotal evidence suggests that consumers are also concerned with signaling accurate self-view information to others, even when these self-views are negative. For instance, the *People of Walmart* website features low socioeconomic status individuals who seem to intentionally wear unflattering clothes, hairdos, and makeup.

Our research attempts to reconcile prior findings that consumers acquire and display products to be seen favorably with the notion that consumers sometimes want products that accurately signal how they see themselves. We posit that competing motives of self-verification and self-enhancement drive differing consumption responses. In particular, while self-enhancement theory asserts that people are primarily motivated to be seen favorably (Sedikides 1993), self-verification theory argues that people are motivated to be known and understood by others, even in the domain of negative self-views. Drawing on recent research showing that self-verification versus self-enhancement motives can be situationally activated (Kraus and Chen 2009), we demonstrate that an active self-verification motive leads consumers to prefer public products that accurately reflect an underlying self-view. In contrast, activating a self-enhancement motive dampens this effect, as negative self-view consumers no longer desire accurate identity products.

In study 1, we sought evidence that situational activation of a self-verification (vs. self-enhancement) motive could influence consumers' preferences for a negative identity product. We conducted a 2 (motive: self-verification vs. self-enhancement, between) \times (appearance-esteem, continuous) design. Based on findings that people are motivated to self-verify (vs. self-enhance) when around socially close (vs. socially distant) others (Kraus and Chen 2009; Swann, De La Ronde, and Hixon 1994), we asked participants in the self-verification condition to write about a significant other (e.g. close friend or family member) and participants in the self-enhancement condition to write about a loose acquaintance. Next, in a supposedly unrelated study, we asked participants to rate their likelihood of purchasing a graphic t-shirt with the tagline "Too Ugly for L.A." We found a significant motive \times appearance-esteem interaction ($b = -.38, t(245) = -2.02, p = .04$). Importantly, when people wrote about a close other, activating a self-verification motive, lower appearance-esteem increased preference for the "ugly" t-shirt ($b = -.28, t(245) = -2.06, p = .04$). In contrast, when people wrote about a distant other, activating a self-enhancement motive, this effect was dampened (*ns*). An additional spotlight contrast showed that low appearance-esteem participants were marginally less likely to purchase the shirt in the self-enhancement (vs. self-verification condition ($b = .54, t(245) = 1.91, p < .06$).

In study 2, we replicated this basic finding, but in a different self-view domain and a different product class. We conducted a 2 (motive) \times (chronic power, continuous) design. Participants completed the social distance manipulation from study 1 and indicated

their preference between a Lexus (high status) and a Kia (low status) branded car. We found a significant motive \times power interaction ($b = -4.47, t(339) = -2.61, p < .01$). Among participants who wrote about a close other (self-verification condition), lower power increased preference for the Kia over the Lexus ($b = -4.55, t(339) = -3.71, p < .001$). In contrast, among participants who wrote about a distant other (self-enhancement condition), lower power did not increase preference for the Kia (*ns*). An additional spotlight contrast showed that this dampening was driven by low power participants decreased preference for the Kia in the self-enhancement condition ($b = 23.13, t(339) = 2.92, p < .01$).

In study 3, we sought to replicate our prior findings using a different situational activation of motive. We ran a 2 (motive) \times (power) design. We asked participants read a Forbes Magazine article entitled "Should You Be Yourself in a Job Interview?" In the self-verification condition, the article argued that interviewees should share accurate information about themselves during the job interview ("...candidates should do all they can to emphasize their true selves, even if means acknowledging their weaknesses..."). In the self-enhancement condition, the article argued that interviewees should only share highly positive information about themselves during the job interview ("...candidates should do all they can to emphasize the positive aspects of themselves, while downplaying the negatives..."). Afterwards, participants again indicated their preference between Lexus and Kia. The motive \times power interaction was significant ($b = -4.68, t(352) = -2.00, p < .05$). When we activated a self-verification motive, lower power increase preference for Kia over Lexus ($b = -4.37, t(352) = -2.79, p < .01$). In contrast, when we activated a self-enhancement motive, power did not affect preference (*ns*). Further, a spotlight contrast showed that low power participants exhibited a decreased preference for Kia in the self-enhancement (vs. self-verification) condition (stats).

In study 4, we sought a boundary condition regarding when situational activation of a self-verification motive (via a social distance manipulation) would *not* increase preference for product signaling an accurate self-view. We predicted that participants with high (vs. low) fear-of-negative-feedback (Watson and Friend 1969) would be less likely to prefer products that signaled an accurate self-view because negative self-view participants with high fear-of-negative-feedback would exhibit a decreased preference of the Kia over the Lexus. We ran a 2 (motive) \times (fear of negative evaluation) \times (power) design. There was a significant motive \times fear of negative evaluation \times power interaction ($b = 8.02, t(180) = 2.25, p < .03$). Consistent with predictions, among participants with a low fear of negative evaluation, when we activated a self-verification motive, the power coefficient was negative and significant, such that lower (vs. higher) power increased points allocated to Kia over Lexus ($b = -10.27, t(180) = -3.07, p = .003$). Among participants with a high fear of negative evaluation, the effect of a self-verification motive on preference was fully attenuated ($b = -3.29, t(180) = -.89, ns$).

Introduction

“Dressed like this, in the ugliest clothes I could muster, I set off for the estate where Anne Lisbet lived... [The] filthy, ugly clothes I was wearing, the drooping head, all of this was for her benefit, so that she would understand.” (Knausgaard 2009)

In the above passage, the character who has been feeling sorry for himself for some time, responds to his girlfriend’s apparent obliviousness by wearing the most unattractive clothing he can find. Indeed, it often appears that consumers acquire and display products to accurately signal something about themselves to others, even if that signal is negative. For instance, people who suffer from depression or low self-esteem may accurately signal how they feel about themselves by wearing clothes and listening to music associated with negative subcultural identities (Sedgwick 2013). However, it also contradicts the popular notion that consumers primarily purchase products in order signal positive information about themselves to others (e.g. Berger and Heath 2007; Rucker and Galinsky 2008; Escalas and Bettman 2005; White and Dahl 2006). What accounts for this behavior?

Our research investigates this question by building on the theory of self-verification (Swann 1983). According to self-verification theory, people seek to be known and understood by others in a manner that is consistent with their self-views, even when these views are negative. We demonstrate that situational activation of a self-verification (vs. self-enhancement) motive lead consumers to prefer public consumption that signals accurate (vs. enhanced) self-view information to others.

We make several contributions to the literature. First, we provide a more nuanced understanding of consumer signaling behavior by focusing on a counterintuitive implication of self-verification theory: that consumers sometimes want to publically signal accurate, and even negative self-views, rather than only positive self-views. Furthermore, we contribute to the self-verification literature itself. While studies in this area have largely focused on how self-verification motives drive feedback preferences and partner selection behavior (Swann, Rentfrow, and Guinn 2003), little research to date has explored whether these motives influence how people signal information about themselves to others, for example through their consumption choices. Finally, we demonstrate two boundary conditions of self-verification by showing that the effects of these motives disappear when consumers consider using a product privately (vs. publicly), as well as when consumers have a high (vs. low) fear of negative social evaluation.

Competing Motives: Self-Enhancement Versus Self-Verification

According to self-enhancement theory, people strive to create to maintain a positive self-view (Sedikides 1993). The motive to self-enhance often leads people to misrepresent their actual traits and abilities. For example, people tend to have exaggerated perceptions of their control over outcomes (Taylor and Brown 1988). Based on the plethora of evidence that people want to achieve a positive self-image, several scholars have argued that self-enhancement is a universal human motivation (e.g. Taylor and Brown 1988; Sedikides 1993). Self-enhancement motives can increase consumer preferences for products that signal highly positive information about the self (Belk 1988; Berger and Heath 2007; 2008; Escalas and Bettman 2005). For instance, people engage in conspicuous consumption of luxury products in order to signal social status and power (Rucker and Galinsky 2008; 2009; Veblen 1899), attract mates and deter ri-

vals (Griskevicius et al. 2007), and maintain or enhance self-esteem (Sivanathan and Pettit 2010). Not only do self-enhancement motives lead consumers to choose products that signal positive information about themselves, they also lead them to avoid products associated with negative or undesirable information. For instance, men eschew products that signal feminine traits (White and Dahl 2006). Consumers also strive to use products that signal unique and differentiated social identities in order to avoid being seen as “conformists” (Berger and Heath 2007).

In contrast, proponents of self-verification theory (Swann 1983) have argued that people are not singularly motivated by self-enhancement motives. Instead, people also have a fundamental desire to be known and understood by others, even in domains of self-perceived flaws and shortcomings. For instance, people prefer interaction partners who give them accurate, as opposed to overly favorable, evaluations of their skills and abilities in several domains (e.g. physical attractiveness, intelligence, and athletic ability), even when these self-views are negative (Hixon and Swann 1993; Robinson and Smith-Lovin 1992; Swann, Pelham, and Krull 1989; Swann et al. 1990; Swann et al. 1992). Furthermore, people who view themselves negatively prefer feedback that validates negative feelings, as opposed to feedback that positively reframes what they are experiencing (Marigold et al. 2014).

Previous research exploring why people sometimes prioritize self-verification over self-enhancement lends insight into how this motive can affect consumer signaling behavior. People self-verify because receiving social confirmation of a self-view provides them with a sense of coherence about their world and themselves (Swann et al. 2003). Even negative self-views may serve as important sources of self-knowledge that must be maintained, not enhanced. Based on this notion, using products that signal accurate self-view information should be a particularly effective method for maintaining self-coherence, as these products provide consumers with an increased sense of assurance that others see them in the same way that they see themselves, without having to explicitly engage in social interactions or elicit direct interpersonal feedback (Oyserman 2009). Based on these ideas, we propose that the situational activation of a self-verification (vs. self-enhancement) motive will cause consumers to prefer products that signal accurate (vs. enhanced) self-view information, even when these views are negative.

For comparison purposes we consider the relevant baseline condition to be one where consumers have a self-enhancement motive (Baumeister 1989; Kraus and Chen 2009; Sedikides 1993), as prior research has found that people are more practiced at making positive social impressions (Farrow et al. 2015; Swann et al. 1990). We expect that among consumers with an active self-enhancement motive, underlying self-views will not influence product preferences, because all individuals in these conditions will be more concerned with acquiring a product that signals positive (vs. accurate) information about themselves.

Hypothesis 1: There will be an interactive effect of self-view and motive on product preference. Consumers with a self-verification motive will prefer products that are consistent with their self-view, such that consumers with a more negative self-view will exhibit higher evaluations and preference for products that signal negative (vs. positive) information. Among participants with an active self-enhancement motive, no such relationship will exist.

Of note, we do not predict a pattern that is entirely consistent with *compensatory* self-enhancement, which occurs when individuals with a negative self-view are more motivated to self-enhance than individuals with a positive self-view (see Mandel et al. forthcoming for a review). In the current research, we investigate how self-verification versus self-enhancement motives influence consumption responses to chronic self-views, which are stable views developed over an individual's lifetime (Ehrlinger and Dunning 2003). As a result, in our studies, participants do not experience the type of self-threat that creates a temporary self-discrepancy, which can in turn lead to compensatory consumption.

Fear-of-Negative-Evaluation as a Boundary Condition

How might this signaling behavior change among consumers who are averse to negative social evaluations? Individuals with high social anxiety are particularly sensitive to the social evaluations of others (Clark and Wells 1995; Rapee and Heimberg 1997). As a result, socially anxious individuals tend to exaggerate the importance of even mildly negative social feedback (Stopa and Clark 2001), leading them to try to avoid negative social evaluations (Wells 1995). Drawing on these findings, we predict that fear of negative social evaluation will dampen the effect of a self-verification motive on the product preference. More specifically, among consumers with a higher fear of negative social evaluation, we expect that fear to outweigh any concerns for self-verification, leading those with both positive and negative self-views to prefer products that signal enhanced self-view information. In contrast, we expect to replicate our effect of self-verification motives predicted in H1 among individuals with low fear of negative social evaluation.

Hypothesis 2: Among consumers with low fear of negative evaluation, activating a self-verification motive will lead consumers to prefer products that are consistent with their self-view. Among consumers with a high fear of negative evaluation, activating a self-verification motive will not lead consumers to prefer products that are consistent with a self-view.

We tested our hypotheses across four studies. In studies 1 – 3, we examined whether different situational activations of a self-verification motive led consumers with negative self-views to prefer products that signaled accurate information about this view. In study 4, we explored a fear-of-negative evaluation as a boundary condition of this effect.

Study 1 – This was a 2 (motive: self-verification vs. self-enhancement, between) \times (appearance-esteem, continuous) design. Participants completed a 6-item appearance-esteem scale (Heatherton and Polivy 1991). Next, based on past research finding that people are motivated to self-verify among socially close (vs. socially distant) others (Swann et al. 1994), we situationally activated a self-verification motive by asking participants to write 3-4 sentences about a socially other: ““Please write 3-4 sentences about a person whom you have known for a long time...”” In the self-enhancement, condition participants wrote about a loose acquaintance: “Please write 3-4 sentences about a person whom you have not known for a long time and do not currently know well...”” Afterwards, we gave participants a supposedly unrelated study asking them to evaluate a graphic t-shirt. We asked participants to rate their likelihood of purchasing a t-shirt with the tagline “Too Ugly for L.A.” written on the front. We found a significant motive \times appearance-esteem interaction ($b = -.38, t(245) = -2.02, p = .04$) (see figure 1). Importantly, when people wrote about a close other, activating a self-verification mo-

tive, lower appearance-esteem increased preference for the “ugly” t-shirt ($b = -.28, t(245) = -2.06, p = .04$). In contrast, when people wrote about a distant other, activating a self-enhancement motive, this effect was dampened (*ns*). An additional spotlight contrast showed that low appearance-esteem participants were less likely to purchase the shirt in the self-enhancement (vs. self-verification) condition ($b = .54, t(245) = 1.91, p < .06$).

Study 2 – This was a 2 (motive, between) \times (self-esteem, continuous) design. Participants completed an 10-item scale of self-esteem (Rosenberg 1965). Next, we asked participants to write about a socially close (vs. distant) other, similar to study 1. Afterwards, participants completed a supposedly unrelated study where they viewed an advertisement featuring a picture of a Kia (low status) and a Lexus (high status) brand car (Mandel et al. 2006). Afterwards, we asked participants to indicate their preference by allocating a total of 100 points between the two cars, with a higher number indicating a stronger preference for the Kia. The motive \times power interaction coefficient was significant ($b = -4.47, t(339) = -2.61, p < .01$). When participants wrote about a close other, activating a self-verification motive, lower power increased preference for the Kia over the Lexus ($b = -4.55, t(339) = -3.71, p < .001$). In contrast, when participants wrote about a distant other, activating a self-enhancement motive), lower power did not increase preference for the Kia (*ns*). An additional spotlight contrast showed that low power participants had a decreased preference for the Kia in the self-enhancement (vs. self-verification) condition ($b = 23.13, t(339) = 2.92, p < .01$).

Study 3 – We ran a 2 (motive, between) \times (power, continuous) design. Participants completed the 8-item scale of chronic power. Next, we activated motive using a different situational manipulation. Specifically, we asked participants to read a Forbes Magazine article entitled “Should You Be Yourself in a Job Interview?” In the self-verification condition, the article argued that interviewees should share accurate information about themselves during the job interview (“...candidates should do all they can to emphasize their true selves, even if means acknowledging their weaknesses...”). In the self-enhancement condition, the article argued that interviewees should only share highly positive information about themselves during the job interview (“...candidates should do all they can to emphasize the positive aspects of themselves, while downplaying the negatives...”). Afterwards, participants allocated 100 points to indicate their preference between Kia and Lexus, similar to study 2. The motive \times power interaction coefficient was significant ($b = -4.68, t(352) = -2.00, p < .05$). When we situationally activated a self-verification motive, the power coefficient was negative and significant, such that lower (vs. higher) power increased the number of points allocated Kia over Lexus ($b = -4.37, t(352) = -2.79, p < .01$), indicating a desire for the product that accurately signaled participants' power self-view. In contrast, when we activated a self-enhancement motive, the power did not affect the points allocation ($b = .31, t(352) = .18, ns$).

Study 4 – This study was a 2 (motive: self-verification vs. control) \times continuous (fear of negative evaluation) \times (power) design meant to test H3. Participants completed the power scale and Watson and Friend's (1969) Brief Fear-of-Negative-Evaluation Scale. Next, we activated a self-verification motive by asking participants to write about a close other (Kraus and Chen 2009). Participants in the control condition wrote about a neutral topic. We then asked participants to indicate their preference between Kia and Lexus using the point allocation task, similar to study 1. Replicating our previous findings, there was a significant two-way motive \times power interaction coefficient ($b = -7.18, t(180) = -1.95, p = .05$) (H1). More important, and consistent with hypothesis 2, this effect was qualified by a

significant motive \times fear of negative evaluation \times power interaction ($b = 8.02$, $t(180) = 2.25$, $p < .03$). We further examined the motive \times power interaction at one standard deviation above and below mean fear of negative evaluation. Consistent with predictions, among participants with a low fear of negative evaluation, when we activated a self-verification motive, the power coefficient was negative and significant, such that lower (vs. higher) power increased points allocated to Kia over Lexus ($b = -10.27$, $t(180) = -3.07$, $p = .003$). In contrast, in the control condition power did not affect points allocation ($b = 4.93$, $t(180) = 1.34$, $p = .18$). Also consistent with predictions, among participants with a high fear of negative evaluation, the effect of a self-verification motive on preference was fully attenuated, such that power did not affect points allocation ($b = -3.29$, $t(180) = -.89$, ns).

In sum, our research offers one possible explanation for reconciling when consumers prefer products that signal something accurate about themselves versus products that signal something favorable. Specifically, we find that situational activation of a self-verification (vs. self-enhancement) motive (such as when people think about a socially close other) can increase preference for products accurately reflect a self-view, even when that view is negative.

REFERENCES

- Baumeister, Roy F. (1989), "The Optimal Margin of Illusion," *Journal of Social and Clinical Psychology*, 8(2), 176-189.
- Belk, Russell (1988). *Possessions and Self*. John Wiley & Sons, Ltd.
- Berger, Jonah, and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains." *Journal of Consumer Research* 34, no. 2 (2007): 121-134.
- Berger, Jonah, and Chip Heath (2008), "Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes," *Journal of Personality and Social Psychology*, 95 (3), 593 - 607.
- Clark, David M., and Adrian Wells (1995), "A Cognitive Model of Social Phobia," *Social Phobia: Diagnosis, Assessment, and Treatment*.
- Ehrlinger, Joyce, and David Dunning (2003), "How Chronic Self-Views Influence (and Potentially Mislead) Estimates of Performance," *Journal of Personality and Social Psychology*, 84 (1), 5-17.
- Escalas, Jennifer Edson, and James R. Bettman (2005), "Self-Conceptual, Reference Groups, and Brand Meaning" *Journal of Consumer Research*, 32 (3), 78-389.
- Farrow, Tom FD, Jenny Burgess, Iain D. Wilkinson, and Michael D. Hunter (2015), "Neural Correlates of Self-Deception and Impression-Management," *Neuropsychologia*, 67, 159-174.
- Griskevicius, Vladas, Joshua M. Tybur, Jill M. Sundie, Robert B. Cialdini, Geoffrey F. Miller, and Douglas T. Kenrick (2007), "Blatant Benevolence and Conspicuous Consumption: When Romantic Motives Elicit Strategic Costly Signals," *Journal of Personality and Social Psychology*, 93(1), 85-102.
- Hixon, J. Gregory, and William B. Swann (1993), "When Does Introspection Bear Fruit? Self-Reflection, Self-Insight, and Interpersonal Choices," *Journal of Personality and Social Psychology*, 64 (1), 35-43.
- Knausgaard, Karl Ove (2009), *My Struggle: Boyhood Island*, New York, NY: Archipelago Books.
- Kraus, Michael W., and Serena Chen (2009), "Striving to Be Known by Significant Others: Automatic Activation of Self-Verification Goals in Relationship Contexts," *Journal of Personality and Social Psychology*, 97 (1), 58-73.
- Marigold, Denise C., Justin V. Cavallo, John G. Holmes, and Joanne V. Wood (2014), "You Can't Always Give What You Want: The Challenge of Providing Social Support to Low Self-Esteem Individuals," *Journal of Personality and Social Psychology*, 107 (1), 56-80.
- Oyserman, Daphna (2009), "Identity-Based Motivation: Implications for Action-Readiness, Procedural-Readiness, and Consumer Behavior." *Journal of Consumer Psychology*, 19 (3), 250-260.
- Rapee, Ronald M., and Richard G. Heimberg (1997), "A Cognitive-Behavioral Model of Anxiety in Social Phobia," *Behaviour Research and Therapy*, 35(8), 741-756.
- Robinson, Dawn T., and Lynn Smith-Lovin (1992), "Selective Interaction as a Strategy for Identity Maintenance: An Affect Control Model," *Social Psychology Quarterly*, 55 (1), 12-28.
- Rosenberg, Morris (1965), *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press.
- Rucker, Derek D., and Adam D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35 (2), 257-267.
- Sedgwick, Mark (2013), "How are Goths and Emos Defined?" *BBCNews.com*
- Sedikides, Constantine (1993), "Assessment, Enhancement, and Verification Determinants of the Self-Evaluation Process," *Journal of Personality and Social Psychology*, 65(2), 317-338.
- Sivanathan, Niro, and Nathan C. Pettit (2010), "Protecting the Self through Consumption: Status Goods as Affirmational Commodities," *Journal of Experimental Social Psychology*, 46 (3), 564-570.
- Spencer, Steven J., Mark P. Zanna, and Geoffrey T. Fong (2005), "Establishing a Causal Chain: Why Experiments are often More Effective than Mediation Analyses in Examining Psychological Processes," *Journal of Personality and Social Psychology*, 89(6), 845-851.
- Stopa, Lusia, and David M. Clark (2001), "Social Phobia: Comments on the Viability and Validity of an Analogue Research Strategy and British Norms for the Fear of Negative Evaluation Questionnaire," *Behavioural and Cognitive Psychotherapy*, 29 (04), 423-430.
- Swann Jr, William B. (1983), "Self-Verification: Bringing Social Reality into Harmony with the Self," *Social Psychological Perspectives on the Self*, 2, 33-66. Hillsdale, NJ: Erlbaum.
- Swann Jr, William B., Brett W. Pelham, and Douglas S. Krull (1989), "Agreeable Fancy or Disagreeable Truth? Reconciling Self-Enhancement and Self-Verification," *Journal of Personality and Social Psychology*, 57 (5), 782-791.
- Swann Jr, William B., Peter J. Rentfrow, and Jennifer S. Guinn (2003) "Self-Verification: The Search for Coherence." *Handbook of Self and Identity*, 367-383.
- Swann, William B., J. Gregory Hixon, Alan Stein-Seroussi, and Daniel T. Gilbert (1990), "The Fleeting Gleam of Praise: Cognitive Processes Underlying Behavioral Reactions to Self-Relevant Feedback," *Journal of Personality and Social Psychology*, 59 (1), 17-26.
- Swann, William B., Richard M. Wenzlaff, Douglas S. Krull, and Brett W. Pelham (1992), "Allure of Negative Feedback: Self-Verification Strivings among Depressed Persons," *Journal of Abnormal Psychology*, 101 (2), 293-306.
- Taylor, Shelley E., and Jonathon D. Brown (1988), "Illusion and Well-Being: A Social Psychological Perspective on Mental Health," *Psychological Bulletin*, 103(2), 193-210.

Veblen, Thorstein (1899), *The Theory of the Leisure Class*. New York: *The New American Library*.

Watson, David, and Ronald Friend (1969), "Measurement of social-evaluative anxiety," *Journal of Consulting and Clinical Psychology*, 33(4), 448-457.

Wells, Adrian (1995), "Meta-Cognition and Worry: A Cognitive Model of Generalized Anxiety Disorder," *Behavioural and Cognitive Psychotherapy*, 23(03), 301-320.

White, Katherine, and Darren W. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Psychology*, 16 (4), 404-414.

Trendy or Timeless? The Effect of Need for Uniqueness and Pressure on Choice

Susan Calderon, IE University, Spain

Antonios Stamatogiannakis, IE University, Spain

Dilney Gonçalves, IE University, Spain

EXTENDED ABSTRACT

Consumers seeking uniqueness prefer unique, scarce (Snyder and Fromkin 1980), and innovative products (Lynn and Harris 1997) over common ones. However, these consumers frequently choose between products that provide equal degrees of uniqueness, for either longer (*timeless* products), or shorter (*trendy* products) time. Moreover, unique products (either *timeless* or *trendy*) are often available for limited time or quantity (Cialdini and Garde 1987; Lynn 1991), potentially putting consumers under some pressure when choosing them. *How do need for uniqueness (NFU) and pressure interact to affect the choice between timeless and trendy products?*

With the exception of extreme pressure (Baumeister 1984), *motivated* individuals that decide under high pressure focus more on evaluating its most relevant dimensions (Wright 1974). High-NFU consumers are motivated when choosing unique products (Snyder 1977), and duration of uniqueness is an important dimension in such choices (Tian, Bearden, and Hunter 2001). Thus, when unique product choices only differ in their duration benefits, high-NFU consumers under pressure may focus on the duration of uniqueness, being more likely to choose timeless products, which provide greater duration benefits.

However, when motivated individuals decide under low pressure, they neglect relevant dimensions of decisions (Ben Zur & Breznitz 1981; Latham & Locke 1975). Instead, they might make intuitive inferences (Chaiken 1980; Kahneman & Frederick 2002; Slovic 1996). Trendy products might appear as more unique (Thompson and Haytko 1997; Simmel 1957) than timeless ones. Thus, although trendy products do not necessarily differ in their degree of uniqueness from timeless ones, they may still be perceived as more unique in direct comparisons (Epley and Gilovich 2006). This “trendy is unique” inference, developed when trendy and timeless products are directly compared, might be used by high-NFU consumers under low pressure. Thus, high-NFU consumers under low pressure could be more likely to choose trendy products.

The pilot field-study involved 31 unique products sales professionals, and 56 members of a business school’s luxury-club. Participants predicted the choice of a high-NFU consumer that should decide “immediately” (high pressure) or “now or later” (low pressure), between a timeless and a trendy product. Neither professionals, nor luxury-club members predicted different choice shares between the high and low pressure conditions, showing that our results are novel to unique product professionals and consumers

In Study 1, participants had to choose between two pre-tested dress-shirts. The timeless shirt was intentionally superior in several dimensions, including uniqueness duration. Two hundred eighteen participants were assigned to either the high (vs. low) pressure condition, had 40 (vs. 60) seconds to choose, and were told that this time was “just enough” (vs. “enough”). In reality, both times were enough, based on the pre-test. Participants completed the NFU scale (Snyder 1977).

Results revealed significant effects of NFU, pressure, and their interaction on choice. Specifically, high-NFU (but not low-NFU) participants tended to choose the timeless (vs. trendy) product under high (vs. low) pressure. These results suggest that high-NFU participants under low pressure might be guided by inferences made when comparing both products, neglecting the duration benefits of time-

less products. Choices of low-NFU participants were not affected by pressure. This study suggests that even with a superior timeless product, high-NFU consumers might rely on “trendy is unique” inferences under low pressure, and choose the trendy product.

Study 2 confirmed our predictions in a consequential choice, using a different product category, and operationalizations of NFU and pressure. We pre-tested two bags in individual and comparative evaluation settings. When evaluated individually, the only difference was that the timeless bag had higher perceived duration of uniqueness. When evaluated comparatively, this advantage persisted, but the trendy bag was perceived as more unique.

One hundred sixty-seven female participants were assigned to either the low or high pressure condition. Everyone had 80 seconds to choose. However, participants in the high (vs. low) time pressure condition were told that “most people take about 120 (vs. 80) seconds” to decide (Briley and Aaker 2006). Participants completed the Consumer’s NFU scale (CNFU; Tian et al. 2001).

Results showed significant effects of CNFU, and of the interaction between CNFU and pressure on choice. High-CNFU participants were more likely to choose the timeless (vs. trendy) product under high (vs. low) pressure. Low-CNFU participants’ choice was unaffected by pressure. Thus, choices of high-CNFU individuals under high pressure comply with the uniqueness duration advantage of timeless products, but under low pressure choices seem to be influenced by “trendy is unique” inferences.

Study 3 supports our theoretical mechanism using different operationalizations of NFU and pressure, and directly measuring participants’ evaluation thoughts. 312 female participants were assigned to a 2 (uniqueness vs. homogeneity prime; Maimaran and Wheeler 2008) x 2 pressure (high vs. low product availability) between-participants design. Participants made the same choice as in study 2, being primed with uniqueness or homogeneity, and considering *both* products under high or low availability. Then, they wrote the thoughts they had while choosing. Two independent coders coded the first two thoughts of each participant (Higgins 1996; Petty and Cacioppo 1981) as duration vs. non-duration related. As predicted, mediation analyses showed a significant interaction of pressure and uniqueness on the number of duration-related thoughts, and a significant effect of the number of duration-related thoughts on choice. Conditional indirect effects for the uniqueness priming (but not for homogeneity priming) was significant. Participants primed with uniqueness listed more duration-related thoughts under high (vs. low) pressure. Subsequently, these thoughts made more likely the choice of timeless products.

We demonstrated that NFU and pressure jointly affect the choice of timeless versus trendy products, through reliance on different information. Theoretically, we establish uniqueness as a multidimensional construct, with its duration as one important dimension. We also find that pressure during choices may lead to beneficial effects, depending on its degree and on individuals’ motivations. Managerially, companies should carefully use pressure depending on whether they want to promote timeless or trendy products. Finally, timeless products satisfy consumers’ uniqueness needs for longer, and thus save resources. Therefore, shoppers seeking uniqueness may want to shop under pressure (e.g., right before shops close) to gear choices towards timeless products.

REFERENCES

- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, 46(3), 610-620.
- Ben Zur, H., & Breznitz, S. J. (1981). The effect of time pressure on risky choice behavior. *Acta Psychologica*, 47(2), 89-104.
- Briley, D. A., & Aaker, J. L. (2006). When does culture matter? Effects of personal knowledge on the correction of culture-based judgments. *Journal of Marketing Research*, 43(3), 395-408.
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39(5), 752-766.
- Cialdini, R. B., & Garde, N. (1987). *Influence: The psychology of persuasion*. (Rev. ed. ed.). New York: HarperCollins.
- Epley, N., & Gilovich, T. (2006). The anchoring-and-adjustment heuristic Why the adjustments are insufficient. *Psychological Science*, 17(4), 311-318.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp.133-168). New York: Guilford Press.
- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 49-81). New York: Cambridge University Press.
- Latham, G. P., & Locke, E. A. (1975). Increasing productivity and decreasing time limits: A field replication of Parkinson's law. *Journal of Applied Psychology*, 60(4), 524-526.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57.
- Lynn, M., & Harris, J. (1997a). Individual differences in the pursuit of self-uniqueness through consumption. *Journal of Applied Social Psychology*, 27(21), 1861-1883.
- Maimaran, M., & Wheeler, S. C. (2008). Circles, squares, and choice: The effect of shape arrays on uniqueness and variety seeking. *Journal of Marketing Research*, 45(6), 731-740.
- Petty, R. E., & Cacioppo, J. T. (1981). Social psychological procedures for cognitive response assessment: The thought-listing technique. In T. V. Merluzzi, C. R. Glass, & M. Genert (Eds.), *Cognitive assessment* (pp. 309-342).
- Simmel, G. (1957). Fashion. *American Journal of Sociology*, 62(6), 541-558.
- Slooman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, 119(1), 3-22.
- Snyder, C. R. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology*, 86(5), 518-527.
- Snyder, C. R., & Fromkin, H. L. (1980). *Uniqueness: The human pursuit of difference*. New York: Plenum Press.
- Thompson, C. J., & Haytko, D. L. (1997). Speaking of fashion: Consumers' uses of fashion discourses and the appropriation of countervailing cultural meanings. *Journal of Consumer Research*, 24(1), 15-42.
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50-66.
- Wright, P. (1974). The harassed decision maker: Time pressures, distractions, and the use of evidence. *Journal of Applied Psychology*, 59(5), 555-561.

The Mortgage Illusion

Nelson Camanho, Católica-Lisbon School of Business and Economics, Portugal

Daniel Fernandes, Católica-Lisbon School of Business and Economics, Portugal

EXTENDED ABSTRACT

Buying a house is perhaps the most important financial decision that households face. For most American homeowners, housing is the most valuable asset in their balance sheet. Many factors influence the housing decision, making it a complex and difficult task to many potential homebuyers. In addition, there are limited opportunities to learn from taking a mortgage. As a result, households are often uncertain about their housing decisions. When people are uncertain about a choice, they draw upon cues to help them arrive at a decision (Slovic 1995; Payne et al. 1999). These cues that people use are sometimes difficult to justify normatively. Previous research has shown that indeed housing decisions might be based in market inefficiencies (Brunnermeier and Julliard 2008; Case and Shiller 1988; Genesove and Mayer 2001; Simonsohn and Loewenstein 2006).

In this paper, we show that potential homebuyers compare the monthly rental payment (R) and the monthly installment of a mortgage at a fixed rate (M) on two equivalent houses when deciding to buy a house. Consumers are more likely to buy a house if the mortgage monthly installment is lower than the monthly rental payment.

In the first study, we manipulate the size of the difference between the monthly installment and the monthly rental payment by changing the maturity of the mortgage. We observe that people are more likely to buy the house in the longer maturity condition such that the monthly installment is lower than the monthly rental payment.

In the second study, participants answer eight scenarios, four in which the monthly mortgage installment is lower than the monthly rental payment and another four in which the opposite holds. The order of the questions is randomly assigned. Results are consistent with the mortgage illusion effect and they cannot be explained by monthly budget constraints. Participants become more likely to buy only when the mortgage installment becomes lower than the rental payment and not in the other conditions. This indicates that the effect is not caused by a desire to pay less but by a desire to pay less than rent.

We run another four experiments that aim to check the robustness of our results. In experiment 3, we narrow the gap between the monthly rental payment and the monthly mortgage installment to 5 dollars and yet find that people are more likely to buy when the monthly mortgage installment is lower than the monthly rental payment. Experiment 4 adds a condition in which the monthly rental payment is the same as the monthly mortgage installment in order to elicit the baseline preference of participants. We observe that people are indeed more likely to switch from buying to renting around the threshold, when the monthly mortgage installment M is equal to the monthly rental payment R. Experiment 5 measures several potential individual biases that could be related to the mortgage illusion. Only the immediacy bias and the long-term discount factor significantly correlate with the mortgage illusion, i.e., more impatient individuals are more likely to incur the mortgage illusion. We also observe that the mortgage illusion is lower among stock investors, full-time students, and married individuals. Experiment 6 shows that a financial education intervention is not effective at reducing the mortgage illusion effect.

We also observe the mortgage illusion in the field using the data from the Panel Study of Income Dynamics (PSID). The PSID provides on the dollar amount panelists pay monthly for rent or for

their mortgage between 1993 and 2013. We identified 2,943 panelists that bought a house in the period of the panel (i.e., between 1993 and 2013) and used to rent before the house purchase. M-R, the difference between the first monthly mortgage installment and the last monthly rental payment. Panelists' M-R concentrates around zero, which is consistent with the mortgage illusion effect. These results suggest that panelists seem to use a threshold for the monthly mortgage installment that is around the monthly rental payment they used to pay. Of course, there are many confounding factors in the PSID analysis, which preclude us to identify the mortgage illusion effect. One of the contributions of our paper is to identify it by running experiments in a controlled environment.

Decisions depend on a comparison of potential outcomes with a reference point, which are constructed narrowly (Kahneman and Tversky 1979). Reference points can be based on past outcomes or some aspiration level. For instance, people betting on horses would really like to break even for a given day and end up making longer shots at the end of the day (McGlothlin 1956). Similarly, cab drivers are highly motivated to achieve a targeted daily income and end up going home too early in a particularly profitable day (Camerer, Babcock, Loewenstein, and Thaler 1997). Along the same vein, home buyers use the monthly rental payment as a reference point to decide whether to buy a house – and fail to consider that these expenses are part of a longer stream of payments.

The mortgage illusion is also consistent with anchoring, i.e., the fact that people's estimates can be affected by a highly accessible number. For instance, when uncertain about the price of a product, people anchor to a certain reference number and adjust very little from that initial number. The adjustment is often insufficient because people stop when they are no longer certain that they should adjust further. Movers arriving from a more expensive city end up renting pricier apartments than those arriving from cheaper cities (Simonsohn and Loewenstein 2006), which is consistent with anchoring to their original city's house prices.

These biases arise because of cognitive limitations. When individuals struggle to find an answer to a decision problem and substitute the solution to a related simple problem (Kahneman and Frederick 2002). Rather than employing a discounted cash flow analysis, homebuyers resort to the simpler mortgage illusion when deciding whether to buy a house. Households who follow the mortgage illusion might end up defaulting on mortgages, worsening their balance sheets and their employment prospects.

REFERENCES

- Brunnermeier, Markus K. and Christian Julliard (2008), "Money illusion and housing frenzies," *Review of Financial Studies*, 21 (1), 135–180
- Camerer, Colin, Linda Babcock, George Loewenstein, and Richard H. Thaler (1997), "Labor supply of New York City cabdrivers: One day at a time," *Quarterly Journal of Economics*, 407–441.
- Case, Karl E. and Robert J Shiller (1988), "The efficiency of the market for single-family homes," *American Economic Review*, 79 (1), 125–137.
- Genesove, David and Christopher Mayer (2001), "Loss aversion and seller behavior: Evidence from the housing market," *Quarterly Journal of Economics*, 116 (4), 1233–1260.

- Gerardi, Kristopher, Lorenz Goette, and Stephan Meier (2013), "Numerical ability predicts mortgage default," *Proceedings of the National Academy of Sciences*, 110 (28), 11267–11271.
- Kahneman, Daniel and Shane Frederick (2002), "Representativeness revisited: Attribute substitution in intuitive judgment" in *Heuristics and biases: The psychology of intuitive judgment*.
- Kahneman, Daniel and Amos Tversky (1979), "Prospect theory: An analysis of decision under risk" *Econometrica*, 263–291.
- McGlothlin, William H. (1956), "Stability of choices among uncertain alternatives," *American Journal of Psychology*, 69 (4), 604–615.
- Payne, John W., James R. Bettman, and David A. Schkade (1999), "Measuring constructed preferences: Towards a building code," *Journal of Risk and Uncertainty*, 19 (1), 243–275.
- Simonsohn, Uri and George Loewenstein (2006), "Mistake# 37: The Effect of Previously Encountered Prices on Current Housing Demand," *Economic Journal* 116 (508), 175–199.
- Slovic, Paul (1995), "The construction of preference," *American Psychologist*, 50 (5), 364–371.

Rightist Resistance To The Market

Marine Cambefort, Université de Strasbourg, France

Fabien Pecot, University of York, UK

EXTENDED ABSTRACT

In comparison with most social sciences (Blee and Creasap 2010; Diamond 1995; Lo 1982; Warnick 1982), there is little to no marketing scholarship about rightist resistance (Izberk-Bilgin 2010; Peñaloza and Price 1993; Roux 2007). This paper presents three potential conflicts between rightist ideologies and the market. It then discusses four avenues for future research.

The consumer research on resistance articulates two main paradigms (Izberk-Bilgin 2010). The Critical Theory based on the critique of social structures founded on capitalist ideology (Hetric and Lozada 1994; Murray and Ozanne 1991). Building on Marxism, it understands resistance to the market within a general framework of mass revolution aiming to the destruction of capitalism and its substitution by socialism. The postmodernist perspective considers that it is not possible to escape from the market (Kozinets 2002). It understands resistance at an individual level, using the codes of the market and re-interprets its symbols (De Certau 1990; Holt 2002; Roux 2007). While they differ in their theoretical and political approach, both share the same emancipatory perspective and overlooks those behaviors resisting the market in order to exclude, perpetuate or increase inequalities (Lo, 1982). A body of research looks at nationalism and religiosity (Izberk-Bilgin 2008; Russel, Russel, and Neijens 2011; Sandıkçı and Ekici 2009; Varman and Belk 2009) but it does not question the resistance to the market as a liberal institution, and overlooks Western countries. The tacit assumption that consumers sharing rightist values are unlikely to engage in resistance against the market overlooks the diversity of rightist thoughts, and the current right-wing criticism of mainstream conservative parties in Europe and in the United States (Hawley 2016).

While one branch of conservatism accepts liberal economic doctrine against socialism, another remains opposed to both social and economic liberalism (Meyer 1964). The former are also labelled conservative and the latter right-wing (Blee and Creasap 2010). Three common characteristics oppose the market and the consumer culture. First, rightist individuals tend to be patriotic and nationalistic (Femia 2012; Huntington 1957) while the market is global (Levitt 1983) and consumer culture promotes a global consumption ethos (Ger and Belk 1996). Second, conservative favor traditions and are skeptical towards modernity and progress (Femia 2012) while the market builds on novelty (Fiske 1989; Twitchell 2000). Finally, rightists tend to put the social order before the individual rights (Scruton, 1980) while the market and the consumer culture emphasize individualism (Behr 2010). In short, there are potential conflicts between rightist beliefs in the national ethos, traditions and limited individual freedom; and the market's institutions of a global consumer, search for continuous novelty, and promotion of individualism.

In order to facilitate further research on rightist resistance to the market, we integrate conservative and right-wing values with the existing paradigms. We distinguish four approaches varying in term of intensity (radical or moderate) and ideological orientation (restoration or emancipation). The critical and postmodernist approaches detailed above share an emancipatory orientation, whereas the new approaches are based on restoration of tradition. The right-wing approach is the radical form of conservative consumer resistance to the market aiming to replace capitalism by a traditional economic system. They conceive market resistance as a part of a wider political project aiming at changing society. The conservative approach is a

moderated rightist resistance to the market. Through their consumption choices, consumers express their conservative values: resistance to innovations, alien or immoral brands characterizes their consumption.

We identify four main avenues for future research. The first direction relates to the rightist groups and their targets. Social scientists point to several existing rightist movements, some of them inviting to boycott companies (eg. The Tea Party, the Alt-right...). Sociologists mention but overlook their opposition and mobilizations against alcohol, pornography, gambling, condoms and other birth control (Blee and Creasap 2010; Lo 1982). Consumer researchers could contribute to these efforts by focusing on their discourses and actions towards consumption practices and their influence on other consumers. The second direction relates to the individuals, either members of rightist groups, or performing individual conservative resistance. A first line of inquiry could look at the negotiation between their beliefs and interests. It would be interesting to investigate which particular brands or products they oppose and focus on the motivations (religious, xenophobic...). As more extreme right-wing wish to replace the liberal capitalist society by another system (Hawley, 2016), how would be the market in their ideal alternative social structure in comparison from Murray and Ozanne's (1991)? A third direction is methodological. Rightist movements are usually less visible because they directly target decision makers (Diamond 1995; Lo 1982). They are sometimes skeptical about academics' intentions (Blee and Creasap 2010). Sociologists suggest using secondary sources and discuss the possibility of covert research (Blee and Creasap 2010). Are consumer research's methods compatible with such constraints? A fourth and last direction is theoretical. Rightist movements are usually considered countermovement as they define themselves in opposition with another movement (Gross, Medvetz, and Russel 2011; Warnick 1982). The theoretical framework of movement-countermovement interactions (C-MC, Meyer and Staggenborg 1996) offers promising research perspective in resistance to the market. While much existing research focuses on the actions of the resistant movement against the market as an institution, this framework looks at the interactions between: a resistant movement, a countermovement, a regulator, and market actors.

In sum, this article contributes to social sciences' research on the influence of the new right in Western societies. It also invites reconsidering the emancipatory potential of the market. Existing research widely discusses the alienating power of the capitalist market, in line with the ideological panorama of the late 1980s and 1990s. However, in comparison with recent right-wing cultural and electoral offensives, the market appears as an institution promoting openness, progress, and individual freedom.

REFERENCES

- Behr, Rafael (2010), "Anti-consumerism: New Frontier or Dead End for Progressive Politics?", *Juncture*, 17 (September), 123-129.
- Blee, Kathleen M, and Kimberly A. Creasap (2010), "Conservative and Right-Wing Movements", *Annual Review of Sociology*, 36 (August), 269-86.
- De Certeau, Michel (1990), *L'invention du quotidien. Arts de faire*, Folio Essais, Gallimard.

- Diamond, Sara (1995) *Roads to Dominion : Right-Wing Movements and Political Power in the United States*, New York, The Guilford Press.
- Femia, Joseph V. (2012), "The Antinomies of Conservative Thought", *Political Studies Review*, 10, 221–37.
- Fiske, John (1989), "Shopping for Pleasure: Malls, Power, and Resistance", in *The Consumer Society Reader*, ed. Juliet B. Schor and Douglas Holt, 306–28, New York, The New Press.
- Ger, Guliz, and Russell W. Belk (1996), "I'd Like to Buy The World a Coke: Consumptionscapes of the 'Less Affluent World'", *Journal of Consumer Policy*, 19 (December), 271–304.
- Gross, Neil, Thomas Medvetz, and Rupert Russell (2011), "The Contemporary American Conservative Movement", *Annual Review of Sociology*, 37, 325-354.
- Hawley, George (2016), "Against Capitalism, Christianity, and America: The European New Right." In *Right-Wing Critics of American Conservatism*, Lawrence: University Press of Kansas, 207–42.
- Hetric, William P. and Hector R. Lozada (1994), "Construing the Critical Imagination: Comments and Necessary Diversions", *Journal of Consumer Research*, 21 (December), 548-558.
- Holt, Douglas B. (2002), "Why do Brands Cause Trouble? A Dialectical Theory of Consumer Culture and Branding", *Journal of Consumer Research*, 29 (June), 70-90.
- Huntington, Samuel P (1957), "Conservatism as an Ideology", *The American Political Science Review*, 51 (June), 454–73.
- Izberk-Bilgin, Elif (2008), "When Starbucks Meets Turkish Coffee: Cultural Imperialism and Islamism As 'Other' Discourses of Consumer Resistance" in NA - Advances in Consumer Research, Vol. 35, ed. Angela Y. Lee and Dilip Soman, Duluth, MN: Association for Consumer Research, 808-809.
- Izberk-Bilgin, Elif (2010), "An Interdisciplinary Review of Resistance to Consumption, some Marketing Interpretations, and Future Research Suggestions", *Consumption Markets & Culture*, 13 (September), 299-323.
- Kozinets, Robert V. (2002), "Can Consumers Escape the Market? Emancipatory Illuminations from Burning Man", *Journal of Consumer Research*, 29 (June), 20-38.
- Levitt, Theodore (1983), The globalization of markets, *Harvard Business Review*, (May/June), 92-102.
- Lo, Clarence Y. H. (1982), "Countermovements and Conservative Movements in the Contemporary U.S", *Annual Review of Sociology*, 8, 107–34.
- Meyer, David S, and Suzanne Staggenborg (1996), "Movements, Countermovements, and the Structure of Political Opportunity", *American Journal of Sociology*, 101(6), 1628–60.
- Murray, Jeff B. and Julie L. Ozanne (1991), "The Critical Imagination: Emancipatory Interests in Consumer Research", *Journal of Consumer Research*, 18 (December), 129-144.
- Peñaloza Lisa and Linda L. Price (1993), "Consumer Resistance: a Conceptual Overview" in NA - Advances in Consumer Research, Vol. 20, ed. Leigh McAlister and Michael L. Rothschild, Provo, UT : Association for Consumer Research, 123-128.
- Roux, Dominique (2007), Consumer Resistance: Proposal for an Integrative Framework, *Recherche et Applications en Marketing (English Edition)*, 22 (December), 59-79.
- Russell, Cristel Antonia, Dale W. Russell, and Peters C. Neijens (2011), "Consumption Expressions of Ideological Resistance", *European Journal of Marketing*, 45 (11/12), 1715-1724.
- Sandikci, Özlem and Ahmet Ekici (2009), "Politically Motivated Brand Rejection", *Journal of Business Research*, 62 (February), 208-217.
- Scruton, Roger (1980), *The Meaning of Conservatism*. Penguin Books.
- Twitchell, James (2000), "Two Cheers for Materialism", in *The Consumer Society Reader*, ed. Juliet B. Schor and Douglas Holt, 281–90, New York: The New Press.
- Varman, Rohit and Russel W. Belk (2009), "Nationalism and Ideology in an Anticonsumption Movement", *Journal of Consumer Research*, 36 (December), 686-700.
- Warnick, Barbara (1982), "Conservative Resistance Revisited - A Reply to Medhurst", *Western Journal of Speech Communication*, 46 (4), 373–78.

Non-Participants and Brands' Communication of Co-Creational Efforts: A Matter of Trust

Fanny Cambier, Université catholique de Louvain (UCL), Belgium
Ingrid Poncin, Université catholique de Louvain (UCL), Belgium

EXTENDED ABSTRACT

Today, more and more firms develop customer empowerment strategies (CES) to empower their customers in ideation or selection of new product developments (Fuchs and Schreier 2011). Research in that field has mostly focused so far on customers actively participating to CES. Another influential and bigger group might be studied: the brand audience as a whole, not participating to the initiatives. Labelling innovation as being designed/selected by consumers may have a positive impact on brand evaluations (Fuchs and Schreier 2011). Yet, marketers must know that communicating their co-creational efforts is not always positive. There might be only one step for the audience to interpret the message as another brand marketing means aiming at improving, overly and unduly, perceived customer orientation.

With this research, we examine effectiveness conditions of CES-communication to the non-participants. More specifically, we highlight reasons for non-participants to be sceptical. We here suggest that brand trust is a central concept after exposure to CES-communication, especially in the current context of greater suspicion toward brands. If the ultimate objective of marketing is to create and nurture a long-term relationship between consumers and companies, trust constitutes the main ingredient of this relationship (Morgan and Hunt 1994).

First, we empirically show the importance for non-participants to publicly see the brand feedback on participant' submitted ideas and to be transparent in the process, which is counterintuitive. Second, our study enhances understanding of how trust influences non-participants' brand relationship. We examine that influence on both fictive and well-known brands.

Our first hypothesis postulates that a message highlighting that a brand gave feedback and was transparent all along the process will improve non-participants' perceived empowerment (H1). We first draw on the vicarious empowerment non-participants can feel when they see other customers participating in innovation challenges, even if they did not participate themselves (Dahl, Fuchs, and Schreier 2014). Then, the co-creation literature reports participants' need to feel that the brand listens to their ideas; transparency and feedback are the key elements they request. If the organization fails to be transparent about the rules, to listen and to give feedback, participants quickly become irritated (Ind, Iglesias, and Schultz 2013).

Perceived empowerment helps foster brand trust (Füller et al. 2009), if participants are simultaneously provided with the needed resources (Tzafrir, Baruch, and Dolan 2004). Fostering trust may be hard in case of information asymmetry. Decreasing information asymmetry may result in increased trust. Thus, one way brands can make their customers trust them is to give them the necessary information (Gefen, Karahanna, and Straub 2003), namely here feedback and transparency. If non-participants may vicariously feel empowerment (Dahl et al. 2014), we hypothesize (H2) that feedback and transparency in CES-communication will foster non-participants' trust in the empowering brand through the indirect and positive influence of perceived empowerment.

Trust is reassessed over time, through assessment of previous encounters (Mayer and Davis 1999). Therefore, in case of low initial brand trust, non-participants might also perceive lower empowerment from the brand (H3).

We find support for our hypotheses H1 and H2 in Study 1. Participants (n=213) were randomly shown three new product development scenarios for a fictive brand: empowerment with feedback/transparency, empowerment without feedback/transparency, no empowerment. Perceived empowerment ($\alpha=0.941$) and brand trust ($\alpha=0.910$) were measured on seven-item existing scales. Results support H1: non-participants significantly perceive higher empowerment in the condition with empowerment and feedback/transparency ($M_{\text{feedback}}=4.99$) than in both other conditions ($M_{\text{no_feedback}}=3.96$, $p_{\text{feedback}}<0.001$ and $M_{\text{CONTROL}}=3.68$, $p_{\text{feedback}}<0.001$). Yet, there is no difference in perceived empowerment between the control condition and the empowerment condition with no feedback/transparency ($p=0.52$). Regarding H2 and using Hayes macro (2013, PROCESS Model 4), with 5000 bootstrap and percentile confidence interval estimates, we confirm the mediating role of perceived empowerment in the relation between CES and brand trust. Yet, only when comparing the empowerment with feedback/transparency condition to control condition. Non-participants start developing brand trust via the stronger empowerment perceived only when a brand publicly gives feedback and cues transparency.

In a second study, we manipulate brand perceived reliability, using well-known high-rotation food brands: famous with low reliability expected (BLoR), famous with higher reliability intended (BHiR) and existing but unknown brand, with neutral perceived reliability intended (BNeR). First, each randomly allocated respondent saw one of the three brand logos. After a few questions about it, he/she receives the treatment. We used identical online press lay-outs for all groups, with brand name and brand picture as sole differences. Content informed about a brand's customer empowerment strategy and included feedback and transparency cues. Initial brand trust ($\alpha=0.883$) and perceived empowerment ($\alpha=0.915$) and were again measured on 7-item existing scales.

Main effects on perceived empowerment are significant: $F(2,2374)=17.87$ ($p<0.001$). BLoR mean is significantly lower than each other two means ($p<0.001$); there is no significant differences between BHiR and BNeR ($p=1.00$). After finding a significant interaction between brand and initial trust on perceived empowerment, we run a floodlight analysis using Johnson-Neyman technique. For individuals with initial brand trust inferior to 4.03 ($\beta=-0.11$; $s.e.=0.06$; $p=0.05$), the effect of the brand on perceived empowerment is significant and negative: individuals perceive lower empowerment from the famous food brand with low reliability than for the famous brand with higher reliability. This effect is not significant for individuals with a brand trust greater than 4.03. 70.8% of the respondents have moderator value below that significance threshold and 29.2% of respondents above. These results support H3.

This research offers noteworthy theoretical insights and practical implications. First, we contribute to a still scarce literature and show the importance of non-participants' trust toward the empowering brands. We imply that initiating and communicating customer empowerment may help foster brand trust, if the brand publicly shows they gave feedback and observed transparency all along the process. Our last result, suggesting that initial brand trust modulates empowerment, allow us alert managers that communicating CES to non-participants may not be a good strategy if they suspect issues with their brand audience's trust in their integrity. These empirical

findings are limited in several ways though that delineate promising areas for future research though.

REFERENCES

- Dahl, Darren W, Christoph Fuchs, and Martin Schreier (2014), "Why and When Consumers Prefer Products of User-Driven Firms: A Social Identification Account" *Management Science*, 61 (8), 1978-88.
- Fuchs, Christoph and Martin Schreier (2011), "Customer Empowerment in New Product Development" *Journal of product innovation management*, 28 (1), 17-32.
- Füller, Johann, Hans Mühlbacher, Kurt Matzler, and Gregor Jawecki (2009), "Consumer Empowerment through Internet-Based Co-Creation" *Journal of Management Information Systems*, 26 (3), 71-102.
- Gefen, David, Elena Karahanna, and Detmar W Straub (2003), "Trust and Tam in Online Shopping: An Integrated Model" *MIS quarterly*, 27 (1), 51-90.
- Ind, Nicholas, Oriol Iglesias, and Majken Schultz (2013), "Building Brands Together" *California Management Review*, 55 (3).
- Mayer, Roger C. and James H. Davis (1999), "The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment" *Journal of Applied Psychology*, 84 (1), 123-36.
- Morgan, Robert M and Shelby D Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing" *Journal of marketing*, 58 (3), 20-38.
- Tzafirir, Shay S, Yehuda Baruch, and Shimon L Dolan (2004), "The Consequences of Emerging Hrm Practices for Employees' Trust in Their Managers" *Personnel Review*, 33 (6), 628-47.

Consumer Underestimation of Energy Use and Greenhouse Gas Emissions Associated with Food

Adrian R. Camilleri, RMIT University, Australia

Richard P. Larrick, Duke University, USA

Shajuti Hossain, Duke University, USA

Dalia Patino-Echeverri, Duke University, USA

EXTENDED ABSTRACT

There is widespread scientific consensus regarding the need to urgently reduce greenhouse gas (GHG) emissions (Cook et al. 2016), and investigate interventions to do so. Attempts to modify behavior typically presume that consumers recognize the connection between their behaviors and the consequences for energy use and GHG emissions. However, there is a growing body of research demonstrating that consumers are often unaware or misinformed (Larrick and Soll 2008). For example, Attari et al. (2010) found that people had a rudimentary understanding of the relative energy use of different appliances and activities. Across four studies, we investigated people's understanding of energy consumption and GHG emissions for another important domain of daily activity: Food. Research suggests that the food system accounts for 19%–29% of global GHG emissions (Vermeulen, Campbell, and Ingram 2012). Therefore, diet change through carbon labels may be an effective strategy to help combat climate change. Encouragingly, research that has looked into carbon labelling of food has shown modest impacts (Vanclay et al. 2011). However, these labels have been criticised as being difficult to quickly interpret (Gadema and Oglethorpe 2011). Therefore, the design of an effective carbon label remains an important public policy goal.

We predicted that consumers are generally unaware of the energy required to produce food, and also the greenhouse emissions produced by food. Urbanites and suburbanites lack direct awareness of all the elements in the modern agricultural system. To the extent that they hold images of the system, the images are likely relatively simple and incomplete. As a result, we expect that many consumers may be unaware of much relevant information; for example, that cattle released methane, a gas that is 28-to-36 times more potent than CO₂.

In Study 1a, 514 participants were sampled to be broadly representative of the US population. Each participant estimated the GHG emissions from producing and transporting a serving of 19 foods and from the one hour use of 18 appliances. In Study 1b, we conducted a similar survey with another 518 participants who estimated energy use for all of the items. In both studies participants were provided with reference information for a 100-W incandescent bulb used for one hour. We found, for both foods and appliances, that estimates increased with actual levels, but remained significantly lower than the true values. Supporting these observations were the results of a number of mixed-effect regression models for foods and appliances in which we regressed logged estimated onto actual values testing for both linear and quadratic relationships. Importantly, the lines of best fit for GHG emissions and energy consumed were shifted downward for foods compared to appliances. In other words, the average estimate was lower – and hence, relatively less accurate – for foods.

In Study 2, we tested the role of knowledge and information processing as an underlying cause for underestimation. In this study, we manipulated the degree to which 606 American participants thought about the food production system before estimating the amount of energy consumed in the production and transport of a serving of different foods. Compared to two control groups (no instructions, or “think carefully”), those who either generated their own intuitive description of the food production process or examined a diagram of

the food production process gave more accurate estimates of energy use. Although all foods were underestimated in all groups, the results suggested that a lack of knowledge and salience of production process at the time of judgment and choice were key contributors to the underestimation effect observed in Study 1.

In Study 3, we designed a carbon label to address the knowledge and salience issues revealed in Study 2, and tested whether it nudged consumers to prefer lower carbon footprint foods. We asked 215 American participants to choose a hypothetical lunch, including one main, two sides, one drink, and two snacks, from a menu. Menu items varied in terms of their carbon footprint. Compared to controls, participants presented with a menu featuring carbon labels chose meals with significantly lower carbon footprints. Environmental attitudes moderated this effect such that when carbon labels were displayed, those with stronger pro-environmental attitudes tended to select meals with lower carbon footprints.

In sum, and consistent with prior research, we found that people tend to underestimate the energy consumed by the use of a range of common appliances (Gadema and Oglethorpe 2011). Similarly, people underestimate the GHG emissions from the use of those common appliances. Our primary contribution is to show that the same is true for food: people tend to underestimate the energy consumed and the GHG emissions associated with the production of a range of foods. Importantly, this ignorance can be reduced using a basic informational intervention.

Importantly, the reduction in average carbon footprint came almost entirely from those who held pro-environmental attitudes. Therefore, it appears that, when making food choices, pro-environmental consumers often fail to take their own values into account, or are unable to do so without additional information. A carbon label may therefore serve as a decision signpost: reminding consumers of their values and then directing them to options most consistent with those values (Ungemach et al. 2017).

The current research has key implications for public policy aimed at nudging people toward more pro-environmental behavior. Some companies have already trialed carbon footprint labels, namely Tesco in the UK. This initial attempt failed – in a large part because customers found the labelling difficult to understand (Lucas and Clark 2012). We suggest that governments should support the development of an optional comparative carbon label for food that translates carbon footprint information into an easy-to-understand unit, such as “light bulb equivalent”. Governments could also devise public education campaigns designed to increase awareness of the most carbon footprint heavy foods, namely beef and lamb.

REFERENCES

- Attari, Shahzeen Z, Michael L DeKay, Cliff I Davidson, and Wändi Bruine De Bruin (2010), “Public Perceptions of Energy Consumption and Savings,” *Proceedings of the National Academy of Sciences*, 107 (37), 16054-59.

- Cook, John, Naomi Oreskes, Peter T Doran, William RL Anderegg, Bart Verheggen, Ed W Maibach, J Stuart Carlton, Stephan Lewandowsky, Andrew G Skuce, and Sarah A Green (2016), "Consensus on Consensus: A Synthesis of Consensus Estimates on Human-Caused Global Warming," *Environmental Research Letters*, 11 (4), 048002.
- Gadema, Zaina and David Oglethorpe (2011), "The Use and Usefulness of Carbon Labelling Food: A Policy Perspective from a Survey of Uk Supermarket Shoppers," *Food Policy*, 36 (6), 815-22.
- Larrick, R. P. and J. B. Soll (2008), "Economics - the Mpg Illusion," *Science*, 320 (5883), 1593-94.
- Lucas, Louise and Pilita Clark (2012), "Tesco Steps Back on Carbon Footprint Labelling," <https://www.ft.com/content/96fd9478-4b71-11e1-a325-00144feabdc0>.
- Ungemach, Christoph, Adrian R Camilleri, Eric J Johnson, Richard P Larrick, and Elke U Weber (2017), "Translated Attributes as Choice Architecture: Aligning Objectives and Choices through Decision Signposts," *Management Science*.
- Vanclay, Jerome K, John Shortiss, Scott Aulsebrook, Angus M Gillespie, Ben C Howell, Rhoda Johanni, Michael J Maher, Kelly M Mitchell, Mark D Stewart, and Jim Yates (2011), "Customer Response to Carbon Labelling of Groceries," *Journal of Consumer Policy*, 34 (1), 153-60.
- Vermeulen, Sonja J, Bruce M Campbell, and John SI Ingram (2012), "Climate Change and Food Systems," *Annual Review of Environment and Resources*, 37 (1), 195.

The Unexpected Consequences of Beautiful Products: Sacredness, Awe and Forgiveness

Ludovica Cesareo, University of Pennsylvania, USA

Patti Williams, University of Pennsylvania, USA

Eugenia Wu, University of Pittsburgh, USA

Keisha Cutright, Duke University, USA

EXTENDED ABSTRACT

We extend the literature on beauty in consumer behavior by examining the degree to which ordinary, but beautiful, products can evoke perceptions of sacredness and feelings of awe relative to functional alternatives. Importantly, we find that such perceptions of sacredness and awe increase consumers' propensity to forgive a company transgression.

Past literature on aesthetically pleasing, beautiful products has demonstrated that they lead to more favorable attitudes, higher purchase intentions and increased willingness to pay (Bloch et al., 2003); they can reaffirm a consumer's sense of self, core values and qualities (Townsend and Sood, 2012); and when chosen for their hedonic rather than functional benefits, can lead to downstream emotional responses of either cheerfulness and excitement, or guilt and anxiety (Chitturi et al., 2007). We extend existing research by examining how beautiful products (versus ordinary exemplars of the same product category) evoke perceptions of sacredness and the discrete emotion of awe, while also identifying a novel downstream consequence associated with those feelings, specifically the heightened willingness to forgive a company transgression.

Beautiful products can create appraisals of sacredness, being perceived as inherently non-ordinary, special and unique (Clark, 1986; Mick and Demoss, 1990; Belk et al., 1989), even if they are humble, everyday objects (Morris, 1948). Prior literature has demonstrated that products deemed to be sacred are revered (Eliade, 1959), spark an emotional attachment (Mol, 1976), and are believed to possess infinite or transcendental significance (Tetlock et al, 2000; Samper and Schwartz, 2013). These perceptions of transcendence in turn lead to feelings of awe.

Awe is a positive, self-transcendent emotion associated with feelings of wonder, astonishment and surprise, elicited by experiences such as exceptional beauty and exemplary human actions or abilities (Haidt, 2003; Shiota et al. 2007). Feelings of awe produce a sense of a "diminished self," wherein one perceives the world as vaster than oneself and one's usual frame of reference, and facilitate religiosity and a propensity for spiritual behaviors (Keltner and Haidt, 2003; Schneider, 2009; Van Cappellen and Saroglu, 2012). Awe seems to evoke one's best self, with individuals who feel awe being more likely to donate time (Rudd et al, 2012), engage in ethical decision making and act according to prosocial values (Piff et al., 2015). Consistent with this diminishment of the self and this orientation toward generosity, we expect that when consumers feel awe in response to beautiful products, they will be more likely to forgive any transgressions or flaws associated with the products.

Past literature on brand transgressions has examined factors that influence a consumer's willingness to forgive a company following a transgression. These include consumer-brand relationships in terms of attachment (Fedorikhin et al., 2008), commitment (Ahluwalia et al., 2000), self-relevance (Johnson et al., 2011) and the strength of the relationship (Aaker et al., 2004), such that the more attached, self-relevant and strong the consumer-brand relationship, the less likely are consumers to forgive a company transgression; trust in the company (Chung and Beverland, 2006; Xie and Peng, 2009); customer expectations about the firm's capability to manage the transgression (Dawar and Pillutla, 2000; Chandrashekar et al., 2007);

individual's self-construal (Sinha and Lu, 2016) and transgression type (higher forgiveness for product, but not ethical, transgressions; Trump, 2014).

In four studies, we find that beautiful products are perceived as sacred, unique, special and divinely influenced, and that these perceptions evoke feelings of awe. Importantly, we find that these perceptions of sacredness and feelings of awe lead consumers to be more forgiving of transgressions associated with beautiful products.

Study 1: Beautiful Products lead to Perceptions of Sacredness and Feelings of Awe

In study 1, lab participants (N=192) were randomly assigned to describe a recent experience with a product that was extraordinarily beautiful or functional. Then, participants reported which emotions (e.g., awe, amazement, astonishment, love, excitement) described how they felt about the product. To ensure that awe was the central emotion evoked by the beautiful product, we had participants complete the Perceptions of Vastness scale (Shiota et al., 2007) (e.g., "I felt in the presence of something greater than myself", $\alpha=.75$). Finally, participants evaluated the extent to which they perceived the product as being sacred, special, unique, and divinely influenced (which we collapsed into a Sacredness index, $\alpha=.71$). Results show that participants in the "beautiful" condition felt more awe ($M_B = 4.72$; $M_F = 3.85$; $F(1, 290) = 11.53$, $p = .001$) and perceived more vastness ($M_B = 2.77$; $M_F = 2.27$; $F(1, 190) = 8.34$, $p = .004$) than participants in the functional condition. In addition, participants who described a "beautiful" product saw it as more Sacred ($M_B = 3.41$; $M_F = 2.78$; $F(1, 190) = 11.427$, $p = .001$). A mediation analysis (Preacher and Hayes, 2004, 2008; Process Model 4, 10,000 bootstrap samples) found that beautiful products increased perceptions of awe via sacredness (95% bias-corrected confidence interval did not include zero; .157- .689).

Study 2: Ruling Out the Effect of Other Positive Experiences on Sacredness and Awe

In study 2, we sought to replicate the findings from Study 1 with a more controlled stimulus, while also ruling out the possibility that any positive experience related to the product (such as receiving a surprise coupon) could be responsible for evoking feelings of sacredness and awe. Given that participants in Study 1 mostly recalled beautiful food and beverage products (cappuccinos, cakes, cupcakes and chocolates), in Study 2, we chose cappuccinos as the stimuli. Participants (N=202) from Amazon's Mechanical Turk were randomly assigned to one of three conditions (beautiful, regular and surprise) where they were shown photos and asked to imagine consuming either a beautiful or ordinary cappuccino; participants in the surprise condition saw the same ordinary cappuccino but were told they received a surprise \$1 coupon for their next visit. Participants then reported which emotions they felt when they received the cappuccino (e.g., awe), how sacred they believed it to be (four-item index) and how much they were willing to pay for it. Results show that participants in the beautiful cappuccino condition felt more awe ($M_B = 4.52$; $M_R = 2.50$, $M_S = 3.23$, $F(2, 199) = 20.460$, $p < .001$) than consumers receiving either a regular or surprise-coupon cappuccino, and that they perceived it as more sacred ($M_B = 2.74$; $M_R = 1.83$, M_S

= 2.19, $F(2, 199) = 10.753, p < .001$). Furthermore, participants were more willing to pay for the beautiful cappuccino relative to both regular and surprise-coupon cappuccinos ($M_B = \$4.54; M_R = \$3.52; M_S = \$3.08; F(2, 199) = 12.621, p < .001$). This second study not only confirms our prediction of the effects of beauty on sacredness and awe, but also offers support that it is indeed the beauty of the product, and not any positive experience related with a product, driving these effects.

Study 3: Beautiful Products lead to a Higher Willingness to Forgive

Study 3 examines how perceptions of awe and sacredness affect consumers' propensity to forgive beautiful products following a transgression. Participants from Amazon's Mechanical Turk ($N=182$) viewed either the beautiful or regular cappuccino scenario from Study 2. They then responded to the same DVs before learning their cappuccino contained a flaw: it was either a decaf (when they asked for a regular), or it contained whole milk (when skim milk was requested). Participants again evaluated the cappuccino and indicated their willingness to forgive the company, operationalized as (consistent with previous failure recovery research: Grewal et al., 2008) their likelihood to repurchase from the café and recommend it to others. Results show that participants in the beautiful cappuccino condition felt more awe ($M_B = 5.16; M_R = 2.84, F(1, 180) = 87.250, p < .001$) than consumers receiving the regular cappuccino, and they perceived it to be more sacred ($M_B = 3.77; M_R = 2.29, F(1, 180) = 52.642, p < .001$). In addition, participants in the beautiful condition were more likely to forgive the café (repurchase and recommend) after the flaw occurred, compared to participants in the regular condition ($M_B = 5.53; M_R = 4.67; F(1, 180) = 16.245, p < .001$). A serial mediation analysis (Preacher and Hayes, 2004, 2008) tested whether the beautiful products increased consumers' intention to forgive the café via sacredness and awe. Results (Process Model 6, 10,000 bootstrap samples) demonstrate this was the case, as the 95% bias-corrected confidence interval did not include zero [.187; .612]. These findings provide initial evidence for our proposed conceptual model, demonstrating that beautiful products evoke a sense of sacredness and feelings of awe, which lead to greater likelihood to forgive.

Study 4: Ruling Out Effort as a Potential Alternative Explanation

In Study 4, we sought to replicate this finding on forgiveness while ruling out effort as a potential alternative explanation to our effects. Effort is often linked to reduced culpability and rewarded with higher forgiveness following a transgression, and thus we wanted to make sure that it was the beauty, and not the perceived effort in creating the product, that was driving our effects (Morales, 2005). Participants ($N=205$) from Amazon's Mechanical Turk were randomly assigned to one of three conditions: beautiful high effort, beautiful low effort or regular high effort. They were shown photos and asked to imagine consuming either a beautiful or ordinary cupcake. They also received a card that described the process necessary to craft their cupcake as either effortful (the pastry chef took 4 hours to prepare it) or effortless (the pastry chef only took 45 minutes). They then responded to the same DVs (emotions, sacredness and willingness to pay) before discovering that their cupcake had a flaw: it had mistakenly been baked with salt instead of sugar. They then indicated how likely they were to forgive the company. To rule out the possibility that beauty simply causes a flaw to be perceived as less consequential, they also indicated how severe they thought the mistake was and how much they cared about the mistake. Results show that participants who received the beautiful high effort cupcake felt more awe

than participants who received the regular high effort cupcake ($M_{BHE} = 5.24; M_{BLE} = 4.63; M_{RHE} = 4.08; F(2, 202) = 7.590, p < .001$). They also believed the beautiful cupcake, both high and low effort, to be more sacred than the regular high effort cupcake ($M_{BHE} = 3.40; M_{BLE} = 3.56; M_{RHE} = 2.31; F(2, 202) = 12.927, p < .001$), and they were willing to pay more for it ($M_{BHE} = \$4.21; M_{BLE} = \$3.83; M_{RHE} = \$2.25; F(2, 202) = 13.920; p < .001$). In terms of forgiveness, participants who received the beautiful cupcake, both high and low effort, were more willing to forgive the transgression relative to participants who received the regular high effort cupcake ($M_{BHE} = 4.01; M_{BLE} = 4.13; M_{RHE} = 3.35; F(2, 202) = 3.344, p = .034$). These findings help rule out effort as a potential alternative explanation of the effect, while reinforcing the effect of beauty on forgiveness. There were no differences across conditions in how 'severe' participants thought the mistake was ($M_{BHE} = 4.27; M_{BLE} = 4.51; M_{RHE} = 4.41; F(2, 202) = .304, p = .738$), nor in how much they cared about the mistake ($M_{BHE} = 4.33; M_{BLE} = 4.54; M_{RHE} = 4.73; F(2, 202) = .885, p = .414$), suggesting that beauty enhances the likelihood of forgiveness after a flaw, but does not change the perceived severity of the flaw. Finally, we performed a mediation analysis to test whether the beautiful cupcake, both high and low effort, relative to the regular cupcake, increased consumers' willingness to forgive via sacredness and awe. Results (Process Model 6, 10,000 bootstrap samples) demonstrated that indeed it is the beauty that leads to a higher willingness to forgive via perceptions of sacredness and feelings of awe, as the 95% bias-corrected confidence intervals for both high and low effort beautiful cupcakes relative to the high effort regular cupcake did not include zero (BHE vs RHE: [.004; .119]; BLE vs RHE: [.052; .402]).

Discussion

Previous literature has identified perceptions of sacredness and feelings of awe as responses to exceptional beauty. Sacredness and awe, in turn, engender prosocial behavior and a willingness to forgive. Across four studies, we extend this literature, demonstrating that mundane, everyday products can be beautiful, and that such beauty leads consumers to judge those goods as sacred and to feel a sense of awe in response to them. These perceptions of sacredness and feelings of awe lead consumers to be more forgiving of flaws and errors associated with the products. Future research should expand the effect of beauty on sacredness, awe and forgiveness by: testing it across different, non-food product categories (watches, fitness trackers, vases, etc.), and perhaps by testing whether where the flaw occurs matters. Perhaps consumers are differentially forgiving of flaws that occur in the aesthetics or beauty of the products versus in their functionality. Finally, future research will examine real consumer behavior in a field study.

Together, this work contributes to the literature on beauty, linking perceptions of product beauty to a unique emotional response that is associated with specific positive downstream behavioral consequences. We also contribute to the literature on transgressions and forgiveness, identifying a new factor and process, whereby beautiful products evoke sacredness and feelings of awe, which enhance the likelihood that consumers forgive a product transgression. In addition, we contribute to the literature on emotions in consumer behavior. Awe is a relatively under-researched emotion in consumer behavior. Here we find that consumers feel awe in response to beautiful products, even when those products are in mundane categories such as cupcakes and cappuccinos, and show that these evoked feelings of awe have important downstream consequences for consumer-firm relationships.

REFERENCES

- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. *Journal of Consumer Research*, 31(1), 1-16.
- Ahluwalia, R., Burnkrant, R. E., & Unnava, H. R. (2000). Consumer response to negative publicity: The moderating role of commitment. *Journal of Marketing Research*, 37(2), 203-214.
- Belk, R. W., Wallendorf, M., & Sherry, J. F. (1989). The sacred and the profane in Consumer behavior: Theodicy on the odyssey. *Journal of Consumer Research*, 16(1), 1-38.
- Bloch, P. H., Brunel, F. F., & Arnold, T. J. (2003). Individual differences in the centrality of visual product aesthetics: Concept and measurement. *Journal of Consumer Research*, 29(4), 551-565.
- Chandrashekar, M., Rotte, K., Tax, S. S., & Grewal, R. (2007). Satisfaction strength and customer loyalty. *Journal of Marketing Research*, 44(1), 153-163.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. *Journal of Marketing Research*, 44(4), 702-714.
- Chung, E., & Beverland, M. (2006). An exploration of Consumer forgiveness following marketer transgressions. *NA-Advances in Consumer Research Volume 33*.
- Clark, Grahame (1986), *Symbols of Excellence: Precious Materials as Expressions of Status*, Cambridge, England: Cambridge University Press.
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of Consumer expectations. *Journal of Marketing Research*, 37(2), 215-226.
- Eliade, Mircea (1959), *Vie Sacred and the Profane. The Nature of Religion*, trans. Willard R. Trask, New York: Harper & Row.
- Fedorikhin, A., Park, C. W., & Thomson, M. (2008). Beyond fit and attitude: The effect of emotional attachment on Consumer responses to brand extensions. *Journal of Consumer Psychology*, 18(4), 281-291.
- Grewal, D., Roggeveen, A. L., & Tsiros, M. (2008). The effect of compensation on repurchase intentions in service recovery. *Journal of Retailing*, 84(4), 424-434.
- Haidt, J. (2003). The moral emotions. *Handbook of Affective Sciences*, 11, 852-870.
- Johnson, A. R., Matear, M., & Thomson, M. (2011). A coal in the heart: Self-relevance as a post-exit predictor of Consumer anti-brand actions. *Journal of Consumer Research*, 38(1), 108-125.
- Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition & Emotion*, 17(2), 297-314.
- Mick, D. G., & DeMoss, M. (1990). Self-gifts: Phenomenological insights from four contexts. *Journal of Consumer Research*, 17(3), 322-332.
- Mol, Hans (1976), *Identity and the Sacred: A Sketch for a New Socio-Scientific Theory of Religion*, New York: Free Press.
- Morales, A. C. (2005). Giving firms an "E" for effort: Consumer responses to high-effort firms. *Journal of Consumer Research*, 31(4), 806-812.
- Morris, Wright (1948), *The Home Place*, New York: Charles Scribner's Sons.
- Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology*, 108(6), 883.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Rudd, M., Vohs, K. D., & Aaker, J. (2012). Awe expands people's perception of time, alters decision making, and enhances well-being. *Psychological Science*, 23(10), 1130-1136.
- Samper, A., & Schwartz, J. A. (2013). Price inferences for sacred versus secular goods: Changing the price of medicine influences perceived health risk. *Journal of Consumer Research*, 39(6), 1343-1358.
- Schneider, K. J. (2009). *Awakening to awe: Personal stories of profound transformation*. Jason Aronson.
- Shiota, M. N., Keltner, D., & Mossman, A. (2007). The nature of awe: Elicitors, appraisals, and effects on self-concept. *Cognition and Emotion*, 21(5), 944-963.
- Sinha, J., & Lu, F. C. (2016). "I" value justice, but "we" value relationships: Self-construal effects on post-transgression Consumer forgiveness. *Journal of Consumer Psychology*, 26(2), 265-274.
- Tetlock, P. E., Kristel, O. V., Elson, S. B., Green, M. C., & Lerner, J. S. (2000). The psychology of the unthinkable: taboo trade-offs, forbidden base rates, and heretical counterfactuals. *Journal of Personality and Social Psychology*, 78(5), 853.
- Townsend, C., & Sood, S. (2012). Self-affirmation through the choice of highly aesthetic products. *Journal of Consumer Research*, 39(2), 415-428.
- Trump, R. K. (2014). Connected Consumers' responses to negative brand actions: The roles of transgression self-relevance and domain. *Journal of Business Research*, 67(9), 1824-1830.
- Van Cappellen, P., & Saroglou, V. (2012). Awe activates religious and spiritual feelings and behavioral intentions. *Psychology of Religion and Spirituality*, 4(3), 223.
- Xie, Y., & Peng, S. (2009). How to repair customer trust after negative publicity: The roles of competence, integrity, benevolence, and forgiveness. *Psychology & Marketing*, 26(7), 572-589.

I Am a Fashionista and I (think) I Know It: The Role of Fashion Knowledge in Preferences for Counterfeits

Ludovica Cesareo, University of Pennsylvania, USA

Silvia Bellezza, Columbia University, USA

EXTENDED ABSTRACT

Is counterfeiting good or bad for the imitated brand? Luxury counterfeiting is overwhelmingly believed to have a negative effect on the original brand, decreasing its perceived prestige and exclusivity (e.g., Commuri, 2009; Dubois and Paternault, 1995). Yet, potential positive effects of counterfeiting have also emerged, demonstrating that the status of the original brand may actually be enhanced by the availability of luxury counterfeits (Nia and Zaickowsky, 2000; Romani, Gistri and Pace, 2012). In a pilot study we conducted at the lab ($N = 58$) we asked participants if they had ever seen a product they owned in a counterfeit version and, if yes, how that made them feel. Interestingly, the sample was pretty split – while negative emotions were still predominant (65.5%, describing feelings like anger, frustration, annoyance and being upset), 35.5% of participants actually felt positively about it, with predominant feelings being flattery, excitement, interest and humor. In this article, we contribute to this debate by looking at consumers' level of fashion knowledge, both objective and subjective, as a factor influencing reactions to counterfeiting in a systematic way. In addition, we also demonstrate the mediating role of flattery and the moderating role of ownership of the real brand.

The impact of prior knowledge on consumers' information processing and product evaluations has been widely established in the literature. Whether referred to as knowledge, familiarity, expertise, or experience (Alba and Hutchinson, 1987), prior knowledge has been defined as what an individual knows and remembers about a product. Prior knowledge influences consumers' perceptions of product quality (Rao and Monroe, 1988) and price (Monroe, 1973); brand extension evaluations (Keller and Aaker, 1992); it differentiates responses to hedonic vs. functional products (Park and Moon, 2003); and, it interacts with advertising effectiveness (Chandy et al., 2001).

In this research, we specifically look at the influence of consumer's fashion knowledge, both subjective and objective, on preference for counterfeits. The former, which we refer to as *Stated Fashion Knowledge* (SFK), is a subjective level of knowledge expressing consumers' self-perceptions as savvy in fashion and luxury goods; the latter, which we refer to as *Revealed Fashion Knowledge* (RFK), is an objective level of knowledge expressing how much a consumer actually knows about fashion and luxury goods. Moving forward, we will refer to fashion knowledge as being either stated or revealed.

Across four studies, we demonstrate how consumers' knowledge of fashion and luxury goods, whether stated or revealed, is predictive of different reactions to counterfeit goods. Specifically, we find that when consumers have low fashion-knowledge, they will be the most favorable towards product counterfeiting. In addition, and in line with prior research highlighting the role of mimicry and pride in consumption (White and Argo, 2011; Bellezza and Keinan, 2014), we demonstrate that the positive reactions to counterfeiting by low fashion-knowledge consumers are mediated by feelings of flattery for being imitated. Interestingly, the effect of knowledge on favorable predispositions towards counterfeits is moderated by ownership, such that owners of the real product whose fashion knowledge is low are the most favorable towards counterfeits. Presumably, owners who do not know much about fashion feel flattered by others wanting to imitate them. This finding is consistent with prior research on the

upsides of mimicry and non-core users seen as brand tourists (White and Argo, 2011; Bellezza and Keinan, 2014).

In the studies that follow, we either measured consumers' stated fashion knowledge, that is self-perceptions as savvy in fashion and luxury goods ("How knowledgeable do you feel about fashion and high end luxury goods?"), or we measured consumers' revealed fashion knowledge. To develop a reliable measure for this second construct, we followed prior knowledge measure developments and manipulations from the literature (Wood and Lynch, 2002; Hong and Sternthal, 2010). We used four existing multiple choice questions regarding the luxury and fashion goods industry (Bellezza and Berger, 2017) and created a battery of 12 others ranging from very easy (e.g., Q: "What do the letters CK stand for on a bottle of perfume?" A: Calvin Klein) to very hard (e.g., Q: "Which brand is known for its *intrecciato* technique?" A: Bottega Veneta). Lab participants ($N = 203$) answered all 16 questions in random order. Based on the results, we selected the four hardest questions and used them as a measure of revealed fashion and luxury goods knowledge in the subsequent studies.

In Study 1, we wanted to establish the link between knowledge and differential reactions to counterfeit goods. Participants in the lab ($N = 353$) first completed the 1-item stated fashion knowledge measure. Next, they read a description of either Louis Vuitton (females) or Rolex (males), while looking at a picture of a signature product from the brand (*Speedy* Louis Vuitton handbag or *Oyster Perpetual* Rolex watch) and writing their thoughts as they imagined owning it. All participants then saw an image of a stand with various counterfeit handbags/watches of different brands, among which was their handbag/watch. Finally, we asked their overall reaction (like/dislike) to the counterfeit handbag/watch (Bellezza and Keinan, 2014), and their intention to spread positive word-of-mouth regarding the counterfeit product (Cheema and Kaikati, 2010). Results demonstrated that low fashion-knowledge participants had a more positive reaction to the counterfeit product ($F(1, 351) = 17.10, p < .001$) and were more likely to spread positive word-of-mouth about the counterfeit product ($F(1, 351) = 5.70, p = .017$) relative to participants whose fashion knowledge was high.

In Study 2, we sought to replicate the effects from Study 1 but this time manipulating consumers' stated fashion knowledge while also examining two other dependent variables.

Pretest. We wrote and pretested six articles, two about the fashion industry that would serve as our fashion-knowledge manipulation (history of the Louis Vuitton brand and history of the Rolex brand) and four about other topics, unrelated to fashion, to identify the best controls (history of Eataly, the gourmet Italian food shop; history of Banksy, the British unknown street artist; history of Tesla, the innovative motor company; and, history of Birchbox, the innovative make-up delivery company). Participants from Mechanical Turk ($N = 59$) read a short excerpt from each article and told us how appealing they thought the topic was, how interesting they thought it was alongside their intention to read the article in its entirety. Results confirmed our choice for the fashion manipulations, as Louis Vuitton and Rolex had the highest and most similar appeal (Appealing: $M_{LV} = 4.85$ vs. $M_{Rolex} = 4.79, t(57) = -.16, NS$; Intention to Read Entire Article: $M_{LV} = 5.12$ vs. $M_{Rolex} = 4.73, t(57) = -.90, NS$; Interesting: $M_{LV} = 4.96$ vs. $M_{Rolex} = 4.33, t(57) = -1.53, NS$). In terms of the control

conditions, the Eataly and Banksy articles ranked highest for females and males respectively, and were not significantly different from the Louis Vuitton and Rolex articles, so we chose them for the main study (Appealing: $M_{Eataly} = 4.96$ vs. $M_{Banksy} = 4.45$; Intention to Read Entire Article: $M_{Eataly} = 5.08$ vs. $M_{Banksy} = 4.45$; Interesting: $M_{Eataly} = 5.15$ vs. $M_{Banksy} = 4.48$).

Main Study. Participants in the lab ($N = 160$) were randomly assigned to one of two conditions, fashion-knowledge vs. control. Based on their gender (female/male), respondents read the article either about Louis Vuitton/Rolex (fashion-knowledge condition), or about Eataly/Banksy (control condition). They then completed a manipulation check in which they reported how knowledgeable they felt about the topic covered in the article they had just read and our stated fashion knowledge measure. Afterwards, they saw the same handbag/watch scenario as in Study 1 and the same counterfeit products' stand before reporting their reaction to their brand being counterfeited and assessing the impact of the counterfeit on the reputation of the original brand. As expected, results showed how, across genders and conditions, there were no differences in terms of topic knowledge ($M_{LV/Rolex} = 4.55$ vs. $M_{Eataly/Banksy} = 4.51$, $F(1, 158) = .06$, NS), while participants who read the LV/Rolex articles perceived themselves as more knowledgeable about fashion than participants who read the Eataly/Banksy articles ($M_{LV/Rolex} = 3.14$ vs. $M_{Eataly/Banksy} = 2.31$, $F(1, 158) = 20.18$, $p < .001$). Given that the fashion knowledge manipulation and measure were highly correlated ($r = .337$, $p < .001$), we used the Z-score of the fashion knowledge measure for the subsequent analyses as in Study 1. Replicating the results from Study 1, again we found that participants whose fashion knowledge was low had a more positive reaction to the counterfeit ($F(1, 158) = 8.82$, $p = .003$) and believed the counterfeit will have a more positive impact on the brand reputation ($F(1, 158) = 6.00$, $p = .015$) relative to participants whose fashion knowledge was high.

These first two studies put forth evidence that indeed consumers' stated fashion knowledge, whether self-reported or manipulated, influences how consumers perceive and react to counterfeit goods. In Study 3, we sought to replicate these findings on preference for counterfeits with a measure of revealed fashion knowledge, while also looking at the moderating role of ownership of the original brand. To ensure we would recruit a sufficient number of real owners of luxury goods, we recruited 197 wealthy participants from Qualtrics (80% female; all very high income). First, respondents completed the self-reported fashion knowledge measure. They then responded to the four hard fashion knowledge questions (tallied as a continuous variable 0-4, which we Z-scored) to measure revealed fashion knowledge. Next, participants who were luxury owners were asked to describe an owned luxury product (either a luxury leather good, luxury sunglasses, or a luxury watch) and subsequently read a counterfeiting scenario about the specific product and brand they previously mentioned. Non-owners simply read a general counterfeiting scenario about either counterfeit leather goods, sunglasses, or watches. Finally, we asked participants about their overall reaction (like/dislike) to the counterfeit product, whether their own or a generic. Results again showed how participants whose revealed fashion knowledge was low liked the counterfeit more ($F(1, 195) = 25.53$, $p < .001$) relative to individuals whose revealed fashion knowledge was high. Interestingly, we found a significant interaction between revealed knowledge and ownership on liking/disliking the counterfeit ($F(1, 193) = 4.87$, $p = .028$; Johnson-Neyman point: $-.494$, area of significance is below), such that owners whose revealed fashion knowledge was low liked counterfeit products more relative not only to high knowledge owners, but also relative to low knowledge non-owners.

Finally, in Study 4 we sought to replicate the moderating effect of ownership while also establishing process evidence. Participants from Mechanical Turk ($N = 421$) first completed the four hard fashion knowledge questions (tallied as a continuous variable 0-4, which we Z-scored) to measure revealed fashion knowledge. They then saw the same Louis Vuitton handbag/Rolex watch scenario as in studies 1 and 2, and the same counterfeit products stand before reporting their overall reaction (like/dislike) to the counterfeit product, their reaction to the brand being counterfeited, the impact of the counterfeit on the original brand and their likelihood of spreading positive word-of-mouth regarding the counterfeit. In addition, we also measured their reaction when seeing the counterfeit version of their product by having them complete a battery of emotions (e.g., guilty, proud, ashamed, embarrassed) among which was our target emotion of "flattery" which we measured through five items (flattered, admired, worshipped, glorified, inspired) and collapsed into a Flattery Index ($\alpha = .90$). Through a full factorial model with fashion knowledge and ownership we found the predicted significant interactions between objective knowledge and ownership on liking/disliking the counterfeit ($F(1, 417) = 6.46$, $p = .011$), reaction to the counterfeit ($F(1, 417) = 6.34$, $p = .012$), the impact of the counterfeit on the original brand's reputation ($F(1, 417) = 8.12$, $p = .005$), their likelihood of spreading positive word-of-mouth ($F(1, 417) = 13.65$, $p < .001$), and how flattered they felt by the counterfeit ($F(1, 417) = 4.52$, $p = .034$), such that low knowledge owners always felt more positively about and more flattered by the counterfeit relative to both high knowledge owners and low knowledge non-owners. A moderated mediation analysis (Preacher and Hayes, 2008) tested whether low knowledge individuals liked the counterfeits more via flattery, and whether ownership played a moderating role. Results (Process Model 8, 10,000 bootstrap samples) demonstrated how flattery mediated the effect of revealed fashion knowledge on all the dependent variables. Specifically, low fashion knowledge individuals liked the counterfeits more, but only when they owned the original (on like/dislike -Index of Moderated Mediation: $[-.272; -.014]$; Indirect effect for owners: $[-.979; -.192]$).

Previous literature has identified the negative and sometimes positive effects of counterfeit luxury goods on originals. We extend this work by demonstrating how knowledge of fashion and luxury goods plays a key role in consumers' preference for counterfeits. Specifically, the lower consumers' knowledge, the higher consumers' liking and predispositions towards counterfeits, even more so if they are owners of the original, because they feel flattered. In addition to contributing to the literature on luxury and counterfeit goods, this research also has interesting managerial implications, suggesting how counterfeiting may not be as detrimental as both researchers and practitioners believe. While low fashion-knowledge consumers have a more positive reaction to counterfeits, high fashion-knowledge consumers, who are the primary target for luxury brands, know the value of the original and are overall less prone to counterfeit goods.

REFERENCES

- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(4), 411-454.
- Bellezza, S., & Berger, J. (2017). When low status becomes high, working paper.
- Bellezza, S., & Keinan, A. (2014). Brand tourists: How non-core users enhance the brand image by eliciting pride. *Journal of Consumer Research*, 41(2), 397-417.
- Chandy, R. K., Tellis, G. J., MacInnis, D. J., & Thaivanich, P. (2001). What to say when: Advertising appeals in evolving markets. *Journal of Marketing Research*, 38(4), 399-414.

- Cheema, A., & Kaikati, A. M. (2010). The effect of need for uniqueness on word of mouth. *Journal of Marketing Research*, 47(3), 553-563.
- Commuri, S. (2009). The impact of counterfeiting on genuine-item consumers' brand relationships. *Journal of Marketing*, 73(3), 86-98.
- Dubois, B., & Paternault, C. (1995). Understanding the world of international luxury brands: the "dream formula." (Special Issue: Research Input into the Creative Process). *Journal of Advertising research*, 35(4), 69-77.
- Hong, J., & Sternthal, B. (2010). The effects of consumer prior knowledge and processing strategies on judgments. *Journal of Marketing Research*, 47(2), 301-311.
- Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of Marketing Research*, 35-50.
- Monroe, K. B. (1973). Buyers' subjective perceptions of price. *Journal of Marketing Research*, 70-80.
- Nia, A., & Lynne Zaichkowsky, J. (2000). Do counterfeits devalue the ownership of luxury brands? *Journal of Product & Brand Management*, 9(7), 485-497.
- Park, C. W., & Moon, B. J. (2003). The relationship between product involvement and product knowledge: Moderating roles of product type and product knowledge type. *Psychology & Marketing*, 20(11), 977-997.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Rao, A. R., & Monroe, K. B. (1988). The moderating effect of prior knowledge on cue utilization in product evaluations. *Journal of Consumer Research*, 15(2), 253-264.
- Romani, S., Gistri, G., & Pace, S. (2012). When counterfeits raise the appeal of luxury brands. *Marketing Letters*, 23(3), 807-824.
- White, K., & Argo, J. J. (2011). When imitation doesn't flatter: The role of consumer distinctiveness in responses to mimicry. *Journal of Consumer Research*, 38(4), 667-680.
- Wood, S. L., & Lynch, J. G. (2002). Prior knowledge and complacency in new product learning. *Journal of Consumer Research*, 29(3), 416-426.

The Price is Right: Perceptions of Control Influence How Consumers Use Price In Judging Product Quality

Boyoun (Grace) Chae, Temple University, USA
JoAndrea Hoegg, University of British Columbia, Canada
Keisha Cutright, Duke University, USA

EXTENDED ABSTRACT

In the current research, we investigate whether feelings of control—the sense that one can make positive things happen in one’s life and avoid negative things—influences how much individuals rely on price to judge product quality. More specifically, we reason that price will have a greater impact on quality judgments when individuals’ personal control is threatened. A set of four studies offers convergent evidence for this central thesis. Further, we demonstrate an underlying psychological mechanism of the effect. Specifically, we find that in a state of low control, people become more susceptible to normative social influence. Given that price-quality judgments are often deemed to be normative, people in low control are more likely to increase their reliance on price in judging quality.

As a first step, we argue that when individuals’ feelings of control are low, they become more susceptible to normative social influence. While no existing research offers direct empirical evidence for this claim, related research points to its plausibility. For example, Terror Management Theory (TMT; Greenberg, Pyszczynski, and Solomon 1986) has shown that individuals who were reminded of death—which is perhaps the most fundamental obstacle to one’s ability to control the environment (Becker, 1973)—are more likely to endorse socially approved standards in judgment and decision making (Norenzayan, 2006). Research on social exclusion also provides support for the idea that low control should increase the susceptibility to normative social influence. For instance, Williams, Cheung, and Choi (2000) found that social exclusion in an online ball tossing game leads people to be more likely to follow the majority’s wrong opinion on a simple perception question than those socially included.

We further propose that this elevated susceptibility to normative social influence will result in greater reliance on price when judging product quality. We argue that this happens because people perceive that using price in judging quality is a social norm that is popularly practiced by other people. Consumer researchers have documented that people interpret high price as a cue for high quality (Broniarczyk and Alba 1994; Cronley et al. 2005). People who are susceptible to social influence tend to rely on others’ opinions in judging quality (Martin, Wentzel, and Tomczak 2008). In sum, this research suggests that in the absence of other signals or information, a reliance on price in the judgment of quality is what consumers have learned to be a socially accepted, normative approach to decision-making.

Taken together, we propose that low control heightens susceptibility to normative social influence, which in turn, increases reliance on price when making quality judgments. Four studies support our propositions.

Study 1 investigated the role of feelings of control on price-quality inferences. The study employed a 3 (control: low vs. high vs. neutral) x 2 (price: expensive vs. cheap) between subjects design. Participants in the high (low) control condition were asked to recall something positive that happened (not) because of something they did (Kay et al. 2008). The use of a positive memory enabled us to manipulate control while holding mood constant. Those in the neutral condition wrote about “a movie or television show that you saw and enjoyed in the past few months”. Next, participants judged a burger whose price was presented as either \$18 for the expensive condition or \$5 for the cheap condition. As predicted, the results

showed that lowering control indeed increased the reliance of price in quality judgments (as opposed to high feelings of control dampening reliance on price).

Study 2 supported the proposed process by showing that merely describing the use of price in judging product quality as normative or not moderates the effect. The results revealed that low control enhanced reliance on price when reliance on price was described as popular and socially acceptable. Communicating the non-normative aspect of using price, however, decreased individuals’ reliance on price.

Study 3 examined whether uncertainty, lack of confidence in judgment, or desire for clarity could explain the effect. None of the variables was significant as a mediator.

Lastly, Study 4 documented that control moderates the downstream effect of price on actual quality experience. People in a low state of control rated an indulging food product as better when it was presented as expensive rather than as cheap. Such difference was not found among people in the high control condition.

In demonstrating the basic relationship between control and price reliance, this research makes several theoretical contributions. First, it extends the price literature by identifying a unique motivational driver for consumers’ reliance on price in judging product quality. In addition, this research offers a new perspective on why consumers rely on price. We suggest that the social aspects of price have been understudied and propose that relying on price-quality inferences can feel like the popular, socially accepted course of action.

This research also contributes to the personal control literature. Our research offers new insight into this area by providing the first investigation into how control influences perceptions around pricing. Further, our documentation of the underlying mechanism of susceptibility to normative social influence is novel; no systematic investigation has addressed the impact of personal control on susceptibility to social influence. By providing empirical evidence of the impact of control on the susceptibility to social influence, this research creates an opportunity to explore various implications of control on consumers’ social behaviors.

REFERENCES

- Becker, Ernest (1973), *The Denial of Death*, New York, NY: Free Press.
- Broniarczyk, Susan M. and Joseph W. Alba (1994), “Theory Versus Data in Prediction and Correlation Tasks,” *Organizational Behavior and Human Decision Processes*, 57 (1), 117-39.
- Cronley, Maria L., Steven S. Posavac, Tracy Meyer, Frank R. Kardes, and James J. Kellaris (2005), “A Selective Hypothesis Testing Perspective on Price-Quality Inference and Inference-Based Choice,” *Journal of Consumer Psychology*, 15 (2), 159-69.
- Greenberg, Jeff, Tom Pyszczynski, and Sheldon Solomon (1986), “The Causes and Consequences of a Need for Self-Esteem: A Terror Management Theory,” in *Public Self and Private Self*, Vol. 1, ed. Roy F. Baumeister, New York, NY: Springer-Verlag.

- Kay, Aaron C., Danielle. Gaucher, Jamie L. Napier, Mitchell J. Callan, and Kristin. Laurin (2008), "God and the Government: Testing a Compensatory Control Mechanism for the Support of External Systems," *Journal of Personality and Social Psychology*, 95 (1), 18-35.
- Martin, Brett A. S., Daniel Wentzel, and Torsten Tomczak (2008), "Effects of Susceptibility to Normative Influence and Type of Testimonial on Attitudes toward Print Advertising," *Journal of Advertising*, Vol. 37, 29.
- Norenzayan, Ara and Ian G. Hansen (2006), "Belief in Supernatural Agents in the Face of Death," *Personality and Social Psychology Bulletin*, 32 (2), 174-87.
- Williams, Kipling D., Christopher K. T. Cheung, and Wilma Choi (2000), "Cyberostracism: Effects of Being Ignored over the Internet," *Journal of Personality and Social Psychology*, 79 (5), 748-62.

Can Sexy Images Drag You Down? How Gender and Self-construal Impact Subsequent Indulgent Consumption

Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

Xing-Yu Chu, National Sun Yat-sen University, Taiwan

Shr-Chi Wang, National Sun Yat-sen University, Taiwan

Dickson Tok, National Sun Yat-sen University, Taiwan

EXTENDED ABSTRACT

The cliché “Sex Sells” is apparently held in high esteem by advertisers who rely on the use of the sexy images as a marketing strategy not only in commercial marketing (e.g., Chang and Tseng 2013; Sengupta and Dahl 2008) but also in social marketing (Reichert, Heckler, and Jackson 2001). A majority of research on the use of sexy images has focused on its impacts on advertising persuasion, ignoring the consumers’ subsequent behaviors following exposures to sexy images.

In the current research, we argue that exposure to sexy images is more likely to evoke indulgent consumption/choice in a subsequent context (when compared with exposure to neutral imagery). Furthermore, we are interested in boundary conditions that could amplify or dampen the priming effects of sexy images on subsequent indulgent consumption. One potential moderator is gender differences. Gender is an important sub-cultural influence on sexual norms (Lopez and George 1995). The other proposed moderator is self-construal. Two types of self-construal, independent and interdependent, distinguish how the self is viewed in relation to others (Singelis 1994).

Nevertheless, we propose that interdependent self-construal may enhance indulgent consumption for women (compared with women with independent self-construal). Priming interdependent self-construal may make one to think collectively and place more on subjective norms (Ybarra and Trafimow 1998). Women show equivalent sexual arousal when the gender norms do not condemn erotica enjoyment (Lopez and George 1995). They are also more responsive to sexy images with romantic love. Since interdependent self-construal is consistent with how female self-regulatory goals, such interdependence will allow women to activate pleasure seeking after exposure to sexy images. Therefore, self-construal could play a dual role when gender differences are considered: independent self-construal enhances males’ indulgent consumption while interdependent self-construal increases females’ indulgent consumption after exposures to sexy images.

In Study 1, empirical data of 2016 World Auto Expo was analyzed. As a sex cue, show girls evoke impulsivity and should be appropriate to promote cars for indulgent purpose (e.g., sports car). We expected that companies were more likely to use show girls for indigent-based cars. The show girl data were assessed through enquires for the brand managers. Using show girl(s) or not served as the dependent variable. The main independent variable was car for indulgence based on two judges who were blind to research purposes. Engine displacement, county of origin, and the marque edition were also considered as independent variables. The results based on the binary logistic regression supported a positive relationship between sex cue and indulgence.

In Study 2, both gender and self-construal were considered as moderators. A 2 (sex cue: sex vs. neutral) X 2 (participant gender: men vs. women) X 2 (self-construal: independent vs. interdependent) between-subjects design was employed. Self-construal was first measured by a 24-item self-construal scale of Singelis (1994). Participants were then watched four videos either sexy or neutral (Van den Bergh et al. 2008). Chocolates (separated package with equal weight and size) were provided for them as appreciation and they

could eat as much as the liked. Chocolate consumption served as the dependent variable. The regression using Model 3 in the PROCESS macro (Hayes 2013) showed a three-way interaction. For men with an independent self-construal, those in the sex cue condition ate more chocolates than the counterparts in the neutral condition. No such difference was found for men with an interdependent self-construal. On the other hand, women with interdependent self-construal in the sex cue condition ate more chocolates than the counterparts in the neutral condition. Similar chocolate consumption was found on women with independent self-construal regardless of the sex cue.

In Study 3, two sex cues were classified. A 2 (sex cue: gratuitous sex vs. romantic love) X 2 (participant gender: men vs. women) X 2 (self-construal: independent vs. interdependent) full-factorial design was conducted. Self-construal was manipulated through movie synopsis with a poster (independent self-construal: *Iron Man*; interdependent self-construal: *Avengers*). Participants were then invited evaluate ten perfume ads (with gratuitous sex or romantic love). Gratuitous sex was presented through the image with a sexually charged close up of a partially clothed men and women passionately embracing each other. Romantic love was manipulated through a pair of wedding rings and a slogan to express their commitment. After participants completed the above measures, they chose one of two tickets to the forthcoming auto expo as a thank-you gift. Sports car and hybrid car exhibition represented indulgent and non-indulgent choice, respectively, which served as the dependent measure. We used slopes analyses (Aiken and West 1991) after the three-way interaction was found. The results indicated that men were more likely to choose an indulgent choice when independent-self was primed. Such effects were stronger when the sex cue contained gratuitous sex. In contrast, women with interdependent-self were more likely to choose an indulgent choice when using romantic love in sex cues.

The current research makes several contributions. First, this research contributes to the sex literature by a) demonstrating subsequent indulgent consumption after sexy image exposure, and b) identifying the boundary conditions in which this effect might occur. Second, this investigation also contributes to the reward-processing literature, which has received recent attention, by demonstrating that motivational mindsets such as sex can have unique effects on consumer choice. Third, it shows that different sexy images may have the dual impacts of both decreasing and increasing indulgent consumption, depending on individual differences in gender and self-construal.

This research points to some interesting directions for future studies. First, it is worth to explore how other typology the sexy images (explicit vs. implicit) (Chang and Tseng 2013) and the level of nudity in sexy images may influence subsequent indulgent consumption. Second, since evolution-based theories suggest gender differences on mating motivations (Malamuth 1996; Symons 1979; Saad 2004), future research may manipulate mating motivation through a priming task to replicate the results found in the current study. Third, since exposures to sexy images may produce a generalized motivation to seek rewarding outcomes and immediate gratification, it is then possible that people become more likely to eat unhealthy foods, procrastinate, and engage in aggression.

REFERENCES

- Aiken, Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interaction*, Thousand Oaks: Sage.
- Chang, Chun-Tuan and Chien-Hun Tseng (2013), "Can Sex Sell Bread? The Impacts of Sexual Appeal Type, Product Type and Sensation Seeking," *International Journal of Advertising*, 32 (4), 559-85.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY: The Guilford Press.
- Lopez, Peter A. and William H. George (1995), "Men's Enjoyment of Explicit Erotica: Effects of Person-Specific Attitudes and Gender-Specific Norms," *Journal of Sex Research*, 32 (4), 275-88.
- Malamuth, Neil M. (1996), "Sexually Explicit Media, Gender Differences, and Evolutionary Theory," *Journal of Communication*, 46(3), 8-31.
- Reichert, Tom, Susan E. Heckler, and Sally Jackson (2001), "The Effects of Sexual Social Marketing Appeals on Cognitive Processing and Persuasion," *Journal of Advertising*, 30 (1), 13-27.
- Saad, Gad (2004), "Applying Evolutionary Psychology in Understanding the Representation of Women in Advertisements," *Psychology and Marketing*, 21 (8), 593-612.
- Sengupta, Jaideep and Darren W. Dahl (2008), "Gender-Related Reactions to Gratuitous Sex Appeals in Advertising," *Journal of Consumer Psychology*, 18 (1), 62-78.
- Singelis, Theodore M. (1994), "The Measurement of Independent and Interdependent Self- Construals," *Personality and Social Psychology Bulletin*, 20 (5), 580-91.
- Symons, Donald (1979), *The Evolution of Human Sexuality*, New York: Oxford University Press.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-55.
- Van den Bergh, Bram, Siegfried Dewitte, and Luk Warlop (2008), "Bikinis Instigate Generalized Impatience in Intertemporal Choice," *Journal of Consumer Research*, 35 (1), 85-97.
- Ybarra, Oscar and David Trafimow (1998), "How Priming the Private Self or Collective Self Affects the Relative Weights of Attitudes and Subjective Norms," *Personality and Social Psychology Bulletin*, 24 (4), 362-70.

Does Bigger Equal Better? How Product-Model Size Ratio and Brand's Social Role Impact Ad Effectiveness

Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

Xing-Yu Chu, National Sun Yat-sen University, Taiwan

Hsin-Yi Wang, National Sun Yat-sen University, Taiwan

Dickson Tok, National Sun Yat-sen University, Taiwan

EXTENDED ABSTRACT

This research examines how advertisers can use the size contrast between product and model images (SCPM) to maximize ad effectiveness. Size (big or small) can be an important metaphor and it shapes perceptions of the significance of social stimuli (Landau et al. 2010). Early studies showed that both children (Bruner and Goodman 1947) and adults (Bruner and Postman 1948) perceive socially significant symbols as physically larger than neutral symbols. People commonly talk about an increase in significance of importance as physical largeness or expansion ("This is a *big* problem, and it is only going to *grow*;" Lakoff and Johnson 1999). Despite its prevalence in our daily life, such the metaphor in advertising remains unexplored.

Before this project, we conducted a content analysis with 1325 ads from popular magazines with various product categories. The results indicated a positive correlation between SCPM ratio and product price ($r=.12, p<.01$): advertisers tended to exaggerate their product images (bigger than the model image) among high-priced products. The observations lead us to propose that SCPM may increase perceptions of power and bring about a sense of the product's worth.

Furthermore, we are interested in the boundary conditions of using SCPM. Brand's social role (BSR) is proposed as a moderator. Consumers tend to treat a brand as a human being (Aaker 1997; Aggarwal and McGill 2012), and interact with the brands in ways similar to interpersonal relationship partners (Aggarwal 2004; Fournier 1998; Swaminathan, Page, and Gurhan-Canli 2007). Two BSRs are distinguished based on brand's social role: leader-like vs. friend-like brand. When a brand positions itself as a leader to its customers, consumers consider it superior to other brands in the same product category. Slogans such as "there is no substitute" (Porsche) and "the king of beers" (Budweiser) are two examples. On the other hand, when consumers perceive the brand as a friend, they feel sincere and trustworthy (Aaker, Fournier, and Brasel 2004). Mutually shared concerns exist between the friend-like brand and its customers (Aggarwal 2004). For instance, Coca-Cola's slogan "the best friend thirst ever had" describes the friend-like relationship between the brand and its consumers.

We propose that processing fluency as the underlying mechanism behind the phenomena above. Fluency is defined as the ease with which new information can be processed (Alter and Oppenheimer 2009; Reber, Schwarz, and Winkielman 2004). The right match between SCPM and BSR is expected to improve processing fluency, which enhances ad effectiveness.

In Study 1, we tested the interaction effect between SCPM and BSR. A 2 (SCPM: large vs. small) x 2 (BSR: leader-like vs. friend-like) between-subjects design was conducted. Chocolates were chosen as the test product category. Godiva and Kinder Bueno were chosen to represent for leader- and friend-like brands. Each participant was presented with one ad selected from the pool of four (i.e., two SCPM for each of the two BSRs). The different SCPM were created. In the large (small) SCPM condition, the size of chocolate (model) image is twice bigger than that of the model (chocolate). In the leader-like (friend-like) brand condition, a capital letter G (K) was placed on the chocolate image with the logo of Godiva (Kinder

Bueno) shown in the ad. Each ad was A5 size. After ad viewing, two dependent variables were assessed: attitudes toward the brand and purchase intentions. The results showed that when facing the leader-like brand, participants in the large SCPM condition showed more favorable attitudes toward the brand and stronger purchase intention than the counterparts in the small SCPM condition. Opposite results were found with participants facing the friend-like brand, participants in the small SCPM condition showed more favorable attitudes toward the brand and stronger purchase intention than those in the large SCPM condition.

In Study 2, we had three objectives: to replicate the results of Study 1 with a different manipulation for BSR, to rule out the effects of product type, and to explore the possible mechanism underlying the predicted effect: *processing fluency*. A 2 (SCPM: large vs. small) x 2 (BSR: leader-like vs. friend-like) x 2 (product type: hedonic vs. utilitarian) between-subjects design was conducted. Since gender differences play an important role in product perceptions, only female participants were recruited. They were first asked to read a magazine article regarding a brand and then asked to view a forthcoming ad. Participants were presented with a brief description of a leader-like (friend-like) brand with a fictitious brand "Mirabelle" designed to prime the brand's social role. The second section was the ads differing on SCPM and product type. The ad materials were identical as those used in Study 1. Perfume and cleanser were chosen to represent as hedonic and utilitarian products. The different ratios between product and model image sizes were created. After the ad was read, purchase intention was assessed. The results was consistent with those in Study 1. We then conducted mediated moderation analysis (Zhao, Lynch, and Chen 2010) and confirmed that the processing fluency mediated the effects of SCPM and BSR on purchase intention

This research contributes to the literature on power in consumer behavior. Previous research has shown that power can be manipulated by the copy embedded in an ad (Rucker, Dubois, and Galinsky 2011). The current research is the first to illustrate that power can be primed through a larger product image (compared with a model image) in an ad. The current work offers rich managerial implications. Advertisers may benefit from taking power difference into consideration and arranging a larger size of the product image (compared with the model image) when promoting a leader-like brand. However, the findings from this work also lend a cautionary note: the strategy of a larger size of product image may not work when the brand is perceived as a friend to consumers. The current investigation provides guidance for brand managers in how to frame the brand's social role in their brand positioning strategies. Brand managers should work closely with ad designers and be judicious in image placement in advertising strategy.

REFERENCES

- Aaker, J. L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, 34(3), 347-356.
- Aaker, J. L., Fournier, S., & Brasel, S. A. (2004). When Good Brands Do Bad. *Journal of Consumer Research*, 31(1), 1-16

- Aggarwal, P. (2004). The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior. *Journal of Consumer Research*, 31(1), 87-101.
- Aggarwal, P., & McGill, A. L. (2012). When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism. *Journal of Consumer Research*, 39(2), 307-323.
- Alter, A. L., & Oppenheimer, D. M. (2009). Uniting the Tribes of Fluency to Form a Metacognitive Nation. *Personality and Social Psychology Review*, 13(3), 219-235.
- Bruner, J. S., & Goodman, C. C. (1947). Value and Need as Organizing Factors in Perception. *Journal of Abnormal and Social Psychology*, 42(1), 33-44.
- Bruner, J. S., & Postman, L. (1948). Symbolic Value as an Organizing Factor in Perception. *Journal of Social Psychology*, 27(2), 203-208.
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*, 24(4), 343-373.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.
- Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.
- Landau, M. J., Meier, B. P., & Keefer, L. A. (2010). A Metaphor-Enriched Social Cognition. *Psychological Bulletin*, 136(6), 1045-1067.
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience? *Personality and Social Psychology Review*, 8(4), 364-382.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous Paupers and Stingy Princess: Power Drives Consumer Spending on Self Versus Others. *Journal of Consumer Research*, 37(6), 1015-1029.
- Swaminathan, V., Page, K. L., & Gürhan-Canli, Z. (2007). Added "My" Brand or "Our" Brand: The Effects of Brand Relationship Dimensions and Self-Construal on Brand Evaluations. *Journal of Consumer Research*, 34(2), 248-259.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.

Unbearable Lightness of Shaky Inferences: When Misused Product Inference is Detrimental to Verified Product Hypotheses

Rui Chen, University of Georgia, USA
Marcus Cunha Jr., University of Georgia, USA

EXTENDED ABSTRACT

Consumers often face consumption choices that involve deciding between two competing hypotheses supported by evidence that vary in terms of levels of certainty (i.e., the supporting evidence could be either missing, inferred, or observed). Understanding how consumers integrate multiple pieces of evidence varying in levels of certainty helps marketers develop better arguments for products. Previous research has presented mixed findings regarding the roles of inferred versus observed evidence in consumers' judgment and decision making. On the one hand, preference for certainty suggests that a hypothesis with fully observed evidence should be favored over a hypothesis with one piece of observed evidence and one piece of missing evidence. This is supported by research showing that people favor explanations making fewer (vs. greater) number of predictions (e.g., Sussman, Khehlani and Oppenheimer 2014, Khehlani, Sussman and Oppenheimer 2011) and that consumers prefer brands which signal lower uncertainty (e.g., Muthukrishnan 1995). On the other hand, consumers evaluate products as a function of inferences they make (e.g., Dick, Chakravarti and Biehal 1990), which could lead them to become less sensitive to higher levels of uncertainty about the evidence at hand (Gunasti and Ross Jr. 2009). In addition, it has been shown that spontaneous inference making increases information utilization but only when the inference is diagnostic (e.g., Kardes, Posavac and Cronley 2004).

Our research is the first attempt to directly test how inferred evidence influences the value of observed evidence in hypothesis testing when two hypotheses are pitted against each other. Specifically, we investigate an under-studied pattern of hypothesis-testing bias in which consumers misuse inferences made about the missing evidence supporting only one hypothesis ("to-be-verified hypothesis" henceforth) to evaluate the validity of a competing hypothesis, which is fully verified by observed evidence ("verified hypothesis" henceforth). We label this phenomenon the "*spillover of inferences effect*". We propose that consumers may more heavily rely on inferred than observed evidence when inferred evidence is biasedly perceived to be more diagnostic than observed evidence.

Study 1 established that consumers devalue the observed evidence supporting the verified hypotheses and judge the probability of validity across two hypotheses as a function of the extent to which the inferred evidence favors the to-be-verified hypothesis. In a 4 base-rate (i.e., base rate as 5-14%, 15-24%, 76-85%, 86-95%; between-subject) X 4 scenario replicates (within-subject) mixed design, participants were presented two hypotheses which compete with each other. Participants were asked to judge the validity of these two hypotheses on a 11-point trade-off scale in the end of the study. In each of the four scenarios (wine regions, telephoto zoom lens, virus, and product malfunction), one hypothesis was fully supported by the observed evidence whereas the other hypothesis was only partially supported by one piece of observed evidence because the other piece of evidence could not be observed at the time. However, the base rate of occurrence of that piece of missing evidence in the population of interest was provided. The analysis yielded a main effect of base rate, with participants reporting a statistically significant change in preference from the verified hypothesis to the to-be-verified hypothesis as the base-rate for the missing piece of evidence increased ($F(3, 130) = 38.98, p < .000$).

Study 2 directly tested whether inferences made about the missing evidence for only to-be-verified hypothesis influences the extent to which participants are willing to support or falsify the competing verified hypothesis. The design was a 2 base-rate (i.e., base rate as 30% vs. 70%) X 2 hypothesis conditions (i.e., focus on the verified hypothesis vs. the to-be-verified hypothesis) between-subjects design. We predict that we will replicate the effect in study 1 regardless of which focal hypothesis consumers hold to evaluate evidence. Study 2 allows us to 1) rule out the alternative explanation that the effect documented in study 1 was a result of attention shifted toward the to-be-verified hypothesis and 2) directly show that consumers use the information perceived to be diagnostic (i.e., base rate of the missing evidence) to evaluate the verified hypothesis. We recoded the 11-point measure ratings by centering ratings around 0. Therefore, a rating of zero indicates no preference for either of hypotheses; positive scores (between 0 and 5) indicate preference for the to-be-verified hypothesis and negative scores (between 0 and -5) indicate preference for the verified hypothesis. The analysis revealed that participants who were explicitly instructed to evaluate evidence against the verified hypothesis which was not associated with the missing evidence still used base rate of the missing evidence to judge the validity of this hypothesis ($M_{\text{low base rate}} = -1.333$ vs. $M_{\text{high base rate}} = .318, p < .000$). In support of the null effect of hypothesis focus, the preference rating for the hypotheses was not a function of the interaction between the base-rate factor and the hypothesis-focus factor ($F(1, 202) = .656, \text{NS}$).

Study 3 explored when might consumers misuse high base rates favoring only the to-be-verified hypothesis in detriment of the verified hypothesis. We predict that when the missing evidence does not accommodate a broader scope of evidence in the context, the *spillover of inferences effect* should be offset. This was a single factor scope of evidence (i.e., the missing evidence accommodates a broader scope of evidence vs. not) between-subject design with three levels. In the first and third conditions, the missing evidence accommodated a broader scope of evidence whereas in the second condition, the missing evidence did not. The results supported our prediction that when both hypotheses required equivalent scope of evidence, the *spillover of inferences effect* was offset ($M_{\text{with_scope_discrepancy_condition\#1}} = .655$; $M_{\text{no_scope_discrepancy_condition\#2}} = -1.828$; $M_{\text{with_scope_discrepancy_condition\#3}} = .688, p = .000$).

Our research investigated and empirically showed a puzzling situation in which consumers prefer a product hypothesis supported by inferred evidence over a competing hypothesis supported by fully observed evidence. We further identified the underlying process – the *spillover of inferences effect* and showed when the effect was offset.

REFERENCES

- Dick, Alan, Dipankar Chakravarti, and Gabriel Biehal (1990), "Memory-Based Inferences During Consumer Choice," *Journal of Consumer Research*, 17(June), 82-93.
- Gunasti, Kunter and William T. Ross Jr. (2009), "How Inferences about Missing Attributes Decrease the Tendency to Defer Choice and Increase Purchase Probability," *Journal of Consumer Research*, 35(Feb), 823-37.

- Kardes, Frank R., Steven S. Posavac, and Maria L. Cronley (2004), "Consumer Inference: A Review of Processes, Bases, and Judgment Contexts," *Journal of Consumer Psychology*, 14(3), 230-56.
- Khemlani, Sangeet S., Abigail B. Sussman, and Daniel M. Oppenheimer (2011), "Harry Potter and the Sorcerer's Scope: Latent Scope Biases in Explanatory Reasoning," *Memory and Cognition*, 39, 527-35.
- Muthukrishnan, A.V. (1995), "Decision Ambiguity and Incumbent Brand Advantage," *Journal of Consumer Research*, 22(1), 98-109.
- Sussman, Abigail. B., Sangeet S. Khemlani, and Daniel M. Oppenheimer (2014), "Latent Scope Bias in Categorization," *Journal of Experimental Social Psychology*, 52, 1-8.

Consumer Trust Erosion During an Industry-Wide Crisis: The Central Role of Legitimacy Judgment

Shijiao Chen, University of Otago, New Zealand
Hongzhi Gao, Victoria University, New Zealand
Damien Mather, University of Otago, New Zealand
John Knight, University of Otago, New Zealand

EXTENDED ABSTRACT

Industry-wide product-harm crises (hereafter called “industry-wide crises”) are well-publicized instances of corporate misconduct permeating an industry and causing potential or real product harm. Severe industry-wide crises can exert a catastrophic impact on the affected industry by eroding consumer trust (Cleeren, Dekimpe, & Helsen, 2008; Feng, Keller, Wu, & Xu, 2014; Knight, Gao, Garrett, & Deans, 2008). We have studied the 2008 Chinese milk melamine contamination in which 22 dairy firms were reportedly involved. In this crisis, consumers’ confidence and trust in the Chinese dairy industry was shaken to its core (Qiao, Guo, & Klein, 2012). Most recently, another major industry-wide crisis occurred in Brazil: more than 30 Brazilian meat manufacturers were reported to indulge in unhygienic and illegal practices, causing concerns in export markets and a loss of trust in the safety of meat exported from Brazil. Previous research on product-harm crises mostly focuses on trust erosion in individual firms rather than in entire industries (Coombs & Holladay, 1996; Klein & Dawar, 2004). Industry-wide crises differ from individual firm crises because they are attributable to institutional factors such as deficient regulation, weak quality control, and poorly defined industry norms (Gao & Knight, 2007; Gao, Knight, Zhang, Mather, & Tan, 2012). The present paper contributes to the product-harm crisis literature by investigating the nature of these institutional factors in connection with consumers’ perceptions, judgment, and trust erosion. We seek insights from institutional theory to better understand this connection.

Institutional theory emphasizes the importance of legitimacy in understanding individuals’ responses toward an institutional system and the entities within it (Finch, Deephouse, & Varella, 2015; Suchman, 1995; Tost, 2011). The concept of legitimacy has not gained sufficient attention in the product-harm crisis literature. Two significant remaining gaps still are presented here: (1) Very few studies investigate consumer legitimacy judgment regarding an industry. It is still unclear how consumers judge an industry as legitimate or non-legitimate based on its institutional frameworks. (2) There is a lack of any theoretical explanation with associated empirical support for the role of legitimacy judgment in consumers’ psychological reactions during an industry-wide crisis. It is unclear whether consumer legitimacy judgment of the affected industry can influence consumer trust in the industry. Against this background, this study investigates how consumers make legitimacy judgment of an industry and whether consumer legitimacy judgment plays a critical role in the erosion of industry trust occurring during an industry-wide crisis.

We define consumer legitimacy judgment (CLJ) as consumers’ judgment of an industry’s actions based on the desirability, properness, and appropriateness in the institutional environment. We hypothesize that CLJ plays a central role in the erosion of consumer broad-scope trust during an industry-wide crisis.

We conducted four studies to understand the mechanism of legitimacy judgment. The first three studies used the Chinese dairy industry as the research context because it is perceived as having institutional deficiencies by Chinese consumers (Gao & Knight, 2007; Knight et al., 2008). We used parents of school children as our sample frame because they are frequent decision-makers and

purchasers of food for households and share concerns about food safety (Qiao et al., 2012). Study 1 constructs and validates the CLJ scales by referring to literature, experts, consumer interviews, and a sample of 311 participants. Study 2 examines the mediation effect of CLJ on the relationship between perception of normalization of misconduct and industry trust with a sample of 284 participants. The results indicate that, once consumers perceive stimuli signifying an industry-wide crisis, they tend to engage in legitimacy judgment and this judgment has a significant impact on their trust in the industry. Study 3 validates the CLJ mediation model by assessing whether the information signaling that a crisis is industry-wide serves as the boundary condition for the full mediation effect. We obtained usable responses from 323 participants from the sample frame. The results indicate that consumers rely on an effortful and systematic approach during an industry-wide crisis and rather engage in a conservative and automatic approach during a non-industry-wide crisis. Study 4 ($n=132$) replicates the CLJ mediation model in the setting of the soymilk industry in China which has a low base-rate of crises, in order to investigate the role of base-rate on the CLJ effect. The results indicate that a high base rate of crises strengthens the tendency of engaging in legitimacy judgment and weakens the reliance on pre-existing perceptions.

This paper contributes to the consumer research literature by combining institutional and psychological perspectives to evaluate legitimacy judgment process and the erosion of industry trust. The paper suggests that monitoring consumers’ perceptions of the industry with regard to the focal scandals and base rates and taking appropriate measures to influence consumer legitimacy judgment process are prescriptions for reducing the erosion of industry trust during a crisis.

REFERENCES

- Cleeren, Kathleen, Marnik G Dekimpe, and Kristiaan Helsen (2008), “Weathering Product-Harm Crises,” *Journal of the Academy of Marketing Science*, 36 (2), 262-70.
- Coombs, W Timothy, and Sherry J Holladay (1996), “Communication and Attributions in a Crisis: An Experimental Study in Crisis Communication,” *Journal of Public Relations Research*, 8 (4), 279-95.
- Feng, Tianjun, L Robin Keller, Ping Wu, and Yifan Xu (2014), “An Empirical Study of the Toxic Capsule Crisis in China: Risk Perceptions and Behavioral Responses,” *Risk Analysis*, 34(4), 698-710.
- Finch, David, David Deephouse, and Paul Varella (2015), “Examining an Individual’s Legitimacy Judgment Using the Value-Attitude System: The Role of Environmental and Economic Values and Source Credibility,” *Journal of Business Ethics*, 127(2), 265-81.
- Gao, Hongzhi, and John G Knight (2007), “Pioneering Advantage and Product-Country Image: Evidence from an Exploratory Study in China,” *Journal of Marketing Management*, 23 (3-4), 367-85.

- Gao, Hongzhi, John G Knight, Hongxia Zhang, Damien Mather, and Lay Peng Tan (2012), "Consumer Scapegoating During a Systemic Product-Harm Crisis," *Journal of Marketing Management*, 28(11-12), 1270-90.
- Klein, Jill and Niraj Dawar (2004), "Corporate Social Responsibility and Consumers' Attributions and Brand Evaluations in a Product-Harm Crisis," *International Journal of Research in Marketing*, 21(3), 203-17.
- Knight, John G, Hongzhi Gao, Tony Garrett, and Ken Deans (2008), "Quest for Social Safety in Imported Foods in China: Gatekeeper Perceptions," *Appetite*, 50(1), 146-57.
- Qiao, Guanghua, Ting Guo, and K. K Klein (2012), "Melamine and Other Food Safety and Health Scares in China: Comparing Households with and without Young Children," *Food Control*, 26(2), 378-86.
- Suchman, Mark C (1995), "Managing Legitimacy: Strategic and Institutional Approaches," *Academy of Management Review*, 20(3), 571-610.
- Tost, Leigh Plunkett (2011), "An Integrative Model of Legitimacy Judgments," *Academy of Management Review*, 36(4), 686-710.

Color Lightness Shapes Hierarchy: When Darker Comes First

Myungjin Chung, University of Texas at Arlington, USA

Ritesh Saini, University of Texas at Arlington, USA

EXTENDED ABSTRACT

In this paper, we demonstrate that there is a perceptual correlation between brightness and inter-item hierarchy. Specifically, we suggest that darker (lighter) color is related to higher (lower) hierarchy. We posit that this association emerges in response to a deep-seated human urge to structure the stimulus they are confronted with. Without sorting the multitude of external cues into coherent units that provide meaning, the world will be more chaotic and unsettling than what most people find comfortable. Relying on the brightness-hierarchy congruency therefore emerges as a handy solution to organize this chaos into a predictable, orderly pattern.

Five studies confirmed this hypothesis. In Study 1 (n=142 undergraduates), participants were first asked to select the most important attribute while purchasing a fabric detergent: scent or brand. Across two conditions, the font color was darker for one of the attributes and lighter for the other. Results revealed that participants were significantly more likely to prefer an attribute when it was presented in a darker typeface (M(dark)= 64.3% vs. M(light)= 36.1%, $\beta = -1.158$, Wald = 10.96, $p = .001$, OR=0.314).

If color lightness corresponds with product hierarchy, we expect that product bundles where the primary product is darker and the secondary complementary product is lighter will benefit from this congruency effect. The next study examines this proposition. Specifically, study 2 (n=81 undergraduates) tested the effect of color lightness on perceived hierarchy in evaluating product bundles. Participants were randomly assigned to a 2 (primary product package: dark vs. light) \times 2 (secondary product package: dark vs. light) design, where they were asked to evaluate the product bundle on various dimensions (Batra and Ahtola (1988) 8-item attitude scale, $\alpha=0.93$). ANOVA results revealed non-significant main effects for both products' color lightness (All F 's <1). However, as expected, the interaction between the two independent variables was significant ($F(1, 80) = 6.595$, $p = .012$). Specifically, the dark-colored detergent paired with light-colored softener induced more positive product evaluation (M=86.93; SD=9.6) than any of the other three paired bundles.

Study 3 (n=97 undergraduates) reinforced our proposition by replicating the results of study 2 in a different product setting: shampoo and conditioner. Participants were randomly assigned to a 2 (primary product package: dark vs. light) \times 2 (secondary product package: dark vs. light) design, where they were asked to evaluate the product bundle using a 6-item attitude scale ($\alpha=0.84$). ANOVA results revealed non-significant main effects for both products' color lightness (All F 's <1). However again the interaction between the two independent variables was significant ($F(1, 96) = 8.411$, $p = .005$). Specifically, the dark-colored shampoo paired with light-colored conditioner induced more positive product evaluation (M=3.5; SD=0.83) than any of the other three paired bundles.

Previously, it has been suggested that color congruency effects may result from automatic processing (Spence and Deroy 2013). To investigate this proposition, we measured response times in all the three studies described above. Lower response latencies have been strongly associated with automaticity and heuristic-use in decision making (De Neys 2006). None of the studies found any relationship between response time and color-congruent behavior (All F 's <1). In the next two studies, we explore a possible motivational underpinning of this effect. In Studies 4 and 5, we examined the moderating effect of personal-need-for-structure on the color hierarchy correspondence we tested in the first three studies. Consumers differ in their desire for control and structure, and aversion to information ambiguity, a trait referred to as

the 'personal need for structure' (PNS) (Neuberg and Newsom 1993). Stimuli incongruence can be construed as a type of information ambiguity which will be aversive to consumers with high-PNS (Rompay, Pruyn, and Tieke 2009). Therefore, we expect that people high in PNS will display greater preference for a categorization which is consistent with their perceptual hierarchy.

In study 4, all participants (n=216 mTurk workers) were shown 16 different sets of stimuli. Each set included a higher hierarchy and a lower hierarchy item (e.g. Entrée-Appetizer). Here, we define perceptual hierarchy as a system or organization in which items, animate or inanimate, are ranked vertically according to status, authority or some other dimension. Participants were asked to categorize each item into a darker or lighter colored basket as they saw fit. To generalize our findings for a wide variety of colors, we employed five different color types. Also, the presentation order of the 16 item sets was randomized across participants. In addition, all participants also answered the 12-item PNS scale (Neuberg and Newsom 1993). Analysis revealed that 76% of the categorizations were congruent, where the higher hierarchy item was tagged with the darker color basket. This was significantly higher than what would be expected by chance (50%) (Binomial Test, $p>0.0001$). Also, measured PNS was correlated to choice congruency ($r=+0.196$, $p=0.004$) confirming our moderation hypothesis.

Study 5 replicated the results of study 4 by creating real life scenario-based questions. In each scenario, participants (n=216 mTurk workers) were asked to choose the more suitable products (darker vs. lighter) for two different people or item (higher versus. lower hierarchy). Rest of the procedure was identical as previous study. Results showed that 82% of the choices were congruent, as expected, in that people chose a darker-colored item/product for a higher hierarchical person/item and chose a lighter-colored item/product for a lower hierarchical person/item (Binomial Test, $p>0.0001$). Also, measured PNS was correlated to choice congruency ($r=+0.130$, $p=0.056$) reconfirming our moderation hypothesis.

General Discussion

We investigated how consumers relate color lightness with inter-item hierarchy. Five studies provide converging evidence that consumers associate higher (lower) hierarchy items to darker (lighter) colors. In the domain of complementary products, those bundles where the primary product is darker and the secondary product is lighter are more preferred than any other bundle configuration. We also demonstrated that a consumer's "need for structure" motivation moderates this preference.

REFERENCES

- De Neys, W. (2006). Automatic-heuristic and executive-analytic processing during reasoning: Chronometric and dual-task considerations. *The Quarterly Journal of Experimental Psychology*, 59(6), 1070-1100.
- Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simpler structure. *Journal of Personality and Social Psychology*, 65(1), 113.
- Spence, C., & Deroy, O. (2013) How automatic are crossmodal correspondences? *Consciousness and cognition*, 22(1), 245-260.
- Van Rompay, T. J., Pruyn, A. T., & Tieke, P. (2009). Symbolic meaning integration in design and its influence on product and brand evaluation. *International journal of design*, 3(2).

Obesity and Sensitivity of Food Perceptions and Preferences to Marketing Actions

Yann Cornil, University of British Columbia, Canada

Pierre Chandon, INSEAD, France

Hilke Plassmann, INSEAD, France

Liane Schmidt, INSEAD, France

Judith Aron-Wisniewsky, IHU-ICAN - Hopital Pitié-Salpêtrière, France

Karine Clément, IHU-ICAN - Hopital Pitié-Salpêtrière, France

EXTENDED ABSTRACT

The environment—and particularly the actions of food marketers—strongly influences the perception of food, which then impacts preferences and eating behavior (Chandon and Wansink 2012). Marketing claims (e.g., “good for you” claims, brand positioning), the size and shape of food packages, their labeling (“medium” or “large”) and the range of sizes on the menu all influence food consumption and the perception of food quality (“tasty,” “healthy”) and quantity.

Research on how food marketing influences food perception and preferences has important limitations. First, almost all existing studies have been conducted with lean, healthy, educated, and young people rather than with obese people who are most at risk. This is an important concern because research suggests that obese people have become insensitive to internal satiation signals (Bartoshuk et al. 2006; Yeomans, Blundell, and Leshem 2004) and to reward signals in the brain (Volkow, Wang, and Baler 2011). The second limitation is the lack of studies examining the effects of the most effective weight-loss remedy for obese people—bariatric surgery—and how it interacts with the effects of the marketing environment. About 200,000 Americans undergo weight-loss surgery (gastric bypass or banding) each year. Yet, only a handful of studies show that weight-loss surgery influences not only food intake, but also food preferences, hunger, and taste acuity (Behary and Miras 2015; Scruggs, Buffington, and Cowan 1994). More generally, no research has, to date, examined how medical interventions like weight-loss surgery influence people’s sensitivity to marketing actions when it comes to food perception and preferences.

The goal of this project is to examine the interplay of biological and psychological factors driving eating behavior before and after weight-loss surgery. Our hypothesis is that the drastic psychological and biological changes (e.g., the composition of the gut microbiota and the levels of metabolic gut hormones) caused by bariatric surgery reduce the impact of marketing factors on food perceptions and preferences.

The main study was conducted with the collaboration of the University Hospital of Pitié Salpêtrière in Paris. During five years we collected data on a sample of 73 obese French female patients scheduled for gastric bypass surgery or surgical banding, and 40 lean French females (for the control group). The obese participants belonged to a clinical study conducted by the Institute of Cardiometabolism And Nutrition (ICAN). The obese patients were tested three times: one month before, 3 months after, and 12 months after the surgery. The control group was tested twice, separated by a period of 3 to 6 months in order to verify that the responses were stable over time. The control group was matched with the obese group on socio-demographic variables (age and employment). However, the obese sample had lower levels of education and income. Our analyses focused on the 46 obese patients and 32 control subjects who participated in at least two experimental sessions. The responses of the subjects who dropped the study after the first session were never significantly different from the responses the subjects who continued the study.

We first measured the effects of food stereotypes. Existing research has shown that people tend to categorize food as “good” or “bad” based on stereotypes, regardless of the actual size of the portion, and that these stereotypes strongly influence food perceptions and preferences (Oakes 2005; Rozin, Ashmore, and Markwith 1996). We selected “surprising” pairs of foods where the stereotypically “good” food actually contains more calories than the stereotypically “bad” food (e.g., a can of Minute Maid pure orange juice, worth 152 calories, vs. a can of regular Coke, worth 140 calories). Overall, we replicated both the “health halo” and the “health horn” effects (Chandon 2013; Chandon and Wansink 2007), participants tended to underestimate calories in “good” foods and overestimate calories in “bad” foods. At t1 (before surgery), obese patients stereotyped foods significantly more than control participants, although their stereotyping tended to decrease 3 months after surgery, and significantly 1 year after.

We also measured size labeling effects. While food vendors are free to label the size of their portions however they want (e.g. “small”, “medium”, “large), past research has shown that size labeling can exert a normative influence on consumers’ portion choice and consumption (Aydinoğlu and Krishna 2011). We tested labeling effects within-subject with a scenario that asked participants to choose portions of fries that vary only in “size labels”, but not in actual size. At t1 (before surgery), obese patients were significantly more influenced by size labeling than control participants, but again, they became significantly less influenced 3 months after and 1 year after surgery.

We finally measured assortment effects. Past research has shown that the range of portion sizes available at a food vendor exerts a normative influence on portion choice (Sharpe, Staelin, and Huber 2008); for instance adding a small size or a large size will shift which size will be considered normal, influencing food intake. In a scenario-based task, we found that before surgery, obese patients were directionally more influenced by assortment effects compared with control participants, but that this influence tended decrease 3 months after surgery, and significantly 1 year after.

Obviously, the most interesting comparisons is between the responses of the obese participants before and after weight-loss surgery. If we had found no effect of bariatric surgery, this would have suggested that the higher sensitivity to marketing actions of obese participants is likely driven by personality or other stable individual differences, and thus that the drastic weight loss typically caused by bariatric surgery is not mediated by sensitivity to marketing actions. However, we found that weight-loss surgery made obese people *less* responsive to marketing actions. This provides the first demonstration that weight-loss interventions, such as bariatric surgery, can influence food perceptions, preferences, and choice. It also suggests that differences in response to marketing actions might be one of the reasons for the higher BMI of the obese group.

REFERENCES

- Aydinoğlu, Nilufer Z. and Aradhna Krishna (2011), "Guiltless Gluttony: The Asymmetric Effect of Size Labels on Size Perceptions and Consumption," *Journal of Consumer Research*, 37 (April), 1095-112.
- Bartoshuk, Linda M, Valerie B Duffy, John E Hayes, Howard R Moskowitz, and Derek J Snyder (2006), "Psychophysics of Sweet and Fat Perception in Obesity: Problems, Solutions and New Perspectives," *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 361 (1471), 1137-48.
- Behary, Preeshila and Alexander D. Miras (2015), "Food Preferences and Underlying Mechanisms after Bariatric Surgery," *Proceedings of the Nutrition Society*, FirstView, 1-7.
- Chandon, Pierre (2013), "How Package Design and Packaged-Based Marketing Claims Lead to Overeating," *Applied Economic Perspectives and Policy*, 35 (1), 7-31.
- Chandon, Pierre and Brian Wansink (2007), "The Biasing Health Halos of Fast-Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions," *Journal of Consumer Research*, 34 (3), 301-14.
- (2012), "Does Food Marketing Need to Make Us Fat? A Review and Solutions," *Nutrition Reviews*, 70 (10), 571-93.
- Oakes, Michael E. (2005), "Stereotypical Thinking About Foods and Perceived Capacity to Promote Weight Gain," *Appetite*, 44 (3), 317-24.
- Rozin, Paul, Michele Ashmore, and Maureen Markwith (1996), "Lay American Conceptions of Nutrition: Dose Insensitivity, Categorical Thinking, Contagion, and the Monotonic Mind," *Health Psychology*, 15 (6), 438-47.
- Scruggs, D.M., C. Buffington, and G.S.M. Cowan (1994), "Taste Acuity of the Morbidly Obese before and after Gastric Bypass Surgery," *Obesity Surgery*, 4 (1), 24-28.
- Sharpe, Kathryn M., Richard Staelin, and Joel Huber (2008), "Using Extremeness Aversion to Fight Obesity: Policy Implications of Context Dependent Demand," *Journal of Consumer Research*, 35 (3), 406-22.
- Volkow, N. D., G. J. Wang, and R. D. Baler (2011), "Reward, Dopamine and the Control of Food Intake: Implications for Obesity," *Trends Cogn Sci*, 15 (1), 37-46.
- Yeomans, Martin R., John E. Blundell, and Micah Leshem (2004), "Palatability: Response to Nutritional Need or Need-Free Stimulation of Appetite?," *British Journal of Nutrition*, 92 (SupplementS1), S3-S14.

Sensory or Nutrition Menu Labeling?

A Field Experiment in Aligning Public Health and Restaurant Business Goals

Yann Cornil, University of British Columbia, Canada
Pierre Chandon, INSEAD, France

EXTENDED ABSTRACT

Americans now spend more on foods prepared away from home than on foods prepared at home (ERS 2016), and meals are considerably larger in restaurants than at home (Lachat et al. 2012). This has led health authorities to mandate calorie labeling on restaurant menus, hoping that it will lead patrons to make healthier choices.

However, the evidence on the effects of menu labeling on demand is mixed. In a recent meta-analysis (Long et al. 2015), calorie labeling alone was found to lead to a small (18 kcal) but statistically significant reduction in the calories ordered or purchased per meal. In addition, the restaurant industry has fought aggressively against menu labeling, officially because of their compliance costs, but presumably also for fear that it hurts customer value (Nestle 2011; Tavernise 2015).

Because of the necessity for the food industry to balance health requirements and customer satisfaction (Nestle 2011; Tavernise 2015), some researchers have explored pleasure-based approaches to promote healthier eating. In particular, Cornil and Chandon (2016) argued that focusing on the sensory experience of eating could lead consumers to choose, prefer, and pay more for smaller food portions because it reminds them that the overall hedonic appreciation of a dish peaks with moderate food portions. However, it is unknown whether such approach can be effective with paying restaurant customers over the course of an entire meal, especially when the marginal cost of food is low or nil.

In order to address this question, we designed a field experiment in a restaurant comparing the effects of a “sensory labeling menu” (with vivid sensory descriptions of the foods), a “nutrition labeling menu” (with information on calories and fat), and a control menu on eating behaviors and on the perceived value of the meal. We find that sensory menus can reduce food intake while increasing customer value, whereas nutrition labeling decreases both food intake and customer value. Our research also contributes to the understanding of restaurant customer value by studying mediating factors (food intake, eating pace, sensory expectations) and moderating factors (companionship) that cannot easily be measured in laboratory settings.

The study took place at the restaurant of a culinary school in France; patrons were invited to an all-you-can-order “small plate” meal where they could order as many portions of starter, main course, and dessert as they wanted, at a fixed price of 15 euros. The prix fixe feature was chosen to provide the most conservative test of the effects, since consumers had no incentive to save money by eating less. The dishes were identical for all customers (gnocchi salad, mini-Shepherd pies, lemon tartlets) and the menus were manipulated between-subject. We tested three menus over nine different lunch services, counterbalancing the time of the service across three different mid-week days. The “control menu” had simple descriptions of the food items. The “nutrition labeling menu” used the same descriptions but added information about both calorie and fat content. The “sensory labeling menu” used vivid sensory descriptions and an invitation to use the five senses to appreciate the meal. After the customers had finished consulting the menu, the waiter presented a sample plate displaying one “portion” of each dish and let the patrons indicate the number of portions they desired for each dish. The patrons were brought each dish successively (with their desired number of portions). Before they started eating, the patrons were asked on an

electronic tablet how much sensory pleasure they anticipated. At the end of the meal we inferred the amount of food consumed from the leftovers. We measured post-meal hunger as well as customer value by asking the customers to estimate what would be a “fair price” for the meal they had. Several high-definition hidden cameras were filming the patrons throughout the lunch; we measured how much time each person spent eating, and computed an index of “slow eating” by dividing the time spent eating by the number of consumed calories.

After exclusion of 8 customers who did not follow the instructions or did not answer the questions, 98 customers were included in the analyses (Mean age=54; 53% Female).

Compared with the control condition, customers in the “nutrition labeling menu” condition ordered and ate less food, ate at a slower rate, and derived less customer value from their meal. Mediation analyses showed that the nutrition menu decreased customer value because it made consumers eat less.

Compared with the control condition, customers in the “sensory labeling condition” also ordered and ate less food and ate at a slower rate. However, their sensory expectations improved, and they derived more customer value from their meal. Mediation analyses showed that the sensory menu increased customer value *despite* making consumers eat less, because it increased pleasure anticipation and decreased the pace of eating, suggesting that customers were “savoring” their meal.

Additional analyses also suggested that the effects of sensory menus and nutrition menus were stronger when more people ate together.

In conclusion, starting in May 2017, all US restaurants with at least 20 locations must comply with the 2010 Patient Protection and Affordable Care Act and provide calorie information on menus and nutrient information if there is a nutrition claim (e.g., fat content if the food is described as “low fat”). Our field experiment suggests that such policy may be effective in decreasing food intake, but that it may hurt customer value. We provide evidence that another solution is possible: “sensory labeling menus” should also decrease calorie intake while increasing customer value at the same time.

REFERENCES

- Cornil, Yann and Pierre Chandon (2016), “Pleasure as a Substitute for Size: How Multisensory Imagery Can Make People Happier with Smaller Food Portions,” *Journal of Marketing Research*, 53 (5), 847-64.
- ERS (2016), “Table 10--Food Away from Home as a Share of Food Expenditures,” <https://www.ers.usda.gov/data-products/food-expenditures/food-expenditures/#Food%20Expenditures>.
- Lachat, C., E. Nago, R. Verstraeten, D. Roberfroid, J. Van Camp, and P. Kolsteren (2012), “Eating out of Home and Its Association with Dietary Intake: A Systematic Review of the Evidence,” *Obesity Reviews*, 13 (4), 329-46.
- Long, Michael W., Deirdre K. Tobias, Angie L. Craddock, Holly Batchelder, and Steven L. Gortmaker (2015), “Systematic Review and Meta-Analysis of the Impact of Restaurant Menu Calorie Labeling,” *American Journal of Public Health*, 105 (5), e11-e24.

- Nestle, Marion (2011), "Michele Obama Gets Darden's to Promise Healthier Meals," <http://www.foodpolitics.com/2011/09/michele-obama-gets-dardens-to-promise-healthier-meals/>.
- Tavernise, Sabrina (2015), "Deadline for Calorie-Count Labeling on Menus Is Extended," *New York Times* (July, 10), A20.

Don't Count Calorie Labeling Out: Calorie Counts on the Left Side of Menu Items Lead to Lower Calorie Food Choices

Steven Dallas, New York University, USA

Peggy Liu, University of Pittsburgh, USA

Peter Ubel, Duke University, USA

EXTENDED ABSTRACT

Government-mandated calorie information on menus and menu boards has been one of the United States government's favorite tools for combatting the obesity epidemic in the United States (FDA 2016). Indeed, as part of the Affordable Care Act, all chain restaurants nationwide will have to provide calorie information on their menus by May 2018 (FDA 2017). However, the key question remains of whether providing caloric information actually reduces the number of calories that people order, and, if they do, by how much. This question has been the subject of extensive research across multiple disciplines, including marketing, economics, psychology, and public health, and, in general, this abundance of studies has found either a small effect or no effect of calorie counts (see Kiszko et al. 2014 for a review). Accordingly, these findings have led some to call calorie labeling a policy "failure" (Carroll 2015; Singal 2015).

In the present research, we suggest a new account for why calorie information may often have little effect in terms of leading consumers to make lower calorie food choices and, based on this account, propose a trivially simple intervention to increase the effectiveness of calorie information. Specifically, we suggest that one reason calorie information is typically ineffective is because it is currently typically displayed to the right of food items on menus. Although traditional economic thought would suggest that the order in which information is processed should have no impact on decision making (Frank and Bernanke 2008), we suggest that the positioning of calorie information on menus and menu boards (and, as a result, the order in which information is processed) has a significant effect on consumers' food choices. Thus, our key hypothesis in this research is that displaying calorie information to the left of food items will lead to significantly lower calorie orders than displaying calorie information to the right of food items.

According to information processing theory, information encountered earlier is given greater weight than information encountered later (Anderson and Jacobson 1965; Asch 1946; Hammond et al. 1998; Lee et al. 2006; Nisbett and Ross 1980). Given that Americans read from left-to-right, when calorie information is to the right of menu items, as is typically the case, it is only processed after consumers have already processed the food item's name. As a result, the food item's name is likely given substantially greater weight than the calorie information when making the food choice. This is especially troubling in light of recent research which has found that a food item's name cues consideration of the food's taste before its health (Sullivan et al. 2015). Accordingly, even if the calorie information is considered later in the decision process, initial taste information has already been given considerable weight. Thus, the calorie information has a limited effect on consumers' food orders, which is what has been found in the numerous studies that have examined the effect of calorie information on consumers' food choices (see Kiszko et al. 2014 for a review). Thus, we propose that simply moving calorie information to the left of menu items will greatly increase its effect on consumers' food orders. In particular, calorie information to the left (vs. right) of menu items may lead to lower calorie food orders because consumers will view the calorie information earlier, which will lead them to place greater weight on the calorie information.

We tested our main hypothesis—that positioning calorie information to the left (vs. right) of menu items leads to significantly lower calorie food choices in three studies. In Study 1, which was conducted at a casual chain restaurant, customers ordered from a menu with either no calorie information, calorie information to the left of the menu items, or calorie information to the right of the menu items. As predicted, consumers who ordered from a menu with calorie information to the left of the menu items ordered significantly fewer calories than consumers who ordered from a menu with either calorie information to the right of the menu items or no calorie information at all. There was no significant difference in terms of calories ordered between the no calories and right calories conditions.

In Study 2, the goal was to try to determine why calorie information to the left (vs. right) leads to lower calorie food orders. Replicating Study 1, we found that consumers ordered significantly fewer calories when the calorie information was to the left of the menu items (vs. to the right or not present at all). More importantly, though, we found support for a serial mediation model. Specifically, when calorie information is to the left (vs. right) of menu items, consumers view it earlier, and the earlier they view the calorie information, the more weight they place on the calorie information when deciding what to order, which leads them to order lower calorie meals.

In Study 3, we tested for a boundary condition of our effect. Specifically, calorie information to the left (vs. right) is only processed earlier because Americans read from left-to-right. Thus, if the effect is truly driven by the order in which information is processed (rather than, say, the physical position of the calorie information on the menu), we should find that the effect is reversed for consumers who read from right-to-left. Accordingly, Study 3 was conducted with Hebrew-speaking Israelis, who read from right-to-left. As predicted, the effect completely reversed for this sample, with consumers ordering significantly fewer calories when the calorie information was to the right of the menu items (vs. to the left or not present at all).

Thus, it may be premature to call calorie labeling a "failed" policy. Instead, it appears that one reason calorie information has been ineffective is because it is typically displayed to the right of menu items. Accordingly, going forward, it should be required for calorie information to be positioned to the left of menu items, as this appears to greatly increase its positive effect on consumers' food orders.

REFERENCES

- Anderson, Norman H. and Ann Jacobson (1965), "Effect of Stimulus Inconsistency and Discounting Instructions in Personality Impression Formation," *Journal of Personality and Social Psychology*, 2 (4), 531-39.
- Asch, Solomon E. (1946), "Forming Impressions of Personality," *The Journal of Abnormal and Social Psychology*, 41 (3), 258-90.
- Carroll, Aaron E. (2015), "The Failure of Calorie Counts on Menus," *The New York Times*, November 30, [available at http://www.nytimes.com/2015/12/01/upshot/more-menus-have-calorie-labeling-but-obesity-rate-remains-high.html?_r=1].

- FDA (2017), "Menu Labeling Requirements," May 4, [available at <https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm515020.htm>].
- Frank, Robert H. and Ben S. Bernanke (2008), *Principles of Economics*, New York, NY: McGraw-Hill/Irwin.
- Hammond, John S., Ralph L. Keeney, and Howard Raiffa (1998), "The Hidden Traps in Decision Making," *Harvard Business Review*, 76 (5), 47-58.
- Kiszko, Kamila M., Olivia D. Martinez, Courtney Abrams, and Brian Elbel (2014), "The Influence of Calorie Labeling on Food Orders and Consumption: A Review of the Literature," *Journal of Community Health*, 39 (6), 1248-69.
- Lee, Leonard, Shane Frederick, and Dan Ariely (2006), "Try It, You'll Like It: The Influence of Expectation, Consumption, and Revelation on Preferences for Beer," *Psychological Science*, 17 (12), 1054-058.
- Nisbett, Richard E. and Lee Ross (1980), *Human Inference: Strategies and Shortcomings of Social Judgment*, Englewood Cliffs, NJ: Prentice-Hall.
- Singal, Jesse (2015), "More Bad News for Fans of Menu Calorie Counts," *New York Magazine*, November 2, [available at <http://nymag.com/scienceofus/2015/11/more-bad-news-for-fans-of-menu-calorie-counts.html>].
- Sullivan, Nicolette, Cendri Hutcherson, Alison Harris, and Antonio Rangel (2015), "Dietary Self-Control is Related to the Speed with Which Attributes of Healthfulness and Tastiness are Processed," *Psychological Science*, 26 (2), 122-34.

How Consumption Experience Valence and Perceived Assortment Size Interact to Shape Word-of-Mouth Sharing

Matteo De Angelis, Luiss University, Italy
Gregory S. Carpenter, Northwestern University, USA
David Dubois, INSEAD, France
Michele Costabile, Luiss University, Italy

EXTENDED ABSTRACT

One dimension of word-of-mouth (WOM) that has received ample attention due to its impact in shaping the success or downfall of products is information valence. Following separate investigations of factors encouraging either positive or negative WOM (PWOM or NWOM) in isolation, recent work turned to examine how socio-psychological factors affected the sharing of PWOM and NWOM (De Angelis et al., 2012; Dubois, Bonezzi, and De Angelis, 2016).

This study turns to another key aspect of a consumption experience by examining the extent to which a consumer had access to choices at the time of purchase. We propose that the size of the assortment consumers choose from can shape their tendency to share their positive versus negative experiences. Specifically, we hypothesize that larger, compared to smaller, assortments enhance consumers' likelihood to share positive experiences but impair consumers' tendency to share negative experiences. This hypothesis is rooted in the idea that a consumer experiences increasing feelings of control over her decision-making process as the size of the assortment she chooses from increases (e.g., Inesi et al. 2011). As a result, greater (vs. smaller) assortments elicit an internal attribution process whereby a consumer tends to increasingly attribute the outcome of her decision-making to her actions (Weiner 1985). Because attributing outcomes to themselves triggers feelings of pride (or lack thereof; Smith and Lazarus 1993; Tracy and Robins 2007), we propose that perceived assortment size interacts with consumer experience valence to shape feelings of pride. In turn, we expect that consumers' likelihood to share their positive versus negative experiences will be a function of their feelings of pride. In particular, we posit that consumers having a positive experience might feel increasingly proud as assortment size increases, while those having a negative experience might feel decreasingly proud as assortment size increases. Consequently, consumers will be more (less) likely to engage in WOM as assortment size increases when having positive (negative) consumption experiences.

Experiment 1 aimed to provide initial evidence for the basic effect. One hundred thirty-two respondents were randomly assigned to one of the two conditions (positive vs. negative experience) whereby they recalled and described either a positive or a negative experience with a product or service. Perceived assortment size was assessed by asking respondents to indicate how many options were available during their choice process (1 = I did not have any other option, 4 = I had many other options). In addition, we assessed WOM likelihood by asking respondents how likely they would be to share their experience with other people they felt distant from (1 = very unlikely, 7 = very unlikely). Results revealed a significant interaction between consumption experience valence and perceived assortment size ($b = .40, t = 2.68, p = .01$). First, consumers' likelihood to share positive experiences increased as perceived assortment size increased ($b = .44, t = 2.04, p = .04$). Second and in contrast, consumers' likelihood to share negative experiences decreased as perceived assortment size increased ($b = -.37, t = -1.75, p = .08$).

Experiment 2a (101 respondents) aimed to provide evidence that the shift in consumers' likelihood to share positive and negative experiences stems from the asymmetry in feelings of control associ-

ated with choosing from smaller versus larger assortments. The procedure was identical to Experiment 1, except we asked respondents to what extent they felt that the outcome of the experience described was due to factors within or outside their control (1 = it was definitely due to factor outside my control, 7 = it was definitely due to factor within my control). First, replicating the initial experiment, we found the predicted interaction ($b = .15, t = 1.82, p = .07$). Then, novel to this experiment, results of a moderated mediation model with perceived assortment size as independent variable, feelings of control as the mediator, experience valence as the moderator and WOM likelihood as the dependent variable revealed that the effect of perceived assortment size on feelings of control was positive and significant ($b = .26, t = 2.46, p = .02$). Additionally, a regression predicting WOM likelihood from feelings of control, experience valence and their interaction revealed a significant interaction between feelings of control and experience valence ($b = .20, t = 2.53, p = .01$), suggesting that higher levels of feelings of control, compared to lower levels, triggered higher WOM likelihood for positive experiences but lower WOM likelihood for negative experiences.

Experiment 2b (199 respondents) differed from Experiment 2a because we manipulated assortment size. Replicating Experiment 1, we again found the predicted interaction ($b = .28, t = 2.39, p = .02$). Importantly, consistent with Experiment 2a, results revealed that the effect of assortment size on feelings of control was positive and significant ($b = .62, t = 5.78, p < .001$), while the regression predicting WOM likelihood from feelings of control, experience valence and their interaction revealed a significant interaction between feelings of control and experience valence ($b = .25, t = 3.56, p < .01$).

Finally, Experiment 3 (132 respondents), tested whether trait-level pride (Tracy and Robins 2007) interacted with perceived assortment size and experience valence to affect WOM likelihood. Results showed a significant three-way interaction effect ($b = .09, t = 2.07, p = .04$). Additionally, simple slope analysis (Aiken and West 1991) revealed that at mean and high levels of pride the interaction of perceived assortment size and experience valence was positive and significant ($b_{mean} = .16, t = 2.10, p = .04$; $b_{high} = .32, t = 3.17, p < .01$), while it was not significant at low levels of pride ($b_{low} = -.01, t = -.02, ns$). These results suggest that the basic effect shown in Experiment 1 occurs for consumers with higher rather than lower levels of dispositional pride.

Overall, this research advances knowledge of when individuals are more likely to share positive versus negative WOM by testing the role of the size of the assortment at the time of purchase in shaping feelings of pride and ultimately guiding what information consumers are likely to share.

REFERENCES

- Aiken, Leona S. and Stephen G. West (2004), *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage Publications.
- Berger, Jonah (2014), "Word of Mouth and Interpersonal Communication: A Review and Directions for Future Research," *Journal of Consumer Psychology*, 24(4), 586-607.

- Chernev, Alexander (2003), "When More is Less and Less is More: The Role of Ideal Point Availability and Assortment in Consumer Choice," *Journal of Consumer Research*, 30(2), 170-183.
- Chernev, Alexander, and Ryan Hamilton (2009), "Assortment Size and Option Attractiveness in Consumer Choice Among Retailers," *Journal of Marketing Research*, 46 (3), 410-420.
- De Angelis, Matteo, Andrea Bonezzi, Alessandro M. Peluso, Derek D. Rucker, and Michele Costabile (2012), "On Braggarts and Gossips: A Self-enhancement Account of Word-of-mouth Generation and Transmission," *Journal of Marketing Research*, 49(4), 551-563.
- Dichter, Ernest (1966), "How Word-of-mouth Advertising Works," *Harvard Business Review*, 44(6), 147-160.
- Dubois, David, Andrea Bonezzi, and Matteo De Angelis (2016), "Sharing with Friends versus Strangers: How Interpersonal Closeness Influences Word-of-Mouth Valence," *Journal of Marketing Research*, 53 (5), 712-727.
- Engel, James F., Roger D. Blackwell, and Paul W. Miniard (1993), *Consumer Behavior*, 7th ed., Chicago: Dryden Press.
- Gourville, John T. and Dilip Soman (2005), "Overchoice and Assortment Type: When and Why Variety Backfires," *Marketing Science*, 24 (3), 382-395.
- Hayes, Andrew F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?" *Journal of Interactive Marketing*, 18 (1), 38-52.
- Inesi, M Ena, Simona Botti, David Dubois, Derek D. Rucker, and Adam D. Galinsky (2011), "Power and Choice: Their Dynamic Interplay in Quenching the Thirst for Personal Control," *Psychological Science*, 22(8), 1042-1048.
- Oppewal, Harmen and Kitty Koelemeijer (2005), "More Choice is Better: Effects of Assortment Size and Composition on Assortment Evaluation," *International Journal of Research in Marketing*, 22 (1), 45-60.
- Packard, Grant and David B. Wooten (2013), "Compensatory Knowledge Signaling in Consumers Word-of-Mouth," *Journal of Consumer Psychology*, 23 (4), 434-50.
- Roseman, Ira J. (1991), "Appraisal Determinants of Discrete Emotions," *Cognition & Emotion*, 5 (3), 161-200.
- Sela, Aner, Jonah Berger, and Wendy Liu (2009), "Variety, Vice, and Virtue: How Assortment Size Influences Option Choice," *Journal of Consumer Research*, 35 (6), 941-951.
- Smith, Craig A., and Richard S. Lazarus (1993), "Appraisal Components, Core Relational Themes, and the Emotions," *Cognition & Emotion*, 7 (3-4), 233-269.
- Sundaram, D.S., Kaushik Mitra, and Cynthia Webster (1998), "Word-of-Mouth Communications: A Motivational Analysis," *Advances in Consumer Research*, 25, 527-531.
- Tracy, Jessica L. and Richard W. Robins (2007), "The psychological Structure of Pride: A tale of Two Facets," *Journal of Personality and Social Psychology*, 92(3), 506.
- Weiner, Bernard (1985), "An Attributional Theory of Achievement Motivation and Emotion," *Psychological Review* 92 (4), 548.
- Weiner, Bernard, Dan Russell, and David Lerman (1979), "The Cognition-emotion Process in Achievement-related Contexts," *Journal of Personality and Social Psychology*, 37 (7), 1211-1220.

Intrusive Advertisements in the Online Context: A Meta-Analysis of the Antecedents and Consequent Constructs

Fernando de Oliveira Santini, Unisinos, Brazil
Frederike Monika Budiner Mette, ESPM Sul, Brazil
Valesca Persch Reichelt, ESPM Sul, Brazil
Wagner Junior Ladeira, Unisinos, Brazil
Claudio Hoffmann Sampaio, PUC RS, Brazil

EXTENDED ABSTRACT

Intrusive advertisements started to gain academic attention in the 1960s, when Bauer and Greyser (1968) indicated that commercials are a cause of consumer discomfort. In recent years, especially since the 2000s, related studies have proliferated in accordance with the popularization of the internet. Studies have examined a variety of online contexts, such as unwanted e-mails (Moriomoto & Chang, 2006, 2009; Chang et al., 2013), pop-ups (Edwards et al.), online games (Hernandez et al., 2004) and streaming advertisements (Logan, 2012, Abrantes, 2015). Parallel to this academic attention, companies' investments in digital advertisements reveal the increasing interest in the managerial environment. Indeed, a 2013 forecast published by the Interactive Advertising Bureau (iAb) that notes that in 2017, \$60 billion will be invested in internet ads. Additionally, Li et al (2002) published a study in the Journal of Advertising proposing a method that could measure intrusive advertisements, which further increased the popularity of this topic. Although the proliferation of studies has provided a scope for better understanding the phenomenon, it has also produced conflicting results given the different methodologies used. For example, the irritation construct is described in some intrusive advertisement studies as a positive force (Edwards et al., 2002) and in others as a neutral force (Hernandez et al. Al., 2004). Similarly, the attitude construct has been found to be positive (Morimoto & Chang, 2009), negative (Abrantes, 2015) and neutral (Héroult, 2013). In this context, this research aimed to contribute by developing a meta-analysis. The use of this methodology could lead to definitive conclusions about the investigated subject across different contexts and methodologies (Green, 2005). Meta-analyses allow researchers to eliminate conflicting results found by eliminating the possible biases of studies and to generate more precise estimations of the effect size (Lipsey & Wilson, 2001). To that end, we searched seven databases: EBSCO, ProQuest, Taylor & Francis, Emerald, Science Direct, JSTOR and Google Scholar. The data collected from these databases were coded by two senior researchers. Pearson's correlation coefficient was the metric selected for this meta-analysis. The correlations of the studies were adjusted by the sample size and scale reliability, as suggested by Hunter and Schmidt (2004). In addition, to evaluate the moderating effects, a regression analysis was performed. Our search initially produced 382 studies published and not published in journals. After the first analysis, 30 studies were used in the data analysis. The results revealed some important findings: First, of the four antecedents identified (relevant information, congruence, entertainment, and frequency), two—relevant information and entertainment—presented significant and negative relations with intrusive advertisements. Thus, the theories and the results indicated that the intrusiveness of an advertisement can be mitigated by its information value (Edwards et al., 2002) and entertainment (Chang et al, 2013). Second, all of the consequent constructs identified in the theoretical review presented significant relations with the intrusive advertisements. The irritation construct presented a strong correlation $r = 0.470$, and the consistency was significant ($FSN = 7238$). Thus, the positive relationship between intrusive advertisements and irritation is consolidated, a new fact that could be ques-

tioned according to some analyzed studies; both have neutral results ($R = 0.294$) (Hernandez et al., 2004), and there is a negative relation between intrusive advertisements and attitude ($r = -0.263$; $FSN = 8297$). Third, it has been observed that people in Western cultures tend to feel intrusiveness effects more strongly. This was evidenced in the stronger relationships identified between intrusive advertisements and attitude in Western cultures than in Eastern cultures. This finding strengthens the assumption that Western consumers are more indulgent and individualistic, and intrusive advertisements could disrupt their goal, thus causing even more negative feelings. Fourth, the results obtained through this meta-analysis provide a quantitative integration of the main findings related to the antecedents and consequent constructs of intrusive advertisements applied in the online context. Therefore, it provides considerable generalization, defining what is considered valid and not valid and what is known and unknown about the subject. Fifth, in the managerial area, the results could be applied to reduce the effects of intrusiveness. In this research, the results indicated that advertising messages should be geared towards informative and entertaining content. In this way, the need for segmentation policies is reinforced to direct the messages to the targeted public. Otherwise, the brand relationship may be depreciated by negative feelings evoked by the intrusiveness, such as irritation, avoidance, attitude and negative buying intention.

REFERENCES

- Abrantes, Júlia Maria Vitorino. Impacto da intrusividade de formatos publicitários em vídeos online. Tese de Doutorado (Universidade de Lisboa), 2015.
- Bauer, R. A., & Greyser, S. A. (1968). Advertising in America, the consumer view.
- Chang, H., Rizal, H., & Amin, H. (2013). The determinants of consumer behavior towards email advertisement. *Internet Research*, 23(3), 316-337.
- Edwards, S. M., Li, H., & Lee, J. H. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, 31(3), 83-95.
- Green, S. (2005). Systematic reviews and meta-analysis. *Singapore medical journal*, 46(6), 270.
- Hernandez, M. D., Chapa, S., Minor, M. S., Maldonado, C., & Barranzuela, F. (2004).
- Héroult, S. (2013). Investigating innovations in information systems: how to evaluate the m-advertising effectiveness?
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Thousand Oaks, CA: Sage.
- Li, H., Edwards, S. M., & Lee, J. H. (2002). Measuring the intrusiveness of advertisements: Scale development and validation. *Journal of advertising*, 31(2), 37-47.
- Lipsey, M. W. & Wilson, D. B. (2001). *Practical meta-analysis* (Vol. 49). Thousand Oaks, CA: Sage publications

Logan, K. (2013). And now a word from our sponsor: Do consumers perceive advertising on traditional television and online streaming video differently?. *Journal of Marketing Communications*, 19(4), 258-276.

Morimoto, M., & Chang, S. (2006). Consumers' attitudes toward unsolicited commercial e-mail and postal direct mail marketing methods: intrusiveness, perceived loss of control, and irritation. *Journal of Interactive Advertising*, 7(1), 1-11.

Morimoto, M., & Chang, S. (2009). Psychological factors affecting perceptions of unsolicited commercial e-mail. *Journal of Current Issues & Research in Advertising*, 31(1), 63-73.

Why Privacy is Only Salient When not Making Actual Decisions: How Congruency Drives the Privacy Paradox

Joris Demmers, University of Amsterdam, The Netherlands

Alfred F. Zerres, University of Amsterdam, The Netherlands

Willemijn M. van Dolen, University of Amsterdam, The Netherlands

EXTENDED ABSTRACT

Although the discrepancy between consumers' privacy concerns and subsequent disclosure behavior has been well-established in previous work (Acquisti et al. 2015; Kokolakis 2015), much remains to be learned about how consumers weigh benefits and costs of sharing personal information in privacy-sensitive situations (Kokolakis 2015; Martin & Murphy 2016). In the current work we propose an updated view on privacy calculus theory, and test the notion that disclosure decisions are driven by the interaction of psychological distance of costs and benefits of disclosure and diverging mindsets under attitudinal and behavioural conditions of preference formation. Across four studies, we demonstrate that preference formation depends on congruency between one's mindset in a specific condition of preference construction and the psychological distance of benefits and costs of disclosure.

In study 1 we test whether perceived temporal and hypothetical distance differs between self-reported benefits and costs of disclosure. We exposed 115 participants to three binary disclosure choice tasks they are likely to encounter on a regular basis in daily life (accepting cookies, social login, sharing app usage data). For each situation, participants were first asked to generate as many potential consequences as possible of choosing the high disclosure option, then to indicate hypothetical and temporal distance of the generated consequences, and finally to indicate for each listed consequence the extent to which they perceived it as pro/con of the high disclosure option. Results demonstrated that across situations self-reported pros of disclosure were perceived as less temporally ($F(1,852.20) = 44.81, p < .001$) and hypothetically distant ($F(1,845.03) = 24.70, p < .001$) than cons.

In study 2 we tested how different stages in preference formation are associated with different mindsets by exposing 75 participants to either an attitudinal or behavioral preference formation condition, after which we measured their mindset using the behavioral identification form (Vallacher & Wegner 1989). Results showed that attitudinal measures of privacy preferences evoke a more abstract mindset than behavioral measures ($M_{\text{attitudinal}} = 16.86, SD = 4.21; M_{\text{behavioral}} = 14.03, SD = 5.16; F(1,74) = 6.73, p < .05$).

In study 3 we tested whether mindset affects behavioral disclosure decisions in an online setting. The mindset of 161 participants was manipulated using a goal elaboration task (Fujita et al. 2006), after which their disclosure behavior on a website was tracked. Results revealed that participants in the abstract mindset condition were less likely to choose the high disclosure options than participants in the concrete mindset condition in three subsequent situations of increasing privacy intrusiveness (cookie acceptance: 72.0% vs. 93.9%, $\chi^2(1) = 8.33, p < .01$; social login: 70.0% vs. 53.8%, $\chi^2(1) = 4.62, p < .05$; sharing phone data: 18.0% vs. 2.0%, $\chi^2(1) = 7.11, p < .01$).

In study 4 we investigated whether the effect of mindset on privacy preferences is dependent on the psychological distance of the consequences. We manipulated the mindset of 115 participants using a category/exemplar task (Fujita et al. 2006), before exposing them to a description of a usage based insurance (UBI) program of a fictional car insurance company, in which users' driving behavior is tracked via their smartphone during six months of the one year contract in exchange for a 20% discount during the other six months.

As our manipulation of consequence distance, we varied whether the discount preceded the tracking of driving behavior or vice versa. If preference formation indeed depends on congruency between mindset and psychological distance of benefits and costs of disclosure, under concrete mindset conditions people should be more inclined to disclose their personal data when the benefits are close and costs are distant, whereas under abstract mindset conditions, inclination to self-disclose should be larger (smaller) when benefits of disclosure are distant (close) and costs are close (distant). Results showed a significant interaction effect of mindset and distance on inclination to sign up for the program ($F(1,109) = 6.63, p < .05, \eta^2 = .06$). Simple effect tests showed that participants in the concrete mindset conditions were more inclined to sign up when benefits were immediate ($M_{\text{immediate benefit}} = 3.41, SD = .23; M_{\text{distant benefit}} = 2.68, SD = .21; F(1,109) = 5.58, p = .05, \eta^2 = .05$). Moreover, when costs preceded benefits, inclination to sign up was higher under abstract mindset conditions than under concrete mindset conditions ($M_{\text{abstract}} = 3.43, SD = .23; M_{\text{concrete}} = 2.68, SD = .21; F(1,109) = 5.69, p = .05, \eta^2 = .05$).

Together, these findings enhance our understanding of how consumers weigh benefits and costs of sharing personal information in privacy sensitive situations. By providing a novel explanation for the privacy paradox, we answer calls from several scholars for more research on the privacy paradox and the factors that drive privacy preferences and behavior (Martin & Murphy 2016; Peltier et al. 2009). In a time where privacy has become a currency that consumers can exchange for free access to web content, personalized services or discounts (Motiwalla et al. 2014), understanding what drives consumers' "willingness to pay" is paramount.

REFERENCES

- Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). "Privacy and human behavior in the age of information," *Science*, 347(6221), 509–515.
- Fujita, K., Henderson, M. D., Eng, J., Trope, Y., & Liberman, N. (2006). "Spatial distance and mental construal of social events," *Psychological Science*, 17(4), 278–280.
- Kokolakis, S. (2015). "Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon," *Computers & Security*, 2015, 1–29.
- Martin, K. D., & Murphy, P. E. (2016). "The role of data privacy in marketing," *Journal of the Academy of Marketing Science*, 45, 135–155.
- Motiwalla, L. F., Xiaobai (Bob) Li, & Liu, X. (2014). "Privacy Paradox: Does Stated Privacy Concerns Translate into the Valuation of Personal Information?" In PACIS (p. 281).
- Peltier, J. W., Milne, G. R., & Phelps, J. E. (2009). "Information Privacy Research: Framework for Integrating Multiple Publics, Information Channels, and Responses," *Journal of Interactive Marketing*, 23(2), 191–205.
- Vallacher, R. R., & Wegner, D. M. (1989). "Levels of personal agency: Individual variation in action identification," *Journal of Personality and Social Psychology*, 57(4), 660–671.

Reason-Product (In)compatibility: Affective and Cognitive Factors in Consumer Reasoning

Alexander DePaoli, Stanford University, USA

Uzma Khan, University of Miami, USA

Itamar Simonson, Stanford University, USA

EXTENDED ABSTRACT

Previous literature has suggested that consumers who reason about their choices make less satisfying decisions. This effect is a function of consumers making choices based on their reasons rather than based on their preferences (e.g. Wilson & Schooler, 1991; Wilson et al., 1993). We argue that this view is incomplete. While prior work largely characterizes reasons solely as rational and cognitive arguments, we posit that reasons often also take the form of arguments based in affective factors. By introducing this distinction between “cognition-based reasons” (grounded in rational evaluations) and “affect-based reasons” (grounded in feelings and emotions, not to be confused with the mere experience of affect), we illustrate that reasoning is not detrimental as a rule. Instead, post-choice satisfaction depends on whether the reasons being generated are “compatible” with the product category in question. If consumers generate reasons that align with the preference basis of a product category (i.e., cognition-based reasons in utilitarian categories or affect-based reasons in hedonic categories), then consumers will tend to choose products that align well with their preferences. In other words, unlike in previous findings where reasoning leads to the selection of less satisfying options, the use of compatible reasoning will lead consumers to choose the same types of options (and therefore be equally satisfied) as if they had simply chosen on the basis of their preferences. Only when reasoning is “incompatible” with the product category (i.e., cognition-based reasons in hedonic categories or affect-based reasons in utilitarian categories) do consumers’ choices skew toward less satisfying options. We argue that past literature has largely focused on cases of incompatibility to conclude that reasoning leads to lower satisfaction, specifically the case of cognition-based reasoning in hedonic categories, such as strawberry jams (Wilson & Schooler, 1991) or decorative wall posters (Wilson et al., 1993).

Our first goal was to validate the claim that consumers can and do reason on the basis of both cognition and affect. Therefore, 202 participants on Amazon Mechanical Turk were asked to identify an actual purchase they had recently made, and then to explain the considerations that informed their choices. Next, they self-coded their responses according to a set of 14 criteria (drawn from the literature) that mapped onto cognition-based reasoning strategies, affect-based reasoning strategies, and distracter decision-making strategies. These self-codes were submitted to a factor analysis resulting in a two factor solution which corresponded with our dichotomy of cognition-based reasons (eigenvalue=1.298) and affect-based reasons (eigenvalue=1.065). The results provide evidence that consumers can and do use both forms of reasoning when making a decision.

To test whether (in)compatibility has consequences for consumer satisfaction, we ran an experimental study using a paradigm similar to Wilson et al. (1993) in which participants chose between four decorative posters. As consumers generally perceive this product category as hedonic, we predicted that the use of cognition-based reasons would replicate past findings that reasoning leads to lower satisfaction, while the use of affect-based reasons would not reduce satisfaction. In order to observe how changes in choice behavior drive this effect, the posters were pretested such that two were seen as having relatively greater utilitarian appeal (e.g., maps of the world) and two were seen as having relatively greater hedonic ap-

peal (e.g., artistic images of the world). We divided 180 Mechanical Turk participants into three conditions: in the “cognition-based reasoning” condition, participants were asked to report their thoughts about choosing or not choosing each of the four posters; in the “affect-based reasoning” condition, they reported their feelings toward choosing or not choosing each poster; and in the “control” condition, they simply examined the products without providing any reasons. Consistent with our hypothesis, cognition-based reasoning led to lower satisfaction than no reasoning ($b = -0.94, p < .01$), but there was no difference in satisfaction when participants instead reasoned on the basis of affect ($b = -0.53, NS$). This satisfaction result was mirrored in participants’ choice behavior: there was no difference between the affect-based and control conditions ($b = -0.05, NS$), but participants asked to generate cognition-based reasons were significantly more likely to choose the relatively utilitarian posters compared to both the control and affect-based conditions ($b = 0.12, p < .05$). This change in choice behavior was found to mediate the effect of reasoning on satisfaction (bias corrected 95% CI [-0.024, -0.004]). These findings were then replicated with 150 in-lab participants using a greater variety of hedonic products and a paradigm in which participants could win the items they chose, thus increasing the incentive compatibility of the study.

Whereas the first experimental study and its replication looked only at hedonic products, this next study aimed to test the full Reason-Product (In)compatibility model using a product category that was framed as either utilitarian or hedonic. We presented 298 Mechanical Turk participants with a choice between two smoothies, a “healthy” option and a “tasty” option. These smoothies were then framed as either “healthy snacks” (utilitarian) or “deserts” (hedonic). Participants were divided into the same three reasoning conditions as before. Coding the results to look at compatibility (cognition-based/utilitarian and affect-based/hedonic) versus incompatibility (cognition-based/hedonic and affect-based/utilitarian), we find that satisfaction was no different from control under compatibility across both framing conditions ($b = 0.36, NS$) but significantly reduced under incompatibility ($b = -2.14, p < .05$). As before, these effects were driven by changes in choice behavior: a moderated mediation revealed that, under the utilitarian frame, affect-based reasons increased choice of the tasty option, which drove down satisfaction (bias corrected 95% CI [-0.411, -0.101]); while under the hedonic frame, cognition-based reasons increased choice of the healthy option, which drove down satisfaction (bias corrected 90% CI [0.006, 0.186]).

These results support the claim that reasoning does not lead to lower choice satisfaction as a rule, but as a function of incompatibility between reason types and product categories. The results have implications for literatures that look at deliberative or reason-based decision processes, as well as for marketers and salespeople aiming to maximize customer satisfaction for products that call for careful pre-purchase consideration.

REFERENCES

- Batra, Rajeev & Olli T. Ahtola (1991), “Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes,” *Marketing Letters*, 2 (April), 159-170.

- Cacioppo, John T. & Rich E. Petty (1981), "Social Psychological Procedures for Cognitive Response Assessment: The Thought-Listing Technique," in *Cognitive Assessment*, ed. T. V. Merluzzi, C. R. Glass, & M. Genest, New York: Guilford Press, 109-342.
- Connolly, Terry & Marcel Zeelenberg (2002), "Regret in Decision Making," *Current Directions in Psychological Science*, 11, 212-220.
- Dijksterhuis, Ap, Maarten W. Bos, Loran F. Nordgren, & Rick B. van Baaren (2006), "On Making the Right Choice: The Deliberation-Without-Attention Effect," *Science*, 311 (February), 1005-1007.
- Kempf, DeAnna S. (1999), "Attitude Formation from Product Trial: Distinct Roles of Cognition and Affect for Hedonic and Functional Products," *Psychology & Marketing*, 16 (January), 35-50.
- Khan, Uzma, Klaus Wertenbroch, & Ravi Dhar (2005), "A Behavioral Decision Theoretic Perspective on Hedonic and Utilitarian Choice," in S. Ratneshwar & D. G. Mick (Eds.), *Inside Consumption: Frontiers of Research on Consumer Motives, Goals, and Desires*. Oxon, Ox: Routledge.
- Millar, Murray G. & Abraham Tesser (1986), "The Effects of Affective and Cognitive Focus on the Attitude-Behavior Relation," *Journal of Personality and Social Psychology*, 51 (August), 270-276.
- Schooler, Jonathan W., Dan Ariely, & George Loewenstein (2003), "The Pursuit and Assessment of Happiness," in *The Psychology of Economic Decisions*, Vol. 1, ed. Isabelle Brocas & Juan D. Carrillo, New York, NY: Oxford University Press, 41-70.
- Sela, Aner, Jonah Berger, & Wendy Liu (2009), "Variety, Vice, and Virtue: How Assortment Size Influences Option Choice," *Journal of Consumer Research*, 35 (April), 941-951.
- Wilson, Timothy D. & Dana S. Dunn (1986), "Effects of Introspection on Attitude-Behavior Consistency: Analyzing Reasons versus Focusing on Feelings," *Journal of Experimental Psychology*, 22, 249-263.
- Wilson, Timothy D., Douglas J. Lisle, Jonathan W. Schooler, Sara D. Hodges, Kristen J. Klaaren, & Suzanne J. LaFleur (1993), "Introspecting About Reasons Can Reduce Post-Choice Satisfaction," *Personality and Social Psychology Bulletin*, 19 (June), 331-339.
- Wilson, Timothy D. & Jonathan W. Schooler (1991), "Thinking Too Much: Introspection Can Reduce the Quality of Preferences and Decisions," *Journal of Personality and Social Psychology*, 60 (February), 181-192.

Psychological Consequences of Exposure to Variability

Yu Ding, Columbia University, USA

Krishna Savani, Nanyang Technological University, Singapore

EXTENDED ABSTRACT

Greater variability is one of the defining features of the 21st century. In addition to warmer temperatures, greater variability in temperature and precipitation is one of the defining features of the climate change that the world is currently experiencing (Intergovernmental Panel on Climate Change, 2007). For example, the frequency of extreme temperature and precipitation events that are two, three or even five standard deviations beyond the long-term mean is predicted to exponentially increase over the 21st century (Coumou & Robinson, 2013; Hansen, Sato, & Ruedy, 2012; Palmer & Räisänen, 2002). Increased variability is not just restricted to climate change. The variance in average monthly crude oil prices, which consumers experience at the gas station, has increased more than six-fold in the most recent decade compared to the previous decade (Energy Information Administration, 2016). The coefficient of variation, or risk per unit return, of the US S&P500 stock index has been consistently increasing in the last 50 years (S&P, 2015) (note 1). Increased variability is an example of *silent transformations* (Jullien, 2011), processes that take place over long time spans and that go mostly unnoticed until their effects become visible.

What are some of the key impacts of increased variability? In the physical world, in times of high variability, any single negative event, however small, has the potential to severely disrupt the system (McNeil & Matear, 2008). As stated in an article on the Devonian extinction, “During ... chaotic times, any harmful events would be more disruptive than they would be in ‘normal’ periods” (Baraniuk, 2015).

Why would greater variability influence people’s psychological functioning? We suggest that lay people would generalize the above idea from the natural science domain to the social domain, believing that in times of high variability, any harmful event or behavior can be more disruptive to society than during times of low variability. In the social context, harmful behaviors are typically referred to as *unethical behaviors*, “behavior that has a harmful effect upon others and is either illegal or morally unacceptable to the larger community” (Brass, Butterfield, & Skaggs, 1998; Jones, 1991). We predicted that if people share the intuition that any harmful event can pose a greater threat to the social order under times of high variability, then *people would judge others who act unethically more harshly* during times of high variability rather than low variability. One might also propose the alternative hypothesis that in times of high variability, people might think that a wider range of behaviors are acceptable, and thus become less punitive. We test these two competing hypotheses in the present research. Given the increasingly punitive attitudes of citizens (Kury, 1999; Roberts & Hough, 2000) and increasingly punitive criminal justice systems (Pratt, Brown, & Brown, 2005; Western, 2006) in major industrialized countries in recent decades, the question of whether there is a link between variability and punitive attitudes is of both scientific and practical importance.

We theorize that the *objective variability* in weather, prices, and other domains would influence individuals through a *subjective sense of variability*. To assess the causal impact of perceived variability on behavior, we experimentally manipulate both represented and experienced variability using different methods, such as (1) showing people data drawn from distributions with the same mean but with high vs. low variance (Experiment 1), (2) giving people the appearance of high vs. low variability by altering the scale of the vertical axis in

graphical data representations (Experiments 2 and 6), and (3) leading people to experience outcomes with high vs. low standard deviation of successive differences (Experiments 3 to 5). We test whether these manipulations of perceived variability have similar effects on individuals’ punitive judgments, using diverse methods, such as scenarios (Experiments 1 to 4), economic games (Experiment 5), and support for the death penalty (Experiment 6).

Inspired by the recent prolonged droughts in the western half of the US (Ingram & Malamud-Roam, 2013), Experiment 1 tested whether people exposed to high variability in temperature would be more willing to punish a person who violates mandatory water restrictions during drought than people exposed to low variability in temperature. Participants were presented with a line graph purportedly depicting the average annual temperature across the US over the past thirty years. To manipulate perceived variability, we exposed participants to data that were generated from two different normal distributions, both with the same mean (52.9°F) but different variances (1.8°F in the low variability condition and 5.7°F in the high variability condition). Participants were asked to rate how variable they thought the temperature of the US was over the past thirty years (7-point scale ranging from *Not at all* to *Extremely*). A manipulation check confirmed that participants in the high variability condition rated the temperature to be more variable ($M \pm SD: 4.76 \pm 1.19$) than those in the low variability condition (3.17 ± 1.34) [$t(183) = 8.48, p < .001, d = 1.25$]. Participants were then asked to imagine that they were residents of a small island, which depended entirely on rainfall to supply its water needs. Participants were informed that due to a severe drought, the government has imposed mandatory water restrictions, but they witnessed their neighbor watering the lawn and washing the car. Participants were asked to rate how willing they were to report their neighbor to the police, the extent to which their neighbor should be punished, and how bad their neighbor’s behavior was (7-point scale ranging from *Not at all* to *Extremely*; $\alpha = .78$). Consistent with our predictions, participants in the high variability condition were more willing to punish their neighbor ($M \pm SD: 4.61 \pm 1.27$) than those in the low variability condition (4.01 ± 1.28) [$t(183) = 3.19, p = .002, d = .47$].

The goal of Experiment 2 was to test whether high variability in one domain would make people more willing to punish unethical behavior in general. Participants were presented with a line graph of the actual US dollar to Euro average quarterly exchange rate over the past ten years. Then participants were thereafter presented with four scenarios in which people engaged in unethical behaviors that were unrelated to exchange rates, such as cheating, committing tax fraud, stealing money, and appropriating others’ belongings (adapted from Sharma, Mazar, Alter, & Ariely, 2014). Participants in the high variability condition indicated that the unethical behaviors should be punished more harshly ($M \pm SD: 5.45 \pm .86$) than those in the low variability condition ($4.84 \pm .99$) [$t(192) = 4.59, p < .001, d = .66$].

To dissociate variability from uncertainty, Experiment 3 manipulated perceived variability while keeping uncertainty constant. Participants were asked to play 10 trials of a dice rolling game on the computer. Each dice roll was equally unpredictable—the dice could land on any one of its six sides. We manipulated the perceived variability of realized dice rolls by altering the standard deviation of successive deviations (SDSD). In the low variability conditions, subsequent dice rolls were close to previous rolls (i.e., 1, 2, 1, 2, 3,

4, 6, 5, 5, 6; $SDSD = 0.96$) whereas in the high variability condition, subsequent dice rolls were far away from previous rolls (i.e., 1, 6, 2, 5, 1, 5, 3, 6, 2, 4; $SDSD = 3.56$). The actual dice rolls were identical across condition—they were just arranged differently to manipulate perceived variability. In an external manipulation check with 199 participants, this manipulation disentangled perceived variability from perceived uncertainty. We then presented participants with 3 scenarios about people engaging in unethical behavior (adapted from Gino, Shu, & Bazerman, 2010; Sharma, Mazar, Alter, & Ariely, 2014). As predicted, participants in the high variability condition punished the unethical behaviors more harshly ($M \pm SD: 5.80 \pm .80$) than those in the low variability condition (5.38 ± 1.00) [$t(189) = 3.25, p = .001, d = .47$].

Experiment 4 tested whether non-graphical representations of variability have similar effects as graphical representations. Participants were asked to play the dice rolling game as in Experiment 3 but with two changes: participants did not receive the feedback about whether they had accurately predicted the outcome of each dice roll; and on each trial, half the participants were presented with the outcomes of the current and past rolls depicted in a graph, whereas the other half were presented with the outcomes depicted in a table. A main effect of the variability indicated that participants in the high variability condition punished the unethical behaviors more harshly ($M \pm SD: 5.77 \pm .71$) than those in the low variability condition ($5.57 \pm .74$) [$F(1, 200) = 4.00, p = .047, d = .28$]. There was neither a main effect of representation format [$F(1, 200) = .11, p = .745, d = .05$], nor an interaction between representation format and variability [$F(1, 200) = .10, p = .750$]. Thus, Experiment 4 showed that the manner in which high vs. low variability is depicted—whether in a graphical format or a tabular format—does not matter. High variability makes people more punitive in either case.

The first goal of Experiment 5 was to test whether exposure to high variability influences people's behavior, and particularly, whether it makes people more willing to punish others even at a financial cost to themselves. Second, we tested whether merely *experienced variability*, which is not with any accompanying graphs or tables, would be sufficient to make people more punitive. Third, we tested whether high variability does not merely increase punitiveness but instead make people more likely to take action, no matter if it is punishing bad behavior or rewarding good behavior. The study used a 2 (variability: high vs. low) X 2 (response type: punish self-serving behavior vs. reward altruistic behavior) mixed design, with variability manipulated as a between-participant factor and punish vs. reward trials manipulated as a within-participant factor. We used the same dice rolling manipulation in Experiment 4 but this time, did not depict the dice rolls in a graph or a table—participants simply experienced dice rolls with high vs. low standard deviation of successive differences. Participants were then asked to play a three-person strategic game with three roles: the Decider, the Receiver, and the Judge (adapted from Peysakhovich, Nowak, & Rand, 2014; Rand, 2012). The Decider received 10 bonus points and decided whether to keep all 10 points for themselves and give 0 points to the Receiver (i.e., acted in a self-serving manner), or to give 5 points to the Receiver and keep 5 points for themselves (i.e., acted altruistically). The Receiver has no choice but to accept what the Decider gives them. The Judge received 20 bonus points and was informed about the Decider's decision. If the Decider acted in a self-serving manner, the Judge could choose whether or not to give up 5 of their points to punish the Decider, who would receive a deduction of 10 points to end up with nothing. If the Decider acted altruistically, the Judge could choose whether or not to give up 5 of their points to reward the Decider, who would receive 10 additional points to end up with

a total of 15 points. Participants were informed that they would receive their cumulative points in the form of a bonus, with 10 points being equivalent to one cent. Unbeknownst to them, all participants were "randomly" assigned to the role of a Judge. They played 20 rounds, in which the Decider acted egotistically in 10 rounds and altruistically in 10 rounds. The number of times that the Judge chose to punish or reward the Decider served as our behavioral dependent measure. We separately analyzed egotistical and altruistic trials because of large mean differences in the dependent variable base rate for punish trials ($M \pm SD: 5.56 \pm 4.03$) and reward trials (7.01 ± 3.72). The dependent measure was participants' choice on each trial (0 = not to punish, 1 = to punish), and the predictor was experimental condition (0 = low variability, 1 = high variability). As predicted, participants in the high variability condition ($M \pm SD: 5.79 \pm 3.94$) punished the Decider's self-serving decisions more than those in the low variability condition (5.32 ± 4.12), $B = .84, 95\% CI [.04, 1.64], SE = .41, odds ratio = 4.26, z = 2.06, p = .039$. Another hierarchical logistic regression on the 10 altruistic trials revealed that the Judge did not reward the Decider's altruistic decisions more in the high variability condition ($M \pm SD: 7.18 \pm 3.63$) compared to the low variability condition (6.85 ± 3.80), $B = .36, 95\% CI [-.59, 1.30], SE = .48, odds ratio = .54, z = .74, p = .461$.

We tested the underline mechanism of perceived social threat in Experiment 6, using 4 items such as "Our society faces more threats right now than it has faced in the past decade". We then measured participants' support for the death penalty using 5 items (from Tam, Au, & Leung, 2008). Finally, we measured perceived control. A test of indirect effect using Preacher and Hayes's (Preacher & Hayes, 2004) PROCESS Model 4 with 5000 bootstrap resamples revealed a significant indirect effect of variability on death penalty approval through perceived societal threat ($B = .12, boot SE = .05, 95\% CI = [.03, .23], z = 2.44, p = .015$). Importantly, the variability manipulation did not influence participants' perceived control ($M \pm SD: 4.76 \pm 1.34$ in high variability condition vs. 4.56 ± 1.48 in low variability condition) [$t(522) = 1.61, p = .11, d = 0.14$], and the indirect effect of variability on support for death penalty through perceived societal threat remained significant even when perceived control was added as a covariate, $B = .12, boot SE = .05, 95\% CI = [.03, 0.23], z = 2.40, p = .016$.

Six experiments provided evidence for one psychological consequence of exposure to high variability—greater punitiveness. Experiment 1 found that participants exposed to a graph depicting high rather than low variability in temperature were subsequently more willing to punish a neighbor who wasted water despite water restrictions. Experiment 2 found that participants exposed to a graph depicting high rather than low variability in currency exchange rates were more willing to punish individuals who committed unethical acts. Experiments 3 to 5 manipulated experienced variability by presenting participants with successive dice rolls with high vs. low standard deviation of successive differences. Those exposed to high variability were more willing to punish wrongdoers in scenarios, and to punish those who acted in a self-serving manner in experimental games, even at a cost to themselves. However, high variability did not increase the rate with which people rewarded altruistic behavior. Finally, Experiment 6 identified the underlying mechanism—people exposed to high rather than low variability in precipitation perceived the society as being more threatened, and were therefore more willing to support the death penalty.

Increased variability is one of the defining features of the 21st century, yet a silent transformation whose effects would gradually unravel over time. The current research presents the first steps at

identifying how this increased variability would influence people psychologically.

REFERENCES

- Baraniuk, C. (2015, June 23). The Devonian extinction saw the oceans choke to death. *BBC News Earth*. Retrieved from: <http://www.bbc.com/earth/story/20150624-the-day-the-oceans-died>
- Brass, D. J., Butterfield, K. D., & Skaggs, B. C. (1998). Relationships and unethical behavior: A social network perspective. *Academy of Management Review*, 23, 14-31.
- Collins, L. M., Graham, J. J., & Flaherty, B. P. (1998). An alternative framework for defining mediation. *Multivariate Behavioral Research*, 33, 295-312.
- Coumou, D., & Robinson, A. (2013). Historic and future increase in the global land area affected by monthly heat extremes. *Environmental Research Letters*, 8, 034018.
- Edwards, J. A., & Weary, G. (1998). Antecedents of causal uncertainty and perceived control: A prospective study. *European Journal of Personality*, 12, 135-148.
- Energy Information Administration. (2016). Petroleum & other liquids, domestic crude oil first purchase prices by area. *U.S. Energy Information Administration*. Retrieved from http://www.eia.gov/dnav/pet/pet_pri_dfp1_k_m.htm
- Gino, F., Shu, L. L., & Bazerman, M. H. (2010). Nameless+ harmless= blameless: When seemingly irrelevant factors influence judgment of (un) ethical behavior. *Organizational Behavior and Human Decision Processes*, 111, 93-101.
- Hansen, J., Sato, M., & Ruedy, R. (2012). Perception of climate change. *Proceedings of the National Academy of Sciences*, 109, E2415-E2423.
- Hoegh-Guldberg, O., Mumby, P. J., Hooten, A. J., Steneck, R. S., Greenfield, P., Gomez, E., ... & Knowlton, N. (2007). Coral reefs under rapid climate change and ocean acidification. *Science*, 318, 1737-1742.
- Ingram, B. L., & Malamud-Roam, F. (2013). *The West without water: What past floods, droughts, and other climatic clues tell us about tomorrow*. CA: University of California Press.
- Intergovernmental Panel on Climate Change. (2007). *Climate Change 2007—Impacts, Adaptation and Vulnerability*. UK: Cambridge University Press.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16, 366-395.
- Jullien, F. (2011). *The silent transformations*. Calcutta: Seagull Books.
- Kurry, T. H. (1999). Attitudes toward punishment: Public opinion and criminal justice. *Jurisprudencija*, 11, 43-69.
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science*, 1, 173-181.
- McNeil, B. I., & Matear, R. J. (2008). Southern Ocean acidification: A tipping point at 450-ppm atmospheric CO₂. *Proceedings of the National Academy of Sciences*, 105, 18860-18864.
- Mumby, P. J., Hastings, A., & Edwards, H. J. (2007). Thresholds and the resilience of Caribbean coral reefs. *Nature*, 450, 98-101.
- Palmer, T. N., & Räisänen, J. (2002). Quantifying the risk of extreme seasonal precipitation events in a changing climate. *Nature*, 415, 512-514.
- Peysakhovich, A., Nowak, M. A., & Rand, D. G. (2014). Humans display a 'cooperative phenotype' that is domain general and temporally stable. *Nature Communications*, 5, 4939.
- Pratt, J., Brown, D., Brown, M. (2005). *The new punitiveness: Trends, theories, perspectives*. S. Wallsworth, & W. Morrison (Eds.). Cullompton: Willan.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717-731.
- Rand, D. G. (2012). The promise of Mechanical Turk: How online labor markets can help theorists run behavioral experiments. *Journal of Theoretical Biology*, 299, 172-179.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Roberts, J. V., & Hough, M. (2002). *Changing attitudes to punishment: Public opinion, crime and justice*. Cullompton, Devon: Willan.
- Roff, G., Zhao, J. X., & Mumby, P. J. (2015). Decadal-scale rates of reef erosion following El Niño-related mass coral mortality. *Global Change Biology*, 21, 4415-4424.
- S&P (2015). S&P 500 Historical data, daily. *Yahoo!Finance*. Retrieved from <https://finance.yahoo.com/quote/%5EGSPC/history?period1=-157795200&period2=1451577600&interval=1d&filter=history&frequency=1d>
- Sharma, E., Mazar, N., Alter, A. L., & Ariely, D. (2014). Financial deprivation selectively shifts moral standards and compromises moral decisions. *Organizational Behavior and Human Decision Processes*, 123, 90-100.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Tam, K. P., Au, A., & Leung, A. K. Y. (2008). Attributionally more complex people show less punitiveness and racism. *Journal of Research in Personality*, 42, 1074-1081.
- Thompson, M. M., Naccarato, M. E., Parker, K. C. H., & Moskowitz, G. B. (2001). The personal need for structure and personal fear of invalidity measures: Historical perspectives, current applications, and future directions. In G. B. Moskowitz (Ed.), *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition* (pp. 19–39). Mahwah, NJ: Erlbaum.
- Western, B. (2006). *Punishment and inequality in America*. New York: Russell Sage Foundation.
- Whitson, J. A., & Galinsky, A. D. (2008). Lacking control increases illusory pattern perception. *Science*, 322, 115-117.

Consumer Value Co-creation in Frontline Healthcare Services

Sarah Dodds, Massey University, New Zealand
Sandy Bulmer, Massey University, New Zealand
Andrew Murphy, Massey University, New Zealand

EXTENDED ABSTRACT

Consumer value co-creation is in the forefront of healthcare research and considered vital to a person's overall health outcomes and wellbeing (McCull-Kennedy et al. 2012; Sweeney et al. 2015). Despite this, little is known about "the process of value creation, when it starts, what it includes and when it ends" (Grönroos 2011, 282). This is surprising, given the growing body of literature focusing on consumer value co-creation in services (Ostrom et al. 2015), product-design and new product development (Schreier, Fuchs and Siller 2012), and healthcare (Danaher and Gallan 2016).

Previous research has uncovered important value co-creation factors that occur prior, during and beyond service interactions (Anderson and Ostrom 2015) however, there is a paucity of research on the process of value co-creation. While conceptually value co-creation is considered "an ongoing, iterative, and continuous process extending well beyond individual transactions" (Vargo and Lusch 2012, 4) there is little empirical evidence to support this. Therefore, this research explores the *dynamics* of the *interaction* between the *consumer* and the *service encounters*, within Complementary and Alternative Medicine (CAM) healthcare services, to shed light on the actual process of value co-creation and its outcomes. The primary goal of this research is to explore how CAM consumers co-create value with their CAM healthcare providers to enhance their wellbeing and achieve specific health outcomes.

This research contributes to the growing body of research on healthcare service marketing, from a consumer's perspective, in three important ways. First, we contribute to the stream of literature on frontline interactive service encounters (Rafaeli et al. 2017), by developing a conceptual framework of consumer value co-creation, that provides new and important insights into how consumers co-create value. Second, we contribute to the stream of literature on consumer value co-creation service experience (McCull-Kennedy et al. 2015) by uncovering new factors (i.e., consumers' approach) of consumer co-creation that interrelate with previously suggested aspects (practice styles). Finally, our research has important implications for healthcare service practice that can ultimately contribute to enhancing peoples' quality of life (Danaher and Gallan 2016).

The research adopted a novel three phase semi-longitudinal multiple method case study research strategy using in-depth interviews and a simplified version of the Zaltman Elicitation Technique (ZMET). Sixteen consumers, 4 male and 12 females ranging from 24 – 77 years, who used CAM healthcare services on a regular basis, participated in the semi-longitudinal study. The first phase included a face-to-face interview with each of the participants which explored the participants' experiences of CAM and where emergent themes on consumer value co-creation surfaced. The second phase involved the participants collecting or taking photographs of images that represent their experiences of CAM. These pictures and images were then discussed in a second interview utilising five of the ZMET steps (Coulter and Zaltman 1995) including storytelling, missed images, sorting task, most representative image and summary image. The third phase involved an interview that explored the process of the participant's CAM health service experience as well as gather feedback on initial analysis from the first two phases. The three phase process allowed us to explore value co-creation over time and enabled methodologi-

cal rigour by using multiple methods over multiple time periods which provided dependable data (Woodside 2010).

We propose a consumer value co-creation framework that demonstrates the value co-creation process in a service context. Fundamentally we confirm that the process is ongoing, iterative, and continuous with no absolute defined beginning or end (Vargo and Lusch 2012). We also show that consumer value co-creation occurs prior, during and beyond the service interaction (Anderson and Ostrom 2015). Importantly this research explains the dynamics of the consumer value co-creation process and how consumers co-create value in frontline services, such as CAM healthcare.

Our findings show three ways that CAM consumers co-create value including: 1) consumer healthcare approach, 2) consumer value co-creation practice styles, and 3) consumer value co-creation activities. Firstly, three consumer healthcare approaches were identified and include: 1) Reactive – consumer has a results outlook; 2) Proactive – consumer has a preventative outlook; 3) Integrative – consumer has a wellness outlook. Interestingly a proactive and integrative approach resulted in enhanced wellbeing. Secondly, three consumer value co-creation practice styles preferred by CAM consumers were identified and include: 1) Advisory – practitioner is perceived as the expert; 2) Consultative – practitioner-client relationship is perceived as collaborative; and 3) Partnership – practitioner-client relationship is perceived as relatively equal with mutual respect. Thirdly, 12 consumer value co-creation activities that consumers engage in to co-create value were identified. The activities include five within practice (e.g. co-operation with practitioner, co-producing treatment plans) and seven outside practice consumer value co-creation activities (e.g. compliance, changing lifestyle factors, building personal knowledge). Engagement in these activities was found to have a positive impact on the health outcomes and wellbeing of the CAM consumer (Sweeney et al. 2015). Importantly, our findings show that a CAM consumers' healthcare approach appears to be influenced by the consumer value co-creation practice styles and consumer value co-creation activities engaged in. In fact, we found evidence that a CAM consumer can transition from one healthcare approach to another. This transition is facilitated by the practice style of the practitioner and the consumer value co-creation activities the consumer engages in.

Our findings have important implications for healthcare practice. A positive service experience with healthcare providers has the potential to contribute to an individual's health outcomes and wellbeing (Sweeney et al. 2015). Healthcare providers and practitioners should consider the practice style/s they adopt and the potential role they have in facilitating a consumer's healthcare approach and encouraging health promoting consumer value co-creation activities. Consultative and partnership practice styles tend to produce better health outcomes for consumers because they foster client-centred, cooperative and collaborative relationships that are educational and empowering. However, more empirical research is required to generalise these findings. Consumer value co-creation is important to understand in all healthcare settings (Zainuddin et al. 2013); therefore further research is required to extend our understanding of the consumer value co-creation process found in this study in a variety of healthcare services, and ultimately other service contexts.

REFERENCES

- Anderson, Laurel and Amy L. Ostrom (2015), "Transformative Service Research: Advancing our Knowledge about Service and Well-being," *Journal of Service Research*, 18(3), 243-249.
- Coulter, Robin H. and Gerald Zaltman (1995), "Seeing the Voice of the Customer: Metaphor-Based Advertising Research," *Journal of Advertising Research*, 35(4), 35-51.
- Danaher, Tracey S. and Andrew S. Gallen (2016), "Service Research in Health Care: Positively Impacting Lives," *Journal of Service Research*, 19(4), 433-437.
- Grönroos, Christian (2011), "Value Co-creation in Service Logic: A critical analysis," *Marketing Theory*, 11(3), 279-301.
- McColl-Kennedy, Janet R., Lilliemay Cheung, and Elizabeth Ferrier (2015), "Co-creating Service Experience Practices," *Journal of Services Management*, 26(2), 249-275.
- McColl-Kennedy, Janet R., Stephen L. Vargo, Tracey T. Dagger, Jillian C. Sweeney, and Yasmin van Kasteren (2012), "Health Care Customer Value Cocreation Practice Styles," *Journal of Service Research*, 15(4), 370-389.
- Ostrom, Amy L., Ananthanarayanan Parasuraman, David E. Bowen, Lia Patricio, and Christopher A. Voss (2015), "Service Research Priorities in a Rapidly Changing Context." *Journal of Service Research*, 18(2), 127-159.
- Rafaelli, Anat, Daniel Altman, Dwayne D. Gremler, Ming-Hui Huang, Dhruv Grewal, Bala Iyer, Ananthanarayanan Parasuraman, and Ko de Ruyter (2017), "The Future of Frontline Research: Invited Commentaries," *Journal of Service Research*, 20(1), 91-99.
- Schreier, Martin, Christoph Fuchs, and Darren W. Dahl (2012), "The Innovation Effect of User Design: Exploring Consumers' Innovation Perceptions of Firms Selling Products Designed by Users," *Journal of Marketing*, 76(5), 18-32.
- Sweeney, Jillian C., Tracey S. Danaher, and Janet R. McColl-Kennedy (2015), "Customer Effort in Value Cocreation Activities: Improving Quality of Life and Behavioral Intentions of Health Care Customers," *Journal of Service Research*, 18(3), 318-335.
- Vargo, Stephen L. and Robert F. Lusch (2008), "Service-dominant Logic: Continuing the Evolution," *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Vargo, Stephen L. and Robert F. Lusch (2012), "The Nature and Understanding of Value: A Service-Dominant Logic Perspective," *Review of Marketing Research*, 9(March), 1-12.
- Woodside, Arch. G (2010), *Case Study Research: Theory, Methods, Practice*. United Kingdom: Emerald.
- Zainuddin, Nadia, Rebekah Russell-Bennett, and Josephine Previte (2013), "The Value of Health and Wellbeing: An Empirical Model of Value Creation in Social Marketing," *European Journal of Marketing*, 47(9), 1504-1524.

Tasteful Work: The Emergence of an Aesthetic Category

Pierre-Yann Dolbec, Concordia University, Canada

EXTENDED ABSTRACT

EDM is a music category that encompasses a number of different music styles, from tropical house to big room house (Magnetic 2015). Yoga is another example of a category composed of different yoga styles, such as Dharma, Power, and Hot yoga (Ertimur and Coskuner-Balli 2015). The context of this study, the aesthetic category of luxury streetwear, similarly encompasses a number of distinct styles, from street goth to goth ninja. Tastefully practicing the styles of lumped in these categories requires an understanding of different teleoaffective structures—i.e. the set of acceptable ends, orders, uses, and emotions (Schatzki 2002)—that governs the practice of taste (Arsel and Bean 2013) for each style. Yet, these different music styles are lumped together under the same category label. We have yet to understand how such a lumping happens, and what are the implications for our understanding of category emergence.

In this brief article, I make the following theoretical contributions: First, I argue that an aesthetic category is constituted of what I term “distinct-yet-related” taste regimes. These regimes are distinct as they are orchestrated by different teleoaffective structures, but related as they share a number of objects, doings, and meanings. Second, I propose four types of institutional work—circumscribing, bridging, curation, and support—that lead to the lumping of distinct-yet-related taste regimes under the same aesthetic category.

Studying how categories emerge is important as categories are structuring devices that help orchestrate markets and direct market actors’ perception, attention, and efforts (Verge and Wry 2014). When actors evaluate music artists, yoga studios, and fashion products, they refer to these categories as a basis for their evaluation (Zuckerman 1999). I draw from institutional theory and a practice-based approach to taste, to explain how this happens.

Taste is central to this research in two ways: first, it is a well-known boundary-making mechanism which is important because actors use such “conceptual distinctions... to categorize objects, people, practices” (Lamont and Molnár 2002, 168). Consequently, examining new tasteful arrangements should offer cues about the emergence of boundaries associated with these. Second, taste is at the center of the evaluation of products in aesthetic markets (Entwistle 2009; Khaire 2014). I use Arsel and Bean’s (2013) practice-based conceptualization of taste. Arsel and Bean (2013, 900) theorize that the practice of taste is orchestrated by taste regimes, “discursively constructed normative systems that orchestrate the aesthetics of practice in a culture of consumption.” I take as a starting theoretical point that in markets driven by taste, the (cultural) codes on which the understanding of categories relies (Glynn and Navis 2013) are tightly linked with the objects, doings, and meanings that are orchestrated by such normative systems.

I combine this practice-based conceptualization of taste with the concept of institutional work. Institutional work are the actions that create, maintain or disrupt the practices, understandings, and rules sustaining markets (Dolbec and Fischer 2015, based on Lawrence and Suddaby 2006). The types of institutional work I introduce are part of the everyday routines of actors in the fashion market. The accumulation of actions resulting from these four types of institutional work from a multitude of actors leads over time to the emergence of a category. I now introduce the context of this study and briefly describe my methodology.

Method

Luxury streetwear is part of the contemporary menswear market. This novel market category emerged in the mid-to-late 2000s, is used by numerous legitimate publications (such as *Elle*, *Business of Fashion*, *WWD*, and *Esquire*), has redefined menswear (Johnson 2015) and led major high fashion brands towards “a steady move ... into the streetwear market” (Reeve 2012). Albeit the translation of streetwear elements to the realm of high end fashion is nothing new, ‘luxury streetwear’ as a category that is covered by critics, catered to by designers, for which there is a wide consumer interest, and which has a strong influence on the development of menswear is novel (Johnson 2015).

I used a multi-method, longitudinal data collection approach, combining 16 in-depth semi-structured interviews, a netnography of two online forums, the forums’ archives (representing 89 threads and 190 003 posts), the archives of related fashion forums (720 posts in 30 threads), as well as archival data in the form of magazines and newspaper articles (590 articles), as well as material from category actors such as blog posts (115 pages).

My findings emerged from an iterative process moving back-and-forth between data collection, data analysis, and theorization (Spiggle 1994). As my work progressed, I started to focus on the emergence of the luxury streetwear category. I coded each type of data in light of my emergent findings to answer my research questions, using an institutional approach to categorization as my enabling theory.

Institutional Work and the Creation of New Aesthetic Market Categories

Albeit space restriction precludes a thorough analysis of this. The perceived lack of differences between these two looks for regime outsiders serves well to illustrate the distinct-yet-related aspect of these regimes. Although similar to regime outsiders, these two looks showcase the following differences for regime insiders. On the left, we have a consumer wearing a number of brands orchestrated by the goth ninja regime, mostly Rick Owens (the jacket, shorts, and sneakers). On the right, we have a consumer wearing a mixture of high fashion brands associated with the street goth regime such as Pyrex (the shorts), streetwear brand such as Supreme (the hoodie) and mainstream sportswear brands such as Nike (the sneakers). Although divergent, both of these looks highlight similar objects, such as the heavy reliance on the color black and drop-crotch shorts, as well as doings, such as the use of leggings underneath the shorts. Next, I show how four types of institutional work lead to the lumping of distinct-yet-related taste regimes under the same aesthetic category.

Circumscribing Work

Circumscribing work represents the efforts of actors that leads to the lumping of distinct-yet-related taste regimes under the same category. First, some of the media and market-knowledge generating firms lack a proper understanding of the specificities of each regimes and as a result lump them as one of the same, thereby subsuming the regimes’ differences and facilitating the creation of the category. PR executives Ella Dror and Ashley Smith, who represent some luxury streetwear brands, emphasize this point when they mention that “different ‘areas’ [of fashion]... are sometimes lazily grouped together jointly ... within fashion media” although there is “there’s an important distinction to make between” them (Johnson 2015).

For example, Esquire magazine (Deleon 2015) introduce “17 luxury sneakers brands” and presents the Adidas Y-3 ‘Qasa’ sneakers with a description mentioning “goth ninja [as] the go-to descriptor of all things dark, designer, and drapery”, while the shoe is mentioned only 10 times during the last 10 years on the web forum at the center of this taste regime, but is part of adjacent regimes (health goth and street goth). The representation of these objects and some doings as being part of the same category to less informed consumers.

A second insight is that some of these actors who are well-aware of the differences between these distinct taste regimes willingly decide to simplify their complexities and differences and choose to group them as a whole to facilitate their news narrative. For example, Jon Caramanica (2015), of the New York Times “Critical Shopper” column, clumps together brands such as Givenchy, Raf Simons, Rick Owens, and Hood by Air, to explain how “the gulf between luxury fashion and street wear has largely disappeared.” For consumers, constantly seeing these brands grouped together by knowledgeable critics and showcased with pictures of highly similar outfits can orient their sensemaking efforts towards grouping these elements as part of one and the same. Together, these two processes lead to the conflation of multiple distinct regimes that might look the same to regime outsiders into a single category. I next explain three types of institutional work that facilitate circumscribing work and lead to the emergence of an aesthetic category.

Bridging Work

Bridging work refers to the bridging of two or more existing market categories by products or market actors. It has been recognized that category hybridization is often the starting point of a category (e.g. Jensen 2010). The name of the novel category under study, ‘luxury streetwear’, emphasizes this hybridization between luxury menswear and streetwear.

In my context, Rick Owens, and especially his “Dunks” shoes, represents an early example of such bridging work. Released in 2008, these shoes have become a staple of the closet of multiple regimes under the ‘luxury streetwear’ category. Pictured in Figure 1, they exemplify well bridging work: they are at the junction of the sportswear, streetwear, and high-end menswear categories. The sportswear influences are present as the shoe was intended as his “own parody combining Puma, Nike, and Adidas motifs” (Owens in Wallace 2015). The proximity was such that Nike sued Rick Owens (Wallace 2015). The streetwear influences are found within the Rick Owens aesthetic language, with machine-wash leathers, “elegant... goth...street” (Colapinto 2008) which at the start of his career was “real popular with rockers” (Courtney Love in Colapinto 2008). Finally, these shoes are well-embedded within high-end fashion as they were, according the fashion director at Barneys, “perfectly Barneys [and] appeals to a luxury customer” (Colapinto 2008). Following the emergence of the luxury streetwear category, Rick Owens became “fashion’s most imitated designer” (La Ferla 2009).

Bridging work also contributes to the category’s evolution by facilitating its expansion and encouraging the solidification of the links between elements of distinct-yet-related regimes. An example of this is the collaborations between designers and accessible fashion brands. Through collaborations, brands and designers come together and propose products that fit within the emergent aesthetic category. These collaborations are intended to target non-regime-specific consumers, such as “the Adidas consumer” (Mellery-Pratt 2015), rather than regime insiders, extending the reach of the emerging category. Examples abound: Rick Owens and Adidas, Undercover and Nike (under “Nike Giakosu”), and Louis Vuitton and Supreme. These collaborative efforts infuse an emerging category with new products,

serve as a mechanism for established but outsider producers to enter the emergent category, and extend the reach of the category.

Curation Work

Curation work entails the selection and interpretation of elements of regimes as well as their representation through discourses and images. This facilitates the creation of linkages between elements of distinct-yet-related taste regimes and signals to a non-regime-specific audience that the elements of these regimes belong to the same aesthetic category. Examples of this are found in lookbooks and editorials of retailers, which both represent objects of distinct-yet-related regimes together and provide scripts for “grooming rituals” (McCracken 1986). This curation also happens through the brands and designers a retailer chooses to sell. Retailers that span a number of regimes help in bringing these regimes together by offering a selection of brands that span the regimes of an emerging category. For example, SSENSE, a “store and e-store’s menswear [which] buy is focused on ... luxury streetwear” (BOF 2015), distributes brands that are elements of the goth ninja regime such as Ann Demeulemeester and Rick Owens, and brands that are elements of the street goth regime such as YEEZY, Hood by Air, and Off-White. They also represent them together, visually fostering linkages between these regimes. Lastly, I discuss support work and how these facilitates the establishment of convergent elements and sensemaking efforts from external audiences.

Support Work

Support work represents the everyday efforts of actors towards the offer of knowledge and advice around elements of a regime and the tasteful performance of the taste regime. Support work is not equal for all objects, doings, and meanings and acts as an indicator of the centrality of these elements within a regime, allowing actors from the media and market-knowledge generating firms to make sense of emerging regimes more easily. An example of this is the amount of attention given to certain brands cited and talked about on regime-centric web forums. How over time the online conversations crystallized four brands which were the most important ones for the regime.

When major publications such as the New York Times cover the emergence of the ‘luxury streetwear’ category, they leverage what is the most accessible elements of a regime which then become central key elements of the emerging aesthetic category. For example, an article in GQ mentions that “Demeulemeester’s dark designs have a diehard cult following, especially amongst fashion heads who lean towards the Internet-dubbed “goth ninja” aesthetic” (Deleon 2013). Other consumer-driven content pieces use the most-mentioned brands of these web forums as well as the pictures posted on these online communities. For example, the “Goth Ninja RPG Strategy Guide Part I” thread on the widely forum Reddit took “most of the pictures ... from the Stylezeitgeist WAYWT thread” as examples (GarvinCadalance).

Discussion: Categories and Market-Level Changes

Research on markets either has assumed that marketers worked towards the creation of whole markets, as exemplified by the following quotes of articles within that research stream: “brand-mediation market creation process” (Giesler 2012, 56) and “the emergence of a new market within the motorcycle industry” (Martin and Schouten 2014, 855), or has yet to conceptually distinguish between markets and categories. Yet, in the luxury streetwear case, and although the emergence of an aesthetic category in the fashion market led to the constitution of novel designer and retailer identities as well as the

creation of a number of consumption communities and specialized media outlets, the fashion market has mostly continued its evolution following its existing logics, norms, rules, conventions, logistical infrastructure, required technical skills and competencies, pricing mechanism, and competitive space (see Martin and Schouten 2014). More, the set of institutional actors, institutional logics, types of institutional work, and institutional boundaries stayed relatively unaffected (see Dolbec and Fischer 2015). In short, based on existing conceptualizations of markets in the literature (Dolbec and Fischer 2015; Martin and Schouten 2014), a new market was not created. A new market category was. Exploring developments in markets through the lens of market categories not only offers a perspective that addresses changes in markets that are more frequent (vs. the creation of whole new markets), it also opens the door to new research perspectives.

REFERENCES

- Arsel, Zeynep and Jonathan Bean (2013), "Taste Regimes and Market-Mediated Practices," *Journal of Consumer Research*, 39 (5), 899-917.
- Belk, Russell, Eileen Fischer, and Robert V. Kozinets (2012), *Qualitative Consumer and Marketing Research*, London, UK: Sage.
- BOF (2015), "SSENSE The Canadian Innovator Blending Music and Fashion," *The Business of Fashion*, <https://www.businessoffashion.com/community/companies/ssense>.
- Caramanica, Jon (2015), "Hooking Up," *T: The New York Times Style Magazine*, March 8th, https://www.nytimes.com/2015/03/08/t-magazine/hip-hop-fashion-style.html?_r=0.
- Colapinto, John (2008), "Elegant Monsters," *The New Yorker*, March 10th, <http://www.newyorker.com/magazine/2008/03/10/elegant-monsters>
- Colman, David (2012), "Trading Up: Showing a Little Restraint," *New York Times*, January 26th, <http://query.nytimes.com/gst/fullpage.html?res=9A05E0D81738F935A15752C0A9649D8B63>.
- DeLeon, Jian (2013), "Ann Demeulemeester is Leaving her Fashion House," *GQ Magazine*, November 20th, <http://www.gq.com/story/ann-demeulemeester-is-leaving-her-fashion-house>.
- (2015), "17 Luxury Sneaker Brands Worth Spending Your Money On," *Esquire Magazine*, December 4th, <http://www.esquire.com/style/mens-accessories/advice/g2538/luxury-sneaker-brands-worth-spending-money/>.
- Dolbec, Pierre-Yann and Eileen Fischer (2015), "Re-Fashioning a Field: Connected Consumers and institutional Dynamics in Markets," *Journal of Consumer Research*, 41 (6), 1447-1468.
- Entwistle, Joanna (2009). *The Aesthetic Economy of Fashion*, New York, NY: Berg Publishing.
- Ertimur Burçak and Gokçen Coskuner-Balli (2015), "Navigating the Institutional Logics of Markets: Implications for Strategic Brand Management," *Journal of Marketing*, 79 (2), 40-61.
- Giesler, Markus (2012), "How Doppelgänger Brand Images Influence the Market Creation Process: Longitudinal Insights from the Rise of Botox Cosmetic," *Journal of Marketing*, 76 (6), 55-68.
- Glynn, Mary Ann and Chad Navis (2013), "Categories, Identities, and Cultural Classification: Moving Beyond a Model of Categorical Constraint," *Journal of Management Studies*, 50 (6), 1124-1137.
- Khaire Mukti (2014), "Fashioning an Industry: Socio-cognitive Processes in the Construction of Worth of a New Industry," *Organization Studies*, 35 (1), 41-74.
- Jensen, Michael, (2010), "Legitimizing Illegitimacy: How Creating Market Identity Legitimizes Illegitimate Products," *Research in the Sociology of Organizations*, 31, 39-80.
- Johnson, Rebecca May (2015), "Will High Fashion's Love Affair with Streetwear Last?," *The Business of Fashion*, February 2nd, <https://www.businessoffashion.com/articles/intelligence/will-high-fashions-love-affair-streetwear-last>.
- Karababa, E Eminegül and Guliz Ger (2011), "Early Modern Ottoman Coffeehouse Culture and the Formation of the Consumer Subject," *Journal of Consumer Research*, 37 (5), 737-760.
- Lamont, Michèle and Virág Molnár (2002), "The Study of Boundaries in Social Science," *Annual Review of Sociology*, 28, 167-95.
- La Ferla, Ruth (2009), "Imitate That Zipper!," *New York Times*, September 2nd, <http://www.nytimes.com/2009/09/03/fashion/03OWENS.html>.
- Lawrence, Thomas B. and Roy Suddaby (2006), "Institutions and Institutional Work," in *Handbook of Organization Studies*, 2nd Edition, S.R. Clegg, C. Hardy, T.B. Lawrence and W.R. Nord (Eds.), London: Sage, 215-54.
- Magnetic (2015), "Stop Calling EDM EDM – Here is a Proper Definition," *Magnetic Magazine*, October 7th, <http://www.magneticmag.com/2015/10/stop-calling-edm-edm-here-is-a-proper-definition/#!>.
- Martin, Diane and John Schouten (2014), "Consumption-Driven Market Emergence," *Journal of Consumer Research*, 40 (5), 855-70.
- McCracken, Grant (1986), "Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods," *Journal of Consumer Research*, 13 (1), 71-84.
- Mellery-Pratt, Robin (2015), "Why Are Sportswear Giants Nike and Adidas Embracing Fashion?," *The Business of Fashion*, January 21st, <https://www.businessoffashion.com/articles/intelligence/nike-adidas-sportswear-fashion>.
- Reeve, Georgia (2012), "10 Reasons why High Fashion is Beating Streetwear at its Own Game," *HighSnobity*, September 25th, <http://www.highsnobity.com/2012/09/25/10-reasons-why-high-fashion-is-beating-streetwear-at-its-own-game/>
- Rosa, José Antonio, Joseph F. Porac, Jelena Runser-Spanjol, and Michael S. Saxon (1999), "Sociocognitive Dynamics in a Product Market," *Journal of Marketing*, 63 (4), 64-77.
- Schatzki, Theodore (2002), *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*, University Park: Pennsylvania State University Press.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21 (3), 491-503.
- Vergne, Jean-Philippe and Tyler Wry (2014), "Categorizing Categorization Research: Review, Integration, and Future Directions," *Journal of Management Studies*, 51 (1), 56-94.
- Wallace, Chris (2015), "How Rick Owens' Beautiful, Dark, Twisted Fantasy Came to Define Modern Menswear," *Complex Magazine*, May 28th, <http://ca.complex.com/style/2015/05/rick-owens-menswear-influence-complex-profile>.
- Zuckerman, Ezra W. (1999), "The Categorical Imperative: Securities Analysts and the Illegitimacy Discount," *American Journal of Sociology*, 104 (5), 1398-438.

Alcohol Consumption and Risk-Taking Behavior: An Analysis of 17-Year Data on Fatal Traffic Accidents

Ioannis Evangelidis, Bocconi University, Italy

EXTENDED ABSTRACT

Fatal traffic accidents have affected over 1.5 million people in the US during the past 17 years. Among those affected, 653,355 people have ultimately lost their lives. Police and media reports frequently mention alcohol as the leading cause of fatal traffic accidents. Indeed, academic research has found that car drivers who consumed alcohol before driving were more likely to be injured in car crashes (Connor, Norton, Ameratunga, and Jackson 2004). This result is hardly surprising as drivers who consume alcohol and then drive are more likely to exhibit impaired driving performance (e.g., Weiler et al. 2000). In this paper I demonstrate that, beyond its detrimental effect on driving performance, alcohol consumption is associated with increased risk-taking behavior as evidenced by lower restraint use rates among both drivers and occupants of vehicles.

Prior academic research supports the conjecture that alcohol consumption can increase risk-taking behavior. Lab studies have shown that experimental manipulations of alcohol consumption increase people's propensity to seek risky monetary gains (Lane, Cherek, Pietras, and Tcheremissine 2004), as well as their willingness to enter high-risk situations during a driving simulation (Burian, Liguori, and Robinson 2002). Alcohol consumption can increase risk-taking behavior because it reduces people's expectations about potential negative outcomes (Fromme, Katz, and D'Amico 1997). Further, alcohol consumption has been shown to have a detrimental effect on people's attentional processing of threat-related cues (Curtin, Patrick, Lang, Cacioppo, and Birbaumer 2001). In turn, impairments in attention to the threat cue can inhibit fear response. Finally, alcohol consumption inflates positive self-perceptions and increases overconfidence (Schweitzer and Gomberg 2001; Schweitzer and Kerr 2000; Steele and Josephs 1990). Prior research has found that people tend to report positively biased self-evaluations on traits they deem important after consuming alcohol (Banaji and Steele 1989). In the context of transportation, another example of risk-taking behavior beyond dangerous operation of the motor vehicle by its driver is restraint omission by the driver and occupants of the vehicle.

Therefore, based on the aforementioned research, assuming that alcohol consumption reduces people's expectations about potential negative outcomes (such as a potential traffic accident), I hypothesized that both the driver and occupants of a vehicle will be less likely to be restrained after consuming alcohol. I empirically tested my hypothesis in a large dataset of fatal traffic accidents that occurred in the US between January 1, 1999 and December 31, 2015. I derived individual-level data about victims of fatal traffic accidents from the Fatality Analysis Reporting System (FARS) of the National Highway Traffic and Safety Administration (NHTSA). The dataset comprised the following variables: age, race, and type (i.e., driver, occupant, pedestrian, or pedalcyclist) of the person, as well as whether the person was using a restraint (i.e., seat belt or helmet), whether the person was tested for alcohol (including the result of the test), and whether the person was killed.

First, I regressed whether the individual died in the traffic accident on the result of his or her alcohol test. Not surprisingly, a larger percentage of people that tested positive for alcohol died compared to the percentage of people that tested negative. Importantly, I regressed whether the individual was using a restraint on the result of his or her alcohol test and found a significant effect of alcohol consumption. While the majority of victims that tested negative for

alcohol were using a restraint, less than a third of the victims that tested positive were restrained. Note that all effects remain highly significant when controlling for the age, race, and type of the victim. Importantly, the relationship between alcohol and restraint use is significant for both drivers and occupants of the vehicle, as well as for people of all ages and races.

I further tested whether restraint use mediated the effect of alcohol consumption on the victim's probability of dying. I found that the effect of alcohol on the victim's probability of dying was significantly mediated by restraint use. Interestingly, my analysis shows that restraint use accounts for a large part of the effect of alcohol consumption on traffic fatalities. This result suggests that alcohol consumption is responsible for traffic fatalities not only due to its adverse effect on driving performance, but also because inebriated individuals are less likely to use a restraint. However, it is important to note that the current data do not permit any inferences about causality. Nevertheless, the experimental research discussed in the introduction suggests that alcohol consumption may account for at least part of the variance in restraint use.

In conclusion, according to the Center for Disease Control and Prevention (CDC), excessive alcohol consumption led to approximately 88,000 deaths and 2.5 million years of potential life lost each year in the US from 2006-2010, shortening the lives of dead victims by an average of 30 years (see also Stahre, Roeber, Kanny, Brewer, and Zhang 2014). Moreover, excessive alcohol consumption was responsible for 1 in 10 deaths among working-age adults aged 20-64 years, while the economic costs of excessive drinking in 2010 were estimated at \$249 billion, or \$2.05 a drink (Sacks, Gonzales, Bouchery, Tomedi, and Brewer 2015). Finally, alcohol consumption is the world's third-largest risk factor for loss of years to disease and disability ranking higher than unsafe water and sanitation, high blood pressure, high cholesterol, and tobacco use (Sridhar 2012; World Health Organization 2011). Until today, public health campaigns have predominantly focused on preventing traffic fatalities by persuading drivers to refrain from getting behind the wheel after consuming alcohol. My data suggest that public health campaigns should inform not only drivers—but also occupants—of vehicles about the relationship between alcohol and risk-taking. Raising awareness about the relationship between alcohol consumption, restraint use, and traffic fatalities is necessary in order to minimize future casualties.

REFERENCES

- Banaji, Mahzarin and Claude Steele (1989), "Alcohol and Self-Evaluation: Is a Social Cognition Approach Beneficial?," *Social Cognition*, 7, 137-51.
- Burian, Scott, Anthony Liguori, and John Robinson (2002), "Effects of Alcohol on Risk-Taking During Simulated Driving." *Human Psychopharmacology: Clinical & Experimental*, 17, 141-50.
- Center for Disease Control and Prevention. *Fact Sheets – Alcohol Use and your Health*. (<http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>).
- Center for Disease Control and Prevention. *Alcohol-Related Disease Impact*. (Atlanta, GA: CDC).
- Connor, Jennie, Robyn Norton, Shanthi Ameratunga, and Rod Jackson (2004), "The Contribution of Alcohol to Serious Car Crash Injuries," *Epidemiology*, 15, 337-44.

- Curtin, John, Christopher Patrick, Alan Lang, John Cacioppo, and Niels Birbaumer (2001), "Alcohol Affects Emotion Through Cognition," *Psychological Science*, 12, 527-31.
- Fromme, Kim, Elizabeth Katz, and Elizabeth D'Amico (1997), "Effects of Alcohol Intoxication on the Perceived Consequences of Risk Taking," *Experimental and Clinical Psychopharmacology*, 5, 14-23.
- Lane, Scott, Don Cherek, Cynthia Pietras, and Oleg Tcheremissine (2004), "Alcohol Effects on Human Risk Taking," *Psychopharmacology*, 172, 68-77.
- Sacks, Jeffrey, Katherine Gonzales, Ellen Bouchery, Laura Tomedi, and Robert Brewer (2015), "2010 National and State Costs of Excessive Alcohol Consumption," *American Journal of Preventive Medicine*, 49, e73-9.
- Schweitzer, Maurice and Leslie Gombert (2001), "The Impact of Alcohol on Negotiator Behavior: Experimental Evidence," *Journal of Applied Social Psychology*, 31, 2095-126.
- Schweitzer, Maurice and Jeffrey Kerr (2000), "Bargaining under the Influence: The Role of Alcohol in Negotiations. *Academy of Management Perspectives*, 14, 47-57.
- Sridhar, Devi (2012), "Health Policy: Regulate Alcohol for Global Health," *Nature*, 482, 302.
- Stahre, Mandy, Jim Roeber, Dafna Kanny, Robert Brewer, and Xingyou Zhang (2014), "Contribution of Excessive Alcohol Consumption to Deaths and Years of Potential Life Lost in the United States," *Preventing Chronic Disease*, 11, 130293.
- Steele, Claude and Robert Josephs (1990), "Alcohol Myopia: Its Prized and Dangerous Effects," *American Psychologist*, 45, 921-33.
- Weiler, John, John Bloomfield, George Woodworth, Angela Grant, Teresa Layton, Timothy Brown, David McKenzie, Thomas Baker, Ginger Watson (2000), "Effects of Fexofenadine, Diphenhydramine, and Alcohol on Driving Performance: A Randomized, Placebo-Controlled Trial in the Iowa Driving Simulator," *Annals of Internal Medicine*, 132, 354-63.
- World Health Organization (2011). *Global Status Report on Alcohol and Health 2011*. WHO: Geneva.

Changing Brand Attitudes Using Relevant Affective Cues: An Investigation of Relational Processing in Evaluative Conditioning

Xiaomeng Fan, Northwestern University, USA
Galen Bodenhausen, Northwestern University, USA

EXTENDED ABSTRACT

Evaluative conditioning (EC) refers to a change of evaluations toward a conditioned stimulus (CS) due to its repeated pairings with an unconditioned stimulus (US). In marketing research and practices, EC has elicited great interests because it can serve as an effective approach to changing consumer preferences. For example, pairing a brand with celebrity endorsers or pleasant images can build consumers' positive attitudes toward the brand (Gibson 2008; Kim, Allen, and Kardes 1996; Sweldens, Van Osselaer, and Janiszewski 2010). Pairing unhealthy products with disgusting images can reduce consumers' choice of those products (Hollands, Prestwich, and Marteau 2011; Shaw et al. 2016). Despite the rich demonstration of EC effects in both the psychology and marketing literatures, there are still questions regarding the mental processes responsible for EC (Hofmann et al. 2010). One dominant account is a simple associative process, according to which EC effects result from automatic formation of associative links between the CS and the US or between the CS and the feeling elicited by the US. As a result, the CS acquires a similar evaluation as the US. In contrast, some recent studies suggest that the mechanism for EC may be more complicated than an associative process because experimentally provided information about the relation between CSs and USs can influence EC (Hu, Gawronski, and Balas 2017; Zanon et al. 2014). This suggests that if the CSs and USs have a plausible conceptual relation (e.g., "CS causes US"), EC effects should be more pronounced in implicit attitudes toward the CS, compared to when such relations are absent. We compare the impact of USs matched in valence and intensity but varying in relational plausibility to the CS. On the associational view, EC effects should be similar irrespective of relational plausibility, but the relational view predicts that EC effects will be substantially stronger when the US has a plausible relation with the CS.

In study 1, we used a 3 (USs: plausible, implausible, control) \times 2 (product type: sweet foods, liquors) between-subject design. The evaluation targets were novel, fictitious brands of sweet foods or liquors. CSs were images showing brand logos with products offered by the brands. In the EC procedure, CSs were paired with either obesity, car accident, or blank (control) images. Obesity (car accident) images were plausible USs for sweet foods (liquors). The two types of USs were pretested as equivalent in their negativity. We measured implicit attitudes toward the brand using the affective misattribution procedure (AMP) and the brief implicit association test (BIAT). We used USs, product type and their interactions to predict implicit attitudes toward the brands. The results on both AMP and BIAT were more consistent with the relational (versus associational) model: implicit attitudes toward the brand were significantly lower for the plausible than implausible US group or the control group. And there was no significant difference between the implausible US group and the control group in their implicit attitudes toward the brand. Product type did not moderate these results. Thus, the results of study 1 indicate that EC effects occur only when the USs have plausible relations with the CSs.

In study 2, we aimed to replicate study 1 while seeking conditions where the classic EC effect, which reflects the associational view, would occur. We found that the classic EC effect occurred when evaluation targets were more perceptually ambiguous (e.g., when brand logos consisted only of abstract images). In this case, implicit attitudes toward the brands were lowered to a similar extent by both plausible and implausible negative USs. But when people's initial perceptions

toward the CS were relatively clear (e.g., when brand logos included concrete product images), implicit attitudes were significantly influenced only by the plausible USs, thus replicating the results in study 1.

Overall, the above findings indicate that EC may involve both associational and relational processes, and one process can dominate over the other depending on people's initial perceptions toward the CS. When the initial perceptions are not clear, the implicit attitudes toward the CS would be mainly influenced through the associational process. When the initial perceptions are relatively clear, the implicit attitudes toward the CS would be changed primarily through the relational process. For marketing practices, our findings suggest that when consumers have little knowledge toward a brand (e.g., foreign brands, newly launched brands), EC can effectively shape consumers' implicit attitudes toward the brand irrespective of the conceptual relations between the brand and the USs employed in advertising messages. But in some cases, consumers may already have some knowledge toward a brand (e.g., local brands, existing brands), and they know what types of products the brand offers. In those cases, it would be more effective to use conceptually relevant USs to change consumers' implicit attitudes toward the brand.

REFERENCES

- Gibson, Byron (2008), "Can Evaluative Conditioning Change Attitudes toward Mature Brands? New Evidence from the Implicit Association Test," *Journal of Consumer Research*, 35 (June), 179-188.
- Hofmann, Wilhelm, Jan De Houwer, Marco Perugini, Frank Baeyens, and Geert Crombez (2010), "Evaluative Conditioning in Humans: A Meta-Analysis," *Psychological Bulletin*, 136(3), 390-421.
- Hollands, Gareth J., Andrew Pretwich, and Theresa M. Marteau (2011), "Using Aversive Images to Enhance Healthy Food Choices and Implicit Attitudes: An Experimental Test of Evaluative Conditioning," *Health Psychology*, 30(2), 195-203.
- Hu, Xiaoqing, Bertram Gawronski, and Robert Balas (2017), "Propositional Versus Dual-Process Accounts of Evaluative Conditioning: I. The Effects of Co-Occurrence and Relational Information on Implicit and Explicit Evaluations," *Personality and Social Psychology Bulletin*, 43(1), 17-32.
- Kim, John, Chris T. Allen, and Frank R. Kardes (1996), "An Investigation of the Mediation Mechanisms underlying Attitudinal Conditioning," *Journal of Marketing Research*, 33 (August), 318-328.
- Shaw, Jena A., Evan M. Forman, Hallie M. Espel, Meghan L. Butryn, James D. Herbert, Michael R. Lowe, and Chantal Nederkoorn (2016), "Can Evaluative Conditioning Decrease Soft Drink Consumption," *Appetite*, 105(October), 60-70.
- Sweldens, Steven, Stijn M. J. Van Osselaer, and Chris Janiszewski (2010), "Evaluative Conditioning Procedures and the Resilience of Conditioned Brand Attitudes," *Journal of Consumer Research*, 37 (October), 473-489.
- Zanon, Riccardo, Jan De Houwer, Anne Gast, and Colink Tucker Smith (2014), "When Does Relational Information Influence Evaluative Conditioning," *The Quarterly Journal of Experimental Psychology*, 67(11), 2105-2122.

The Rise of the Impulsive Shopper: The Case of the Amazon Dash Button

Maya Farah, Lebanese American University, Lebanon
Zahy Ramadan, Lebanese American University, Lebanon

EXTENDED ABSTRACT

When completing a purchase decision, consumers are no longer limited to the traditional journey across the marketing funnel stages of awareness, consideration, evaluation, and action. Indeed, technological disruptions, such as the Amazon Dash buttons that allow customers to remotely order a given product by the mere press of a button (Hockett 2015), are removing key stages of the consumer journey, forgoing the consumer selection phase and forcing his/her loyalty to a given retailer or brand.

Technological disruptions to the consumer journey have not yet been discussed in the marketing literature. The case of the Amazon Dash buttons will be utilized to develop a further understanding of the changes in consumer decision making and consumer impulsive purchase behavior resulting from their usage.

Conceptual Framework

The Effects of Tech Disruptions on Retailers and Shoppers

Consumer impulsiveness is an individual's sudden desire or urge to purchase an item in an immediate, spontaneous manner; this is generally bought on by physical closeness to the product or the promise of prompt satisfaction and gratification (Arens and Rust 2012). Perceived service value is a consumer's expectation that a given product's usage allows him/her to achieve benefits that are believed to be of value to the user (Boksbarger and Melsen 2011). Accordingly, the researchers hypothesize:

Hypothesis 1: The higher the shopper's perceived service value of Amazon Dash button, the higher his/her purchase impulsiveness.

When the consumer perceives that the value of the service he/she is receiving from the retailer is congruent to his/her personal needs, this establishes an affective bond of love and commitment to the retailer (Sabbir and Nazrul 2014; Ramadan and Farah 2017). Nevertheless, consumer love is based on a retailer's efforts not only to satisfy the consumers' needs, but to also provide them with additional values and benefits that induce affective responses (Hye-Young et al. 2008). Consequently, the researchers posit the following:

Hypothesis 2: The higher the shopper's perceived service value of Amazon Dash button, the higher his/her retailer love.

The Effects of Consumers' Affective Feelings Towards Retailers on Shopping Impulsiveness

Consumer impulsiveness has also been found to be a direct result of retailer love (Mishra et al. 2014). The emotions of attachment towards the retailers tend to arouse a positive, affective response in consumers that in turn has a significant impact on impulsive purchasing tendencies (Mishra et al. 2014). In fact, consumers are more likely to purchase and utilize Dash buttons if they feel an affective feeling to Amazon. Consequently, the researchers hypothesize:

Hypothesis 3: The higher the shopper's retailer love, the higher his/her shopping impulsiveness.

The Effects of Consumer Self-Control on Shopping Impulsiveness

An important factor in determining a consumer's likelihood to buy products through the Amazon Dash button is his/her individual spending self-control. Accordingly, a decrease in self-control leads to an increase in a consumer's likelihood to purchase products and services impulsively (Sharma et al. 2014). Subsequently, the researchers hypothesize:

Hypothesis 4: The higher the shopper's perceived consumer self-control, the lower his/her purchase impulsiveness.

Based on the above discussion, this study proposes a conceptual framework that identifies the main triggers for consumer impulsive purchases relative to three specific elements, namely: (1) the perceived service value of Dash button, (2) retailer's love and affective commitment, as well as (3) consumer spending self-control.

Research Methodology

A survey was devised including multi-item scales adopted from the literature to measure the interrelationships between the aforementioned constructs. The empirical data was collected in the US through a web survey distributed and completed by 630 Amazon prime users of the Dash Button. The data was analyzed using SPSS 24 and LISREL 8.8.

Discussion of the Findings and Implications

The findings showed all linkages to be significant. The estimation of the model shows a good fit. As hypothesized, perceived service value had a direct impact on impulsiveness and retailer's love. Retailer's love had also a significant positive effect on impulsiveness, while consumer self-control had -as expected- a significant negative effect on impulsiveness.

The empirical findings of this study show the scale at which technological advances such as the Amazon Dash button would affect consumers' buying patterns and their expected effect on the traditional consumer journey. With its Dash button technology, Amazon will make it very difficult for shoppers using it to consider new brands. As the technological disruption's perceived value increases for consumers in regards to value and convenience, these shoppers are expected to have higher affective feelings towards the retailer, and hence to potentially become more impulsive in their buying behavior. While shoppers' spending self-control will be the main inhibitor on the impulsiveness attribute, the consumer journey in its different stages and touch points appears to be fundamentally altered with the adoption of these buttons. Ultimately, the dash button is expected to increase the relative cost of searching for other brands and retailers as it promotes brand and store (Amazon) loyalty. The dash button is expected to have a long-term service value and hence may become a necessity in certain product categories.

Conclusion

This study enhanced the understanding of the alterations brought to the consumer's journey in light of the newest technological disruptions, specifically the Amazon Dash Button and contributed to the development of theories related to consumer impulsive behavior in online environments. This study is yet not free from limitations as it

utilizes data only from Amazon Prime users based in the US market. Future research could focus on consumer impulsiveness with regards to various product categories and to other types of tech disruptions. It could also be conducted in other markets.

REFERENCES

- Arens, Z.G., & Rust, R.T. (2012). The duality of decisions and the case for impulsiveness metrics. *Academy of Marketing Science Journal*, 40(3), 468–479.
- Boksberger, P.E., & Melsen, L. (2011). Perceived value: A critical examination of definitions, concepts and measures for the service industry. *The Journal of Services Marketing*, 25(3), 229–240.
- Hockett, M. (2015). *No joke: Amazon's dash button enables one-push ordering*. Industrial Distribution, Madison: Advantage Business Media.
- Hye-Younh, K., Youn-Kyung, K., Jolly, L., & Fairhurst, A. (2008). Satisfied customers' love toward retailers: A cross-product exploration. *Advances in Consumer Research*, 35, 507–515.
- Mishra, H. G., Sinha, P. K., & Koul, S. (2014). Buying impulsive trait: An effective moderator for shopping emotions and perceived risk. *Journal of Management Research*, 14(2), 109–120.
- Rahman, M.S., & Islam, N. (2014). Value Congruence and Consumer's Satisfaction towards Online Banking—The Mediation Role of Affective Commitment. *Management & Marketing. Challenges for the Knowledge Society*, 9(3), 347-358
- Ramadan, Z.B., & Farah, M.F. (2017). The Pokémonisation of the first moment of truth. *International Journal of Web Based Communities*, 13(2), 262-277.
- Sharma, P., Sivakumaran, B., & Marshall, R. (2014). Exploring impulse buying in services: Toward an integrative framework. *Journal of the Academy of Marketing Science*, 42(2), 154–170.

Moved by Fear: Exploring Affect as a Driver of Narrative Transportation

Matthew Farmer, University of Arizona, USA
Jesper Nielsen, University of Arizona, USA

EXTENDED ABSTRACT

Prior research has shown that narrative transportation (i.e., immersion into a story) can be an important factor in persuasion by reducing the connection to one's own beliefs and attitudes toward the focal content of the story (Green 2004). Common to many models of transportation-driven persuasion is the idea that narrative transportation generates greater affective response that in turn influences persuasion (Escalas 2004; Green and Brock 2000). While most persuasive narratives attempt to generate positive affect through transportation, one domain that relies on narratives to help facilitate persuasion is that of fear appeals, where the negative consequences of certain behaviors are portrayed through narratives that can elicit very strong negative emotions, such as fear.

In this research we propose that, whereas current transportation models show affective response as an outcome of narrative transportation and a driver of persuasion, narratives that rely on fear may follow a different route to persuasion. Specifically, we propose that the experience of fear arousal results in an alternative relationship between transportation and affect such that the affect can help drive narrative transportation. We predict that this happens because fear arousal will lead to a general state of increased vigilance (Nielsen, Shapiro, and Mason 2010; Pratto and John 1991) that in turn drives increased processing of the narrative, leading to higher transportation (Nielsen and Escalas 2010). We further propose that the fear-induced narrative transportation will facilitate non-affective drivers of persuasion, such as reduced counterarguing. We explore this proposal across three studies.

Overview of studies. In all studies, participants saw narrative ads in the form of storyboards (Escalas 2004, Nielsen and Escalas 2010) aimed at curbing distracted driving. Depending on the condition, these narratives were either neutral or fear evoking and were always followed by a measure of narrative transportation (Green and Brock 2000).

In study 1, participants were randomly assigned to either a fearful writing task or a neutral writing task. A pretest confirmed that the fear writing task significantly increased ratings on a fear arousal scale (Keller and Block 1996) compared to a control. Following the writing prime, all participants saw the storyboard for a neutral Public Service Announcement (PSA) titled "It Can Wait". Following completion of the storyboard review, participants completed the narrative transportation scale (Green and Brock 2000) and a few demographic items. Participants' facial expressions were recorded during the writing task and analyzed using the Noldus FaceReader 6 to generate scores on several different emotions. Panel data analysis controlling for fixed effects confirmed an overall effect of fear on "scared" facial expressions as well as an interaction between time and the fear condition. Comparing narrative transportation ($\alpha = .83$) scores for the two conditions confirmed that participants who were primed with fear prior to reviewing the PSAs experienced higher transportation than those in the no prime condition ($M_{\text{NeutralPrime}} = 5.70$, $M_{\text{FearPrime}} = 6.21$, $F(1, 194) = 7.84$, $p < .01$).

In study 2, participants were randomly assigned to either the neutral storyboard used above or to a more fearful version of the same storyboard. After viewing the PSA, participants completed a modified version of the narrative transportation scale ($\alpha = .73$) and a fear arousal scale adapted from the PANAS scale. Results confirmed

the predicted effect of the fearful PSA on fear arousal ($M_{\text{Neutral}} = 2.43$, $M_{\text{Fearful}} = 2.91$, $F(1, 163) = 11.44$, $p < .001$) and transportation ($M_{\text{Neutral}} = 4.92$, $M_{\text{Fearful}} = 5.63$, $F(1, 163) = 9.76$, $p < .01$). We then tested whether fear arousal mediated the direct effect of fear condition on transportation ($\beta = .238$, $t = 3.12$, $p < .01$). Our test of fear arousal as a mediator of this relationship (PROCESS model 4, Hayes 2009) showed a direct effect of fear condition on fear arousal ($\beta = .474$, $t = 3.38$, $p < .001$, 95% CI = [.20, .75]). The direct effect of fear condition on transportation was no longer significant when fear arousal was included as a mediator ($\beta = .270$, $t = 1.41$, $p = .16$, 95% CI = [-.11, .65]).

Study 3 directly tested the full model predicting fear's effect on persuasion through narrative transportation and counterarguing. After viewing one of the two storyboards presented in study 2, participants then filled out the same narrative transportation scale used in previous studies, a version of the fear arousal scale used in the pretest for study 1 (Keller and Block 1996), a scale to measure counterarguing (Nabi, Moyer-Gusé, and Byrne 2007), and a persuasion measure. Results confirmed that participants who viewed the fearful version of the PSA indicated increased fear arousal ($M_{\text{Neutral}} = 2.28$, $M_{\text{Fearful}} = 2.38$, $F(1, 233) = 3.92$, $p < .05$), transportation ($M_{\text{Neutral}} = 5.63$, $M_{\text{Fearful}} = 6.25$, $F(1, 233) = 13.48$, $p < .001$), and persuasion ($M_{\text{Neutral}} = 5.41$, $M_{\text{Fearful}} = 6.59$, $F(1, 233) = 32.60$, $p < .001$). We then tested whether the direct effect of fear arousal on counterarguing ($\beta = -.232$, $t = -3.64$, $p < .001$) was mediated by transportation (PROCESS model 4, Hayes 2009). We found a direct effect of fear arousal on transportation ($\beta = 1.59$, $t = 4.70$, $p < .001$, 95% CI = [1.19, 1.99]), while the direct effect of fear arousal on counterarguing was no longer significant when transportation was included as a mediator ($\beta = -.249$, $t = -1.05$, $p = .29$, 95% CI = [-.72, .22]).

In the present research, we seek to better understand fear arousal's effects on narrative persuasion. We accomplished this by presenting an unrelated fear manipulation prior to exposure to a neutral narrative and showing a causal effect of incidental fear arousal on transportation (study 1). We replicate this effect through manipulation of fear within the PSA itself (studies 2 and 3). Finally, we showed that fear arousal affects persuasion through narrative transportation by reducing overall counterarguing against the communication's message. Current transportation models would not predict that transportation is driven by affect generated by the narrative. Researchers should take the potential for this two-way relationship into account when developing their models moving forward.

REFERENCES

- Escalas, Jennifer Edson (2004), "Imagine Yourself in the Product: Mental Simulation, Narrative Transportation, and Persuasion," *Journal of Advertising*, 33(2), 37–48.
- Green, Melanie C. (2004), "Transportation Into Narrative Worlds: The Role of Prior Knowledge and Perceived Realism," *Discourse Processes*, 38(2), 247–66.
- Green, Melanie C. and Timothy C. Brock (2000), "The Role of Transportation in the Persuasiveness of Public Narratives.," *Journal of Personality and Social Psychology*, 79(5), 701–21.
- Hayes, Andrew F. (2009), "Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium," *Communication Monographs*, 76(4), 408–20.

- Keller, Punam Anand and Lauren Goldberg Block (1996), "Increasing the Persuasiveness of Fear Appeals: The Effect of Arousal and Elaboration," *Journal of consumer research*, 22(4), 448–459.
- Nabi, Robin L., Emily Moyer-Gusé, and Sahara Byrne (2007), "All Joking Aside: A Serious Investigation into the Persuasive Effect of Funny Social Issue Messages," *Communication Monographs*, 74(1), 29–54.
- Nielsen, Jesper H. and Jennifer Edson Escalas (2010), "Easier Is Not Always Better: The Moderating Role of Processing Type on Preference Fluency," *Journal of Consumer Psychology*, 20(3), 295–305.
- Nielsen, Jesper H., Stewart A. Shapiro, and Charlotte H. Mason (2010), "Emotionality and Semantic Onsets: Exploring Orienting Attention Responses in Advertising," *Journal of Marketing Research*, 47(6), 1138–1150.
- Pratto, Felicia and Oliver P. John (1991), "Automatic Vigilance: The Attention-Grabbing Power of Negative Social Information," *Journal of Personality and Social Psychology*, 61(3), 380–91.

Behavioral Disinhibition: A Unitary Framework to Account for Self-Licensing and Consistency Effects in Goal Accessibility and Consumer Choice

Bob M. Fennis, University of Groningen, The Netherlands
Justina Gineikiene, ISM University of Management and Economics, Lithuania

EXTENDED ABSTRACT

The concept of licensing –the tendency to select an effortless, or indulging option after considering or choosing a healthy, effortful, sustainable, or responsible option– has seen a surge of research interest in consumer behavior. Strikingly, research on its opposing pendant, consistency –the subsequent tendency to select a similarly healthy or sustainable option after considering or choosing an initial healthy or sustainable option– has not kept pace and is surprisingly scarce in our field. Moreover, there is –to our knowledge– as yet no unitary explanatory framework that can simultaneously account for both consumer licensing and consistency effects. The present research aims to take a first step to fill that void. By examining the role of one underlying psychological construct and framework that may account for both licensing and consistency in judgment and choice, and can shed light on the underlying process driving those effects – behavioral disinhibition (Carver and White 1994; Fennis et al. 2015; Hirsch et al. 2011). In three studies, we examined how (chronic) differences in such disinhibition affect reward sensitivity, accessibility of health vs. enjoyment-related goals and the actual display of licensing vs. consistency in choice following consideration of a healthy food option.

We build on the dual goal activation notion recently forwarded in health research to understand dieting behavior (Stroebe et al. 2013). More in particular, this research has shown that exposure to tempting, palatable foods, may trigger not one, but two distinct, sometimes conflicting goals, i.e., an enjoyment and a health goal. The inherent incompatibility between both goals will induce a “tug-of-war” between the two, resulting in shielding of the goal that will remain active, at the expense of the subordinated goal that becomes inactive (Stroebe et al. 2013). Extending this research, we propose that, similar to palatable foods, exposure to healthy food items may similarly activate both a health goal and/or an enjoyment goal. In addition, the goal that “wins” the resulting “tug-of-war” between the two incompatible goals, will not only remain salient but will also directly determine the downstream consequences of such activation – licensing when the enjoyment goal remains active, consistency when the health goal dominates.

Moreover, we propose behavioral disinhibition (Hirsch et al. 2011) –an unrestrained, approach oriented, reward-sensitive state, associated with lower levels of impulse control– as a key construct that will determine which type of goal will remain active and consequently, when the ensuing downstream behavioral consequence will be licensing or consistency. We hypothesize that higher (lower) disinhibition levels will increase accessibility of an enjoyment (health) goal, which will consequently foster licensing (consistency) in consumer choice.

In a series of three studies we tested our hypotheses. Study 1 focused on a core premise underlying our reasoning: the notion that behavioral disinhibition would spur an increased tendency for unrestrained, appetitive behavior, i.e., a tendency for immediate reward seeking. Study 2 built on these results and examined the extent to which the type of goal activation following exposure to a health-related food cue is a function of individual differences in behavioral disinhibition and so tests the notion that for consumers high in behavioral disinhibition, the accessibility of an enjoyment goal will increase, while for consumers low in disinhibition, exposure to the

same food cue will increase the accessibility of a health goal. Finally, extending Study 1 and Study 2, the third study directly tests the notion that behavioral disinhibition drives both licensing and consistency following exposure to a health-related food cue in a consumer choice setting. Study 1 used a correlational design where participants engaged in a reward-seeking task (the Balloon Analogue Risk Task, BART, Lejuez et al. 2002) and we measured individual differences in behavioral disinhibition using the seven items capturing behavioral inhibition from the measure developed by Carver and White (1994).

Studies 2 and 3 used a largely similar experimental design with exposure to a healthy vs. neutral food cue as a between-subjects factor and chronic differences in behavioral disinhibition as a measured individual difference variable. Study 2 measured accessibility of a health vs. enjoyment-related goal (using a word-stem completion task, cf. Bargh et al. 1996), while Study 3 assessed actual consumer choice of indulging products following exposure to the type of food item as key dependent variables.

Study 1 found evidence that higher levels of behavioral disinhibition indeed predicted increased reward sensitivity as measured by BART performance. Study 2 assessed a direct implication of this disinhibition-driven reward sensitivity for goal accessibility. This study showed that exposure to a healthy food option is indeed capable of activating not only a health, but also an enjoyment goal and demonstrated that the accessibility of the enjoyment goal was indeed more pronounced for consumers high, as opposed to low in behavioral disinhibition, while the accessibility of the health goal proved to be more pronounced for consumers low, as opposed to high in disinhibition. Finally, extending Study 1 and Study 2, the third study directly tested the notion that behavioral disinhibition drives both licensing and consistency following exposure to a health-related food cue in a consumer choice setting. This study showed that exposure to the same health-related food cue promoted increased indulgence, a licensing effect, when behavioral disinhibition was high and its opposite, health-related decision making –a consistency effect– when disinhibition was low.

Together, the present studies extend earlier findings on licensing and consistency effects, and provide a more integrative account of their occurrence. In so doing, we bridge the gap between the –sometimes separate and conflicting– findings on such effects in fields such as moral reasoning, health behavior and consumer behavior.

REFERENCES

- Bargh, John A., Mark Chen, and Lara Burrows (1996), “Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action,” *Journal of Personality and Social Psychology*, 71, 230-38.
- Carver, Charles S., and Teri L. White (1994), “Behavioral Inhibition, Behavioral Activation, and Affective Responses to Impending Reward and Punishment: The BIS/BAS Scales,” *Journal of Personality and Social Psychology*, 67, 319-27.
- Fennis, Bob M., Tor W. Andreassen, and Line Lervik-Olsen (2015), “Behavioral Disinhibition Can Foster Intentions to Healthy Lifestyle Change by Overcoming Commitment to Past Behavior,” *PLoS one*, 10, 1-12.

Hirsh, Jacob B., Adam D. Galinsky, and Chen-Bo Zhong (2011), "Drunk, Powerful, and in the Dark: How General Processes of Disinhibition Produce Both Prosocial and Antisocial Behavior," *Perspectives on Psychological Science*, 6, 415-27.

Lejuez, Carl W., et al. (2002), "Evaluation of a Behavioral Measure of Risk Taking: The Balloon Analogue Risk Task (BART)," *Journal of Experimental Psychology: Applied*, 8, 75.

Stroebe, Wolfgang, Guido M. Van Koningsbruggen, Esther K. Papies, and Henk Aarts (2013), "Why Most Dieters Fail but Some Succeed: A Goal Conflict Model of Eating Behavior," *Psychological Review*, 120, 110-19.

The “Weight” of Product Claims and Vertical Location: Health Goes up and Taste Goes Down

Alexandra Festila, Aarhus University, Denmark
Polymeros Chrysochou, Aarhus University, Denmark

EXTENDED ABSTRACT

Healthy food products are generally perceived to be lower in calories and less filling than unhealthy food products, and the source of such inferences is usually based on specific stereotypes about the product category (Oakes 2005) and the content of food product labels and claims (Gravel et al. 2012).

The perceived lightness or heaviness of foods has further downstream consequences in the design of packages and ads. Recent literature demonstrates that, by visually manipulating the “heaviness” of various package design elements, one can alter consumers’ inferences about the product. For example, a food presented in a heavier container is perceived to be more satiating and dense than when presented in a lighter container (Piqueras-Fiszman and Spence 2012). Furthermore, Karnal et al. (2016) shows that a change in the visual weight of colors and typeface affects consumers’ healthfulness perception. Products that are assigned lighter (as opposed to heavier) colors and typeface are perceived as healthier. In a similar fashion, the location of different elements on the package can also influence perceived heaviness/lightness of the product. If the context matches the location - “light” locations for healthy products and “heavy” locations for unhealthy products - consumers’ evaluations are enhanced (Deng and Kahn 2009). As healthy foods (as opposed to unhealthy foods) are perceived to be lighter, and lighter objects (as opposed to heavier objects) are associated with a higher vertical location, we propose that descriptors of light and healthy foods will be preferred at the top, whereas descriptors of heavy and unhealthy foods will be preferred at the bottom (**H1**). Furthermore, drawing on the notions of semantic match (or congruency) and processing fluency (Schwarz 2004) we next argue that, in a marketing context, a match between the content of the verbal claim (healthy versus unhealthy) and vertical location (top versus bottom) will elicit more positive consumer responses. Following this rationale, we posit that a match (vs. mismatch) between vertical location (top vs. bottom) and the content of the verbal claim (healthy vs. unhealthy) will produce more (vs. less) positive consumer responses (**H2**).

In Study 1, a classification task was used in which respondents were asked to place five pairs of two words (healthy versus unhealthy) in a top or in a bottom. The pairs of words used were: healthy foods-unhealthy foods, salad-burger, light-heavy, lean-fat, empty-full. Our results provide initial evidence that individuals tend to associate healthy concepts with a top location and unhealthy concepts with a bottom location (H1). Specifically, respondents in this study consistently and more frequently placed at the top words relating to health, supporting the claim that the metaphor of lightness and heaviness of healthy and unhealthy foods manifests in the perceptual vertical space. For an overview of the studies and main results.

Drawing on this initial finding, in Study 2, we investigate whether these effects can be verified in a marketing context by alternating the location (top and bottom) of two food product claims (health and taste) on food packaging. The claims used for this study were “your daily dose of health” and “your daily dose of taste” respectively. The product used was a fictional smoothie brand. Our results suggest that a claim denoting healthy attributes will elicit more favorable evaluations (pack attitude and anticipated product satisfaction) when placed at the top of the package. Conversely, a claim denoting unhealthy attributes (taste) will elicit more favorable evaluations when placed at the bottom of the package (H2).

In Study 3 we test the replicability of these effects in a different marketing context (ads) and with two product categories that vary in their degree of healthfulness – apples and muffins. The claims used for this study were “your healthy choice” and “your tasty choice”. As in Study 2, verbal claims conveying product attributes related to health elicit more positive consumer responses when placed at the top compared to the bottom, whereas verbal claims designating unhealthy food attributes (e.g., taste) elicit more positive consumer responses when placed at the bottom compared to the top. Furthermore, these effects seem to be consistent across food product categories varying in their degree of healthfulness.

As outlined and demonstrated in the first three studies, if the content of the claim describes healthy attributes of food products, it is more effective if located at the top of the package (as opposed to the bottom). Contrary to this, the results from the Study 4, employing a content analysis of food packages, suggest that, in practice, most health-related claims are located at the bottom of the package. This finding highlights the need for more research-driven managerial decision-making. Although at the outset it might seem like an inconsequential design decision, the location of the claims seems to be an important driver of product evaluation and possibly even choice.

The findings of this paper are in line with recent literature demonstrating that, by manipulating the heaviness of various design elements, one can alter consumer inferences such as perceived food satiety, density and healthfulness (Karnal et al. 2016; Piqueras-Fiszman and Spence 2012) and have potential implications both for marketing practitioners (in brand positioning and communication) and for policy makers that try to nudge consumers into making healthier food choices.

REFERENCES:

- Deng, Xiaoyan and Barbara E. Kahn (2009), “Is Your Product on the Right Side? The “Location Effect” on Perceived Product Heaviness and Package Evaluation,” *Journal of Marketing Research*, 46 (6), 725-38.
- Gravel, Karine, Éric Doucet, C Peter Herman, Sonia Pomerleau, Anne-Sophie Bourlaud, and Véronique Provencher (2012), ““Healthy,” “Diet,” or “Hedonic”. How Nutrition Claims Affect Food-Related Perceptions and Intake?,” *Appetite*, 59 (3), 877-84.
- Karnal, Nadine, Casparus JA Machiels, Ulrich R Orth, and Robert Mai (2016), “Healthy by Design, but Only When in Focus: Communicating Non-Verbal Health Cues through Symbolic Meaning in Packaging,” *Food Quality and Preference*, 52, 106-19.
- Oakes, Michael E. (2005), “Stereotypical Thinking About Foods and Perceived Capacity to Promote Weight Gain,” *Appetite*, 44 (3), 317-24.
- Piqueras-Fiszman, Betina and Charles Spence (2012), “The Weight of the Container Influences Expected Satiety, Perceived Density, and Subsequent Expected Fullness,” *Appetite*, 58 (2), 559-62.
- Schwarz, Norbert (2004), “Metacognitive Experiences in Consumer Judgment and Decision Making,” *Journal of Consumer Psychology*, 14 (4), 332-48.

Minds that Don't Matter: Online Interaction with Brands Decreases Empathy for People

Lura Forcum, Clemson University, USA

EXTENDED ABSTRACT

Brands can be perceived as anthropomorphic entities, leading consumers to attribute humanlike minds to them (Kervyn, et al. 2012; Aggarwal and McGill 2007, 2012). Previous marketing research has focused on firm-level benefits of brand and product anthropomorphism. However, thus far, marketing research has not considered whether there might be negative societal outcomes of seeing brands as humanlike.

In general, enhanced mind attribution represents increased accuracy, because seeing other minds is a motivated process (e.g., Kidd and Castaño 2013; Waytz et al. 2010). Individuals often decrease mind attribution to outgroup members, which is associated with social ills such as dehumanization and racial discrimination (Haslam 2006; Gray et al. 2012). However, not all increases in mind attribution represent increased accuracy. In this work, we argue that social media interaction with brands may lead consumers to attribute minds to brands. We further theorize that attributing minds to mindless agents may decrease understanding of other people's mental states.

Viewing social media content is likely to increase mind attribution to the entities who post such content, whether human or brand. Prior work has shown that reading narrative fiction increases mind perception abilities because it requires more effortful determination of others' mental states than does reading nonfiction (Kidd and Castaño 2013). Furthermore, a motivation to connect with another person—likely the intention of most individuals in social media contexts—enhances mind attribution to the person (Pickett, Gardner and Knowles 2004; Waytz et al. 2010).

Competing predictions can be made regarding outcomes of undue mind attribution. On one hand, effortfully attributing minds to mindless targets might improve mind perception in humans, much like exercising a muscle strengthens it. However, we posit the opposite: mind attribution to brands will decrease mind perception in other people. First, seeing a mind where none exists may temporarily distort individuals' sense of what constitutes a human mind. This may make it more difficult to identify or understand a human mind. Second, because it is more difficult to imagine the type and contents of a non-human (vs. human) mind, individuals who do so may subsequently feel less confident about their mind perception abilities (Bem 1972; Ross, Lepper, and Hubbard 1975). Three experiments test our hypotheses.

Sixty-three undergraduate students completed experiment 1. Participants were randomly assigned to one of two conditions: an identical Facebook post that was shared by the Cheetos brand or by a person. In a control condition, 26 participants described their favorite college course. Next, participants completed 6 items from the cognitive empathy scale (Jolliffe and Farrington 2006). As predicted, cognitive empathy was lowest among individuals who thought about the brand's mental states, compared to individuals who thought about a person's mental states or the control condition (both $p's < .05$). Differences between the person and control conditions were not statistically significant ($p > .99$), likely because both recollection and mind perception of other human minds are fairly effortless and common cognitive processes.

Experiment 2 tests whether using hashtags (e.g., #IloveGap) in social media posts to brands results in decreased self-reported cognitive empathy (Jolliffe and Farrington 2006). We first established that using a hashtag in a comment to a brand increases mind attribution

to the brand. This is likely because hashtags serve as a meta-commentary on a written statement (e.g., "It's Monday! So excited! #sarcasm"; Wikipedia 2017) and require consideration of how perceivers will interpret both the message and the commentary. In a pre-test, 25 Mturk participants were assigned to write a message about the Gap using a hashtag, either directed to the Gap or to a friend. Mind attribution to the brand was measured using 3 items standard in the literature (Ward et al. 2013). Individuals who directed a hashtag to the Gap (a friend) rated it as having more (less) mind ($p < .01$). In the main study, we used the same hashtag paradigm and measured understanding of other minds with 3 items from the Jolliffe and Farrington (2006) cognitive empathy scale ($N=82$). As predicted, individuals who used a hashtag when commenting to the brand (a friend) reported less (more) cognitive empathy ($p < .05$). Thus, social media interactions with brands can depress individuals' ability to understand the minds of other humans.

In experiment 3, 83 Mturk participants read information about the shoe brand Naturalizer. In one condition, the information was presented as if it appeared in the brand's Twitter feed; in the other condition it was presented in list form. Next, participants rated the extent to which the brand possessed a mind before completing 10 RMET items. We controlled for prior experience with the brand and Twitter. As predicted, individuals in the Twitter condition attributed more mind to the brand compared to those in the list condition ($p < .05$). They also performed worse on the RMET ($p < .001$). Mind attribution mediates the hypothesized relationship (Zhao et al. 2010). The mean indirect and direct effects are negative and significant (95% bootstrap confidence intervals exclude zero). Thus, even reading about a brand in social media settings can increase mind attribution to the brand, which leads to poorer ability to understand others' emotional states. This experiment rules out the alternative explanation that our result is due to participants' level of knowledge about the social media platform or the brand.

In this work, we present evidence that social media interaction with brands can incorrectly heighten mind attribution to the brand, harming individuals' ability to understand the mental states of other people. Both decreased empathy for others and decreased performance on the RMET indicate that consumers who attribute a mind to a mindless agent subsequently struggle to understand agents that do possess a mind. This finding contributes to the extant research in marketing on brand anthropomorphism, which has not previously examined societal outcomes. Furthermore, as mind attribution to brands may occur outside consumers' conscious awareness, this finding should be communicated to the public. Finally, motivations such as a need for control over one's environment and loneliness can enhance mind attribution to mindless agents (Waytz et al. 2010). Thus, the potential for ill effects due to mind attribution to mindless brands may extend beyond social media interactions.

REFERENCES

- Aggarwal, Pankaj and Ann L. McGill (2007), "Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products," *Journal of Consumer Research*, 34 (4), 468–79.

- (2012), "When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism," *Journal of Consumer Research*, 39 (2), 307–23.
- Baron-Cohen, Simon, et al. (2001) "The "Reading the Mind in the Eyes" Test Revised Version: A Study with Normal Adults, and Adults with Asperger Syndrome or High-Functioning Autism." *Journal of Child Psychology and Psychiatry* 42(2), 241–51.
- Bem, Daryl J. (1972), "Self-perception Theory," *Advances in Experimental Social Psychology*, 6, 1–62.
- F. B. de Waal (2012), "The Antiquity of Empathy," *Science*, 336, 874–76.
- Epley, Nicholas and Adam Waytz (2009), "Mind Perception," *Handbook of Social Psychology*, Hoboken, NJ: Wiley and Sons.
- Goldstein, Thalia R., and Ellen Winner (2012), "Enhancing Empathy and Theory of Mind," *Journal of Cognition and Development*, 13(1), 19–37.
- Gray, Kurt, Liane Young, and Adam Waytz (2012), "Mind Perception Is the Essence of Morality," *Psychological Inquiry*, 23 (2), 101–24.
- Haslam, Nick (2006), "Dehumanization: An Integrative Review," *Personality and Social Psychology Review*, 10 (3), 252–64.
- Jolliffe, Darrick and David P. Farrington (2006), "Development and Validation of the Basic Empathy Scale," *Journal of Adolescence*, 29 (4), 589–611.
- Kervyn, Nicolas, Susan T. Fiske, and Chris Malone (2012), "Brands as Intentional Agents Framework: How Perceived Intentions and Ability Can Map Brand Perception," *Journal of Consumer Psychology*, 22 (2), 166–76.
- Kidd, David Comer, and Emanuele Castaño (2013), "Reading Literary Fiction Improves Theory of Mind," *Science*, 342(6156): 377-80.
- Pickett, Cynthia L., Wendi L. Gardner, and Megan Knowles (2004), "Getting a Cue: The Need to Belong and Enhanced Sensitivity to Social Cues," *Personality and Social Psychology Bulletin*, 30(9), 1095–107.
- Ross, Lee, Mark R. Lepper, and Michael Hubbard, (1975), "Perseverance in Self-perception and Social Perception: Biased Attributional Processes in the Debriefing Paradigm," *Journal of Personality and Social Psychology*, 32(5), 880-92.
- Shamay-Tsoory, Simone G. (2011), "The Neural Bases for Empathy," *Neuroscientist*, 17, 18–24.
- Ward, Adrian F., Andrew S. Olsen, and Daniel M. Wegner, (2013), "The Harm-made Mind: Observing Victimization Augments Attribution of Minds to Vegetative Patients, Robots, and the Dead," *Psychological Science* 24(8), 1437-45.
- Waytz, Adam, Kurt Gray, Nicholas Epley, and Daniel M. Wegner (2010), "Causes and Consequences of Mind Perception," *Trends in Cognitive Sciences*, 14 (8), 383-88.
- Wikipedia (2017). "Hashtags," Retrieved March 10, 2017 from <https://en.wikipedia.org/wiki/Hashtag>.
- Zhao, Xinshu, John G. Lynch, and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths About Mediation Analysis," *Journal of Consumer Research*, 37 (2), 197-206.

Pathogen Fear and the Familiar

Chelsea Galoni, Northwestern University, USA
Gregory S. Carpenter, Northwestern University, USA
Hayagreeva Rao, Stanford University, USA

EXTENDED ABSTRACT

In June of 2009, the World Health Organization declared H1N1 – the swine flu, a pandemic. Despite being a relatively innocuous illness, the announcement caused mass hysteria around the world. Schools closed for weeks, governments slaughtered pigs in masses, hand sanitizer was out of stock on major store shelves, and websites selling respirator masks crashed from an overwhelming increase in traffic (Bolduan 2009; CBS News 2009). What this highlights is how powerful the emotional response elicited by the presence of disease-causing illness can be with regard to behavior. While the swine flu is a particularly salient example of this effect, consumers often incidentally find themselves in the presence of small reminders of illness. For instance, a commuter sneezes on a train, a friend complains of a sore throat, or a partner comes home with a chesty cough. Unlike H1N1, these instances are unlikely to lead to hysteria, but they may nevertheless have a systematic and consequential impact on consumption patterns.

But what might these differences look like? One reason why pathogen presence might systematically change consumption behavior is because of the emotions it elicits, namely disgust and fear. Disgust is an adaptive evolutionary mechanism that operates toward avoiding disease-causing pathogens (e.g. Rozin, Haidt and McCauley 2008; Tybur et al. 2012). As a result, feeling disgust leads to a tendency toward expelling in service of removing things that cause illness from one's environment (Lerner and Keltner 2000; Tybur, Liberman and Griskevicius 2009). Given this tendency toward expulsion, consumers are less likely to make a purchase at all, and value the goods they do buy less when they are feeling disgusted (Galoni and Noseworthy 2015; Lerner, Small and Loewenstein 2004; Morales and Fitzsimons 2007). Similarly, fear motivates vigilance and avoidance in service of mitigating risk and defending against threat (Lerner and Keltner 2001; Marks and Nesse 1994). Given these tendencies, consumers feeling fear are more likely to choose the safe, less risky option, and form stronger brand attachment with trusted brands when they are feeling afraid (Dunn and Hoegg 2014; Lee and Andrade 2011; Raghunathan and Pham 1999).

Taken together, we posit if the presence of pathogens leads to both a disgust and fear response, then in times of greater pathogen presence consumers should buy fewer products overall and asymmetrically reduce their consumption of non-familiar, more risky options. We examine these predictions using influenza data from Google Flu Trends and the Center for Disease Control, alongside scanner sales data from more than 35,000 retailers across the United States for the period January 2009 through December 2014. We form a weekly index of pathogen density within each state by weighting the actual presence of the flu with flu-related Google searches. We then match this weekly state-level pathogen density index with a weekly unit count of familiar and non-familiar products sold within the state.

Given the size of the scanner data, we limit our analysis of familiarity to one within-brand and one within-category comparison. For the within-brand comparison, we chose to examine OREOs, as it is a traditional national brand that is widely known and trusted by consumers, yet has a sufficiently diverse range of products to allow for differences in familiarity. We operationalize familiarity within the OREO brand by examining attributes, wherein any product with additional information beyond being a traditionally flavored

OREO is operationalized as non-familiar. Thus products included in the non-familiar category include new flavors of OREOs (e.g. Mint Chocolate, Cookie Dough) and OREOs with alternative formats to the original (e.g. Thins, Chocolate Covered). For the within-category comparison we examine canned soup. The benefit of this category is two-fold. First, the canned soup category serves as a quasi-manipulation check for our pathogen density index. Since soup is a soothing liquid high in electrolytes, people ought to buy it more often when they are sick; thus, sales should remain the same or even increase in times of increased pathogen presence. Second, the category has a natural familiarity distinction in that it has a strong, traditional national brand (Campbell's) as well as many private label brands. We thus operationalize familiarity in this category by examining the asymmetric effect of pathogen density on Campbell's sales versus private label sales.

We then subject the data to a multi-level mixed effects model controlling for baseline state differences, regional similarities, sales seasonality, and changes in reporting over time. Following from our predictions, the analysis revealed that unit sales of OREOs did indeed decrease in times of increased pathogen presence, 95% CI [-.22; -.04], whereas soup sales were not influenced but skewed positive, 95% CI [-.01; .07]. In line with the notion that the impact of the flu on sales should asymmetrically punish non-familiar products, we found a significant pathogen density x familiarity interaction for OREOs, 95% CI [-.12; -.08], and canned soup, 95% CI [-.28; -.25]. To account for concerns about inference making in multi-level frameworks, we also ran our model through a Markov chain Monte Carlo simulation with 5 chains consisting of 5,000 iterations to the same result. Indeed, in times of increased pathogen presence, consumers buy fewer OREOs, buy more soup, and are significantly more likely to choose the familiar over the non-familiar product.

The data analysis provides evidence for an asymmetric effect of pathogen presence on demand for familiar and non-familiar products. Indeed, the presence of illness seems to have systematic and meaningful differences in consumption patterns. This is both theoretically and practically relevant. Theoretically, the present research sheds light on the impact of pathogen presence on consumer decision-making and provides preliminary evidence that the emotional reaction to pathogen presence is a mixed emotion consisting of both disgust and fear responses. Likewise, the present research demonstrates the effectiveness of using big data as a tool for robustness in theory building and testing in consumer behavior. Using large, publicly accessible data, we demonstrate the practical, real-world impact of contagion and emotions that transcends the controlled white walls of the lab.

REFERENCES

- Bates, David, Martin Maechler, Ben Bolker, and Steve Walker, (2015), "Fitting Linear Mixed-Effects Models Using lme4," *Journal of Statistical Software*, 67(1), 1-48.
- Bolduan, Kate, (2009, April 30), "More than 100 schools closed because of swine flu," Retrieved from <http://www.cnn.com/2009/US/04/29/swine.flu.schools/>
- Bürkner, Paul-Christian, (in press), "brms: An R Package for Bayesian Multilevel Models using Stan," *Journal of Statistical Software*.

- CBS News (2009, April 30), "Swine Flu is Bad, but Panic is Dangerous," Retrieved from <http://www.cbsnews.com/news/swine-flu-is-bad-but-panic-is-dangerous/>
- Dunn, Lea, and JoAndrea Hoegg, (2014), "The impact of fear on emotional brand attachment," *Journal of Consumer Research*, 41(1), 152-168.
- Galoni, Chelsea, and Theodore J. Noseworthy, (2015), "Does dirty money influence product valuations?," *Journal of Consumer Psychology*, 25(2), 304-310.
- Lee, Chan J., and Eduardo B. Andrade, (2011), "Fear, social projection, and financial decision making," *Journal of Marketing Research*, 48(SPL), 121-129.
- Lerner, Jennifer S., and Dacher Keltner, (2000), "Beyond valence: Toward a model of emotion-specific influences on judgment and choice," *Cognition & Emotion*, 14(4), 473-493.
- Lerner, Jennifer S., and Dacher Keltner, (2001), "Fear, anger, and risk," *Journal of personality and social psychology*, 81(1), 146-159.
- Lerner, Jennifer S., Deborah A. Small, and George Loewenstein, (2004), "Heart strings and purse strings carryover effects of emotions on economic decisions," *Psychological science*, 15(5), 337-341.
- Marks, Isaac M., and Randolph M. Nesse, (1994), "Fear and fitness: An evolutionary analysis of anxiety disorders," *Ethology and sociobiology*, 15(5-6), 247-261.
- Morales, Andrea C., and Gavan J. Fitzsimons, (2007), "Product contagion: Changing consumer evaluations through physical contact with "disgusting" products," *Journal of Marketing Research*, 44(2), 272-283.
- Raghunathan, Rajagopal, and Michael T. Pham, (1999), "All negative moods are not equal: Motivational influences of anxiety and sadness on decision making," *Organizational behavior and human decision processes*, 79(1), 56-77.
- Rozin, Paul, Jonathan Haidt, and Clark R. McCauley, (2008), "Disgust," In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotions* (3rd ed., pp. 757-776). New York, NY: Guilford Press.
- Tybur, Joshua M., Debra Lieberman, and Vlad Griskevicius, (2009), "Microbes, mating, and morality: Individual differences in three functional domains of disgust," *Journal of Personality and Social Psychology*, 97, 103-122.
- Tybur, Joshua M., Debra Lieberman, Robert Kurzban, and Peter DeScioli, (2013), "Disgust: Evolved function and structure," *Psychological review*, 120(1), 65-84.

Engineered Essence and Authenticity

Chelsea Galoni, Northwestern University, USA
Brendan Strejcek, Northwestern University, USA
Kent Grayson, Northwestern University, USA

EXTENDED ABSTRACT

In a world where it is increasingly easy to deceive and be deceived, authenticity is becoming more important. Defined by Newman and Dhar (2014) as a judgment of “truth with respect to some valued property or dimension,” authenticity is an attribute that can strongly inform consumption decisions. For example, consumers can signal their own authentic selves by consuming products that are authentic to a shared underlying value (e.g. Kirmani 2009; Malär et al. 2011), and value cultural experiences on the basis of their authenticity (e.g. Chhabra 2005). Likewise, consumers are willing to pay more for authentic goods, and demonstrate increased brand loyalty toward firms behaving authentically (e.g. Newman and Dhar 2014; Spiggle, Nguyen and Caravella 2013). Because of this, the ability to portray an authentic brand image and offer authentic products are sources of value to firms.

However, little is known about how consumers make authenticity inferences for every-day goods. Recent research by Newman and Dhar (2014) sheds light on this process by arguing that the authenticity of mass-produced goods is largely influenced by their ability to come into physical contact with a valued source of brand essence. The researchers argue that physical contact with an original factory location creates a contagious transfer of essence and makes the product more authentically representative of the brand. This finding led the authors to make the claim that authenticity itself is contagious. However, much of the qualitative research on authenticity demonstrates product authenticity in the absence of contagion. For example, in the wine and beer industries, authenticity is centrally linked to “traditional production methods” (Beverland 2005; 2006). In their research on craft souvenirs, Littrell, Anderson and Brown (1993) identify “artisans’ production techniques” as a key contributor to tourist perceptions of authenticity. Likewise, in their research on the authenticity of restaurant food, Cohen and Avieli (2004) discuss the importance of consumer understandings about the “process of preparation” as an influence on perceptions of authenticity. This suggests that method of production - beyond location of production - is central to authenticity judgment. Likewise, there are feasibility concerns with the notion that contagious contact with an original manufacturing location is essential for product authenticity; it implies that a firm without access to an original manufacturing location is by its very nature less authentic than its counterpart with that access.

To address these practical concerns and integrate qualitative research on authenticity, we present a multi-process model wherein mass-produced branded products and services can gain authenticity from beliefs about a contagious transfer of essence through physical contact with a valued location, and from beliefs about essence engineering following instructions from a valued founder. Across three studies, we demonstrate that these processes are independent, function through distinct psychological mechanisms, and have downstream consequences on consumer choice and product valuation.

In study one, we independently manipulate both contagious essence via original manufacturing location and engineered essence via manufacturing process for Levi’s jeans in a 2 (Location: New vs. Original) by 2 (Process: Original vs. New) design. We then measure beliefs about essence, authenticity, and product valuation. Replicating Newman and Dhar (2014), results revealed a marginally significant main effect of location on judgments of authenticity ($p = .10$).

Relevant to our hypothesis, the main effect of process and the process x location interaction were significant. Planned contrasts revealed that jeans made at a new factory location were significantly more authentic when they were made via an original process. In fact, they were equally as authentic as jeans made in the original factory location, providing preliminary evidence that an original process is sufficient to guarantee a level of authenticity equivalent to that of original location.

In study two, we conceptually replicate the results of study one in a context where we can completely manipulate contagion opportunity. All participants read about a brand new restaurant being opened in New York City. We manipulate contagion by altering whether an executive chef will be present or absent at the new restaurant, and manipulate process through whether that restaurant will operate using the chef’s process or a process designed by the owning firm. We find a main effect of contagion, such that the chef’s presence meaningfully contributes to authenticity. More importantly, we find a significant main effect of process and a process x location interaction such that using the executive chef’s process lead to a more authentic experience than using the firm’s process overall, but this effect was even greater when the chef himself could not be present.

In study three, we examine an individual difference that moderates the engineered essence through process path but not the transferred essence through contagion path. In particular, if process is guaranteeing that a product’s essence is formed in the way a founder intended it to be formed, then people believing the world is fixed ought to see the influence of production process as more persistent. We demonstrate that people with such fixedness beliefs are most sensitive to information about production process and that this belief moderates the relationship between information about process and engineered essence, leading to judgments about authenticity. However, fixedness did not moderate the relationship between contagious location and authenticity, consistent with distinction between the two psychological mechanisms.

In conclusion, we present evidence for a multi-process model of authenticity via both the transfer of essence through physical contact and the engineering of essence through process. This model sheds light on the psychological process through which consumers make judgments about authenticity and has actionable consequences for marketing practitioners. Indeed, we demonstrate two psychologically distinct routes to authenticity judgments and show that products need not have to come into physical contact with a valued point of origin to become authentic in the minds of consumers.

REFERENCES

- Beverland, Michael B. (2005), “Crafting Brand Authenticity: The Case of Luxury Wines,” *Journal of Management Studies*, 42 (5), 1003-29.
- (2006), “The ‘Real Thing’: Branding Authenticity In The Luxury Wine Trade,” *Journal of Business Research*, 59, 251-58.
- Chhabra, Deepak, (2005), “Defining Authenticity And Its Determinants: Toward An Authenticity Flow Model,” *Journal of Travel Research*, 44 (2), 64-73.
- Cohen, Erik and Nir Avieli, (2004), “Food In Tourism: Attraction and Impediment,” *Annals of Tourism Research*, 31 (4), 755-78.

- Kirmani, Amna (2009), "The self and the brand," *Journal of Consumer Psychology*, 19(3), 271-275.
- Littrell, Mary A., Luella F. Anderson, and Pamela J. Brown, (1993), "What Makes A Craft Souvenir Authentic?" *Annals of Tourism Research*, 20, 197-215.
- Malär, Lucia, Harley Krohmer, Wayne D. Hoyer, and Bettina Nyffenegger, (2011), "Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self," *Journal of Marketing*, 75(4), 35-52.
- Newman, George E. and Ravi Dhar, (2014), "Authenticity Is Contagious: Brand Essence and the Original Source of Production," *Journal of Marketing Research*, 51 (June), 371-86.
- Spiggle, Susan, Hang T. Nguyen, and Mary Caravella, (2012), "More Than Fit: Brand Extension Authenticity," *Journal of Marketing Research*, 49 (December), 967-83.

Redesigning the Market for Volunteers: A Donor Registry

Ellen Garbarino, University of Sydney, Australia

Stephanie Heger, University of Sydney, Australia

Robert Slonim, University of Sydney, Australia

Carmen Wang, Harvard University, USA

Daniel Waller, Australian Red Cross Blood Service, Australia

EXTENDED ABSTRACT

Volunteer markets, such as blood donations can suffer recurring periods of excess demand and excess supply, due to a lack of price signals and the altruistic motivations of their volunteers (Slonim, Wang and Garbarino, 2014). This paper designs and implements a Registry, that improves market coordination by exploiting the behavioral preferences of volunteers. Registries have been shown to be an effective coordination tools in other markets, such as kidneys replacements (Roth, Sonmez and Unver, 2004, 2007), bone marrow donation (Bergstrom, Garratt, Sheehan-Connor, 2009), and entry-level labor markets (Roth, 1984; Roth and Peranson, 1999). We find that Registry members are more responsive to donation solicitations and critical shortage solicitations than non-Registry members and that their increased responsiveness is more predictable, reducing the probability of both excess supply and demand. We also find evidence that the improvement of market outcomes when using the Registry to solicit donations is due to the positive self-selection into the Registry from altruism and desire for a commitment device, and no support for the improvement being due to ask avoidance.

In partnership with the Australian Red Cross Blood Service (Blood Service), we introduced a Blood Donor Registry throughout Australia using a large-scale field experiment that unfolded over two rounds using long-lapsed donors. Long-lapsed donors are donors who have given at least one successful whole blood donation, but have not donated in at least the past 24 months. Joining the registry involved agreeing to be in a database of people willing to donate when called when there was a shortage of their blood type. Donors invited to join the registry were told that they would only be called once or twice a year and only when there was a specific need for their blood type. The study involved two rounds; Round 1 manipulated whether the person was invited to join the registry or not, Round 2 (3-5 months later) involved either a standard shortage call to donate or a critical need shortage call (used when there is less than three weeks blood supply). In Round 1 (Invitation stage), over 13,000 eligible long-lapsed donors, were randomly assigned to one of five invitation conditions: 1) invited to join the registry only (Registry Only), 2) invited to join the registry and to donate now (Registry + Donation), 3) invited to donate now only (Donate Only), 4) no invitation to registry or donate but called in Round 2 when there was a shortage (Control 1), and 5) never invited or called (Control 2). The Round 2 donation request stage involve donation request calls 3-5 months later when a blood shortage was occurring. These request calls were only placed to those who had joined the registry in treatments 1 and 2, or answered the phone in treatment 3, or are in control 1. Looking at those who were reached in the Round 1 phone call, 73% of those in the registry conditions (treatments 1 and 2) joined the registry; suggesting it is a popular and appealing idea. We focus on donation behavior as the most important outcome, however, the full manuscript examines call answering and joining the registry as well.

First, we hypothesize that the Registry serves as a screening mechanism that identifies the more motivated lapsed donors. Hence when called to donate in a shortage, subjects who selected into the Registry from the Registry + Donation condition will be more likely to donate than subjects in the Donation Only condition, but that sub-

jects who selected out of the Registry from the Registry + Donation condition will be less likely to donate than subjects in the Donation Only condition.

Second, we hypothesize that the Registry improves the coordination of supply, rather than only increasing the overall supply. In particular, Registry members are expected to be more responsive to solicitations than non-Registry members. We measure responsiveness in two ways: (1) Registry members are more likely to donate when solicited and, importantly, less likely to donate when not solicited; (2) Registry members donate more quickly after receiving the solicitation than non-Registry members.

Finally, exploring the behavioral mechanisms behind the Registry's effectiveness we examine whether the Registry is effective due to the crowding-in of (1) pure altruists, (2) donors who need a commitment device or (3) donors who are engaging in ask avoidance behavior.

Pure altruism stem from a compassion to help others with no ulterior personal benefits while impure altruism stems from a "taste for giving," such as status seeking and self- and social-image, often called 'warm glow' (Becker, 1974; Andreoni, 1989). This distinction is important since the Registry provides information to volunteers about the need for their blood donation, which affects the utility pure altruists obtain from making a donation, whereas impure altruists would not be influenced by this information since their utility from giving is independent of the need. If the Registry allows the self-selection of individuals with pure motives, Registry members should be more responsive to critical shortage calls (highest need), relative to standard calls, than non-Registry members.

The Registry provides a non-binding commitment device that increases the psychological costs of not donating when asked in the future. Commitment devices have successfully modified behavior in several contexts, including savings (Thaler and Benartzi, 2004; Ashraf, Karlan and Yin, 2006), health (Gine, Karlan and Zinman, 2010; Royer, Stehr and Sydnor, 2015) and monetary donations (Bremen, 2011). The Registry represents a preference for a restricted choice set (Gul and Pesendorfer, 2001), where joining the Registry removes the option to "not donate" from future choice sets. This predicts that Registry members will increase their donation rates more than non-Registry members between Round 1 and Round 2. The Registry might also increase utility among donors who experience dis-utility from being solicited for a donation (Exley and Petrie, 2016). Since the Registry invitation promises to contact donors only once or twice per year (significantly less than the Blood Service solicits active donors), the Registry may encourage donors to return by limiting the number of calls you will receive, a form of ask avoidance (Andreoni, Rao and Trachtman, 2011; DellaVigna, List and Malmendier, 2012). The hypothesis is that there are a portion of long-lapsed donors who would donate if only they did not expect that the donation would lead to an increase in Blood Service solicitations. The Registry alleviates this dis-utility by promising to reduce the number of future "asks", and hence should crowd-in donors who are choosing to stay long-lapsed in order to avoid future solicitations.

Round 1 Donation Behavior (Invitation stage, no current shortage): Consistent with Hypothesis 1 the Registry serves as a screening

mechanism: subjects who selected-in to the Registry (Registry + Donation) are 6 percentage points more likely to donate when asked in Round 1 than subjects in the Donation Only condition ($p < .01$), while subjects who selected-out of the Registry in Round 1 are 8 percentage points less likely to donate than subjects in the Donation Only condition ($p < .05$), a net difference of 14 percentage points.

Next, we address hypothesis 2 to show that Registry members are more responsive. An important part of coordinating the supply of whole blood is also to ensure that individuals only donate when they are needed. Consistent with Hypothesis 2, compared to Donation Only subjects, Registry members are 6 percentage points ($p < .01$) more likely to donate when solicited to donate in Round 1 (Registry + Donation) and 10 percentage points ($p < .01$) less likely to donate when not solicited to donate in Round 1 (Registry Only).

Round 2 Donation Behavior (Calls when shortage): Examining donation behavior in Round 2 where we will compare behavior of individuals who select into the Registry, with individuals in the Donation Only treatment who are being solicited for a donation for a second time and with individuals in Control 1 who are being contacted for the first time in conjunction with the experiment.

Of those who answered the phone in Round 2, we find that Registry members are 6 percentage points more likely to donate than Control 1 subjects, who have never been asked ($p < .05$) and 13 percentage points more likely to donate than Donation Only subjects who were asked a few months before ($p < .05$). This is consistent with H1, that the Registry helps identify those willing to donate.

Consistent with Hypothesis 2 that the Registry improves coordination, Registry members are significantly more responsive to the solicitation; they are 10 percentage points more likely to donate within 3 weeks of the solicitation than Donation Only subjects ($p < .01$). Supporting that they adjust their donation to suit the greater immediate need.

Examining why people select into the Registry we consider three behavioral theories: 1) selection on pure altruism; if a donor is long-lapsed because he stopped giving out of concern for whether his donation is needed, then the Registry may provide the necessary information about the urgent need for whole blood, which crowds-in the volunteers with pure altruism motives; 2) selection on a preference for commitment; if a donor is long-lapsed due to problems of self-control, then the Registry may provide the needed psychological commitment to crowd-in the long-lapsed volunteer; 3) selection on "solicitation dis-utility" whereby the Registry reduces volunteers' expectations about future donation solicitations. If a donor is long-lapsed because of solicitation dis-utility and if the Registry promises to reduce future solicitations, then the Registry will crowd-in these long-lapsed volunteers.

Pure Altruists: Given that the Registry only calls a member if there is a need for their blood type, a registry call tells members there is a current need and a critical need call tells them there is less than three weeks supply. Knowing there is an active need should trigger pure altruist to be more willing to give and this effect should be strongest when the call is a critical needs call.

If donors with purer motives are self-selecting into the Registry because it tells them when their donation will be most needed, we would expect that not only would Registry members be more likely to give when called but that they would also be more responsive to a critical call than non-Registry members.

Looking at donors who were reached in Round 2, Registry members are 5 percentage points more likely to donate within 3 weeks than non-registry members ($p < .05$). And if the member receives a critical need call they are an additional 9 percentage points more likely to donate within 3 weeks than a Registry member who

receives the standard solicitation ($p < .05$). Whereas non-Registry members who receive the critical call are no more likely to donate within 3 weeks than non-Registry members who received the standard solicitation (ns). Hence, the Registry not only generates a stronger response to standard need signal but an even larger response when the need is more critical, supporting the Registry successfully identifies more pure altruists.

Commitment Device: we next consider selection on a preference for commitment. If a donor is long-lapsed due to problems of self-control, then the Registry may provide the needed psychological commitment to crowd-in the long-lapsed volunteer. If people are using the Registry as a commitment device, we would expect 1) No difference in donation rate between Donation Only subjects in Round 1 and Round 2, since they are facing the same decision each time with no commitment device, and 2) an increase in donation rate in the Registry + Donation condition between Round 1 and Round 2, since in Round 1 these folks had no commitment device but in Round 2 their agreement to be a Registry member serves as a commitment device. These hypotheses imply that the rate of increase between the Round 1 and Round 2 donation rates should be larger for the Registry + Donation treatment than for the Donation Only treatment. For those who answered the phone in Round 2, we find that Registry members increase donation rates by 19 percentage points, whereas non-Registry members increase their donation rates by 8 percentage points ($p < .01$), supporting that Registry members use the Registry as a commitment device.

Solicitation Dis-utility and Ask Avoidance: we next consider the possibility that people's desire to limit the number of times they are asked for a donation is part of the Registry's appeal. Active donors receive frequent solicitations from the Blood Service, while when a donor becomes long-lapsed the Blood Service significantly reduces the number of solicitations. If a long-lapsed donor makes another donation, he returns to the pool of active donors and starts receiving regular solicitations again. Registry members are told they will be contacted "only once or twice a year but never more than four times" in a year, hence the Registry allows people to be donors but with guaranteed limited solicitation.

A volunteer with multiple prior long-lapse experiences will have more accurate expectations about the number of solicitations he will receive than an individual who is long-lapsed for the first time. Our data shows that people with longer donation histories were significantly more likely to experience a second period of lapse. Which means that people with longer histories should expect fewer solicitations and hence be more responsive to the infrequent registry call. Conversely, recency bias suggests that first-time long-lapsed donors are more likely to believe that the number of solicitations during a long-lapse will be more similar to the number of solicitations as an active donor. Thus, they might well expect more frequent calls and hence be less responsive to the call they receive. Solicitation dis-utility implies, conditional on joining the Registry, volunteers with longer donation histories will be more likely to make a donation. The evidence of ask avoidance is not supported, in that the length of a Registry member's donation history has no effect on the likelihood of donation when called ($p > .10$).

We find that the Registry is effective at improving market outcomes, increasing donation rates among long-lapsed donors, it does so by crowding-in volunteers with pure motives and volunteers who have a preference for commitment. We find no evidence consistent with the Registry appealing to volunteers who experience solicitation disutility. Given past evidence in support of solicitation dis-utility that contrasts with our lack of evidence (Andreoni et al., 2011; DellaVigna et al., 2012), future research exploring the boundaries

of solicitation dis-utility is important. One potential reason for the different results may be that in our study we examine volunteer labor supply, whereas in previous work subjects were involved in a one-off monetary donation request. Although we introduce the Registry in the whole blood market, the Registry provides a general framework for managing voluntary labor markets. Because the supply of voluntary labor operates quite differently from traditional labor markets dictated by wages, we believe that identifying the behavioral mechanisms is an important contribution, providing useful insights into how to design future Registries or expand existing Registries.

REFERENCES

- Andreoni, J., "Giving with impure altruism: applications to charity and Ricardian equivalence," *The Journal of Political Economy* (1989), 1447–1458.
- Andreoni, J., J. M. Rao and H. Trachtman, "Avoiding the ask: A field experiment on altruism, empathy, and charitable giving," Technical Report, National Bureau of Economic Research, (2011).
- Ashraf, N., D. Karlan and W. Yin, "Tying Odysseus to the mast: Evidence from a commitment savings product in the Philippines," *The Quarterly Journal of Economics* (2006), 635–672.
- Becker, G. S., "A theory of social interactions," *Journal of Political Economy* 82 (1974), 1063–1093.
- Bergstrom, T. C., R. J. Garratt and D. Sheehan-Connor, "One chance in a million: Altruism and the bone marrow registry," *The American Economic Review* (2009), 1309–1334.
- Breman, A., "Give more tomorrow: Two field experiments on altruism and intertemporal choice," *Journal of Public Economics* 95 (2011), 1349–1357.
- DellaVigna, S., J. A. List and U. Malmendier, "Testing for altruism and social pressure in charitable giving," *Quarterly Journal of Economics* 127 (2012).
- Exley, C. L. and R. Petrie, "Finding excuses to decline the ask," Harvard Business School NOM Unit Working Paper (2016).
- Gine, X., D. Karlan and J. Zinman, "Put your money where your butt is: A commitment contract for smoking cessation," *American Economic Journal: Applied Economics* (2010), 213–235.
- Gul, F. and W. Pesendorfer, "Temptation and self-control," *Econometrica* (2001), 1403–1435.
- Roth, A. E., "The evolution of the labor market for medical interns and residents: a case study in game theory," *The Journal of Political Economy* (1984), 991–1016.
- Roth, A. E. and E. Peranson, "The redesign of the matching market for American physicians: Some engineering aspects of economic design," *The American Economic Review* 89 (1999), 748.
- Roth, A. E., T. Sonmez and M. Unver, "Efficient kidney exchange: Coincidence of wants in markets with compatibility-based preferences," *The American Economic Review* 97 (2007), 828–851.
- Roth, A. E., T. Sonmez and M. U. Unver, "Kidney exchange," *Quarterly Journal of Economics* 119 (2004).
- Royer, H., M. Stehr and J. Sydnor, "Incentives, commitments, and habit formation in exercise: Evidence from a field experiment with workers at a Fortune-500 company," *American Economic Journal: Applied Economics* 7 (2015), 51–84.
- Slonim, R., C. Wang and E. Garbarino, "The market for blood," *The Journal of Economic Perspectives* 28 (2014), 177–196.
- Thaler, R. H. and S. Benartzi, "Save more tomorrow: Using behavioral economics to increase employee saving," *Journal of Political Economy* 112 (2004), S164–S187.

The Consumption Consequences of Couples Pooling Financial Resources

Emily N. Garbinsky, University of Notre Dame, USA

Joe J. Gladstone, University College London, UK

EXTENDED ABSTRACT

No consumer decision is an island. An individual's relationships will shape their purchase decisions in numerous ways, particularly by those closest to them: their romantic partners. While past research has acknowledged that relationship partners can shape consumption, the conditions in which partners influence consumer choice, and the mechanisms by which this occurs, are surprisingly understudied (Cavanaugh 2016; Gorlin and Dhar 2012; Simpson, Griskevicius, and Rothman 2012). Existing research has demonstrated that couple members think about their partner when making decisions for joint consumption (Lerouge and Warlop 2006; Scheibehenne, Todd, and Mata 2011). However, even when making a purchase for single consumption, couple members must still consider the feelings and judgments of their partner when deciding what to spend their money on (Simpson et al. 2012).

We argue that an important moderator of the degree to which couple members consider their partner when making a purchase is the type of account from which they spend. Specifically, we hypothesize that couple members are more likely to consider whether their partner will judge their purchase when spending from a joint (vs. separate) bank account, because they feel a greater need to justify their purchase to their partner. Importantly, we suggest that this increased need for justification will make individuals more likely to spend their money on utilitarian products (which are easier to justify) rather than hedonic products, compared to couple members who spend from a separate account. In line with this underlying mechanism, we demonstrate that in situations where the need for justification is reduced, the effect of account type on spending patterns disappears.

S1: Real Spending Behavior

We partnered with a retail bank to collect over 160,000 transaction records from 396 customers who hold a joint or separate bank account with their partner. Our results show that individuals who hold a joint (vs. separate) bank account spend less money on hedonic products ($b = -489.57$, $t = -2.96$, $CI_{95\%} [-814.31, -164.82]$). More specifically, over the course of 12 months, those with a joint account spent on average £490 less on hedonic purchases compared to those with a separate account.

We find similar results for utilitarian spending. Controlling for the same set of covariates, individuals who hold a joint (vs. separate) bank account spend more on utilitarian products ($b = 1129.25$, $t = 3.46$, $CI_{95\%} [486.84, 1771.65]$). More specifically, over the course of 12 months, joint account holders spent on average £1129 more on utilitarian purchases compared to those with a separate account. The effects remain significant when controlling for age, gender, income, and whether the person has children.

To address potential confounds, we moved to a controlled experimental setting. In studies 2-4, we recruited participants in committed romantic relationships and had them imagine that they hold a separate or joint account with their partner.

S2: Manipulating Perceptions of Separate and Joint Accounts

After the manipulation (separate vs. joint account), participants indicated their likelihood of purchasing hedonic and utilitarian products. Those with a separate account ($M = 3.13$) were more likely to purchase hedonic products than those with a joint account ($M = 2.65$)

$F(1,118) = 4.07$, $p = .046$, and those with a joint account ($M = 5.12$) were more likely to purchase utilitarian products than those with a separate account ($M = 4.09$) $F(1,118) = 18.50$, $p < .001$.

S3: Mediating Role of Need for Justification

After the manipulation (separate vs. joint account), participants made choices between the same product framed in a utilitarian or hedonic manner (e.g., clothes for work or fun). Those with a joint (vs. a separate) account showed a greater preference for utilitarian products ($F(1,118) = 5.23$, $p = .024$). They also experienced a greater need to justify their purchases ($M = 4.61$ vs. $M = 3.69$), $F(1,118) = 10.29$, $p = .002$. Using a mediation analysis, we find that this increased need for justification explains joint account holder's preference for utilitarian over hedonic products (.23, 5.57).

S4: Moderating Role of Feeling Licensed to Indulge

After the manipulation (separate vs. joint account), participants imagined it was their birthday or an ordinary day. In the ordinary day condition (high need to justify), those with a joint account ($M = 2.96$) chose more utilitarian products than those with a separate account ($M = 1.89$), $t(204) = 4.96$, $p < .001$. While in the birthday condition (low need to justify), there was no difference in the number of utilitarian products chosen, $t(204) = .18$, $p = .86$.

S5: Field Study Using Real Product Choice

During a home football game, we recruited couple members at the student union who have access to both separate and joint bank accounts, and randomly assigned them to think about using one of these accounts (separate or joint) to make a purchase. They then indicated which one of two school-branded products they would like to purchase: a beer mug (hedonic) or a coffee mug (utilitarian). Those using their joint bank account card were more likely to choose the utilitarian product than those using their separate bank account card, $\chi^2 = 4.35$, $p = .037$.

Discussion

This research makes several theoretical contributions. Recent reviews suggest that despite the numerous ways in which close relationships with romantic partners shape consumption, the topic is surprisingly understudied (Cavanaugh 2016; Gorlin and Dhar 2012; Simpson et al. 2012). By examining the conditions in which couple members are more likely to consider how their partner will feel about a purchase, the current findings provide insight into this understudied area. Our work also contributes to an emerging stream of research on financial decision-making in couples. Previous work has focused on financial decisions made by couple members in tandem (Dzhogleva and Lambertson 2014; Olson and Rick 2015), or on joint consumption decisions made for both couple members to consume together (Etkin 2016). We build on this work by showing that how couples choose to manage their finances affects decisions made in the absence of their partner, and extends beyond products which both of them will consume to affect individual consumption preferences.

REFERENCES

- Cavanaugh, Lisa A. (2016), "Consumer Behavior in Close Relationships," *Current Opinion in Psychology*, 10, 101-06.

- Dzhogleva, Hristina and Cait Poynor Lamberton (2014), "Should Birds of a Feather Flock Together? Understanding Self-Control Decisions in Dyads," *Journal of Consumer Research*, 41 (2), 361-80.
- Etkin, Jordan (2016), "Choosing Variety for Joint Consumption," *Journal of Marketing Research*, 53, 1019-33.
- Gorlin, Margarita and Ravi Dhar (2012), "Bridging the Gap Between Joint and Individual Decisions: Deconstructing Preferences in Relationships," *Journal of Consumer Psychology*, 22 (3), 320-23.
- Lerouge, Davy and Luk Warlop (2006), "Why It Is So Hard to Predict Our Partner's Product Preferences: The Effect of Target Familiarity on Prediction Accuracy," *Journal of Consumer Research*, 33 (3), 393-402.
- Olson, Jenny G. and Scott Rick (2015), "Managing Debt and Managing Each Other: The Interpersonal Dynamics of Shared Financial Decisions," in *SSRN Working Paper Series*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2637637.
- Scheibehenne, Benjamin, Peter M. Todd, and Jutta Mata (2011), "Older but Not Wiser: Predicting a Partner's Preferences Gets Worse with Age," *Journal of Consumer Psychology*, 21 (2), 184-91.
- Simpson, Jeffrey A., Vladas Griskevicius, and Alexander J. Rothman (2012), "Consumer Decisions in Relationships," *Journal of Consumer Psychology*, 22 (3), 304-14.

When Moral Mindsets Increase Unethical Consumption: The Influence of Religion and Moral Emotions on Luxury Consumption

Stephanie Geiger-Oneto, University of Wyoming, USA
Elizabeth Minton, University of Wyoming, USA

EXTENDED ABSTRACT

While research has extensively explored religiosity's influence on materialism (c.f., Burroughs and Rindfleisch 2002; LaBarbera and Gurhan 1997; Rindfleisch, Burroughs, and Wong 2005, 2009), there has yet to be an examination of how religiosity influences luxury consumption. Religious scripture often refers to living life simply, being content with what one has, giving up control to a higher power, and suppressing desires for buying goods and performing actions just for show (i.e., conspicuous consumption) (Hunt and Penwell 2008; Schmidt et al. 2014). These values are in direct opposition to those held by consumers in pursuit of heightened self-esteem through the consumption of luxury brands.

Thus, our research fulfills four purposes: (1) identifying the relationship among religiosity (both dimensions of intrinsic and extrinsic religiosity) and luxury consumption, (2) understanding how moral emotions drive attitudes toward luxury consumption and associated morality perceptions (i.e., examining moral emotions as a mediator to the relationship between religiosity and luxury consumption), (3) testing the moderating influence of moral versus marketplace mindsets on luxury consumption attitudes, and (4) determining specific reasons for luxury consumption, as moderated by religiosity level.

Morality and Luxury Consumption

Luxury goods, are those which “confer prestige on their owners, apart from any functional utility” (Grossman and Shapiro 1988: 82). These goods are more likely to be purchased for their symbolic value than non-luxury products because of their ability to signal status and prestige (Dubois, Laurent, and Czellar 2001; Geiger-Oneto et al. 2013; Vigneron and Johnson 2004; Wilcox, Kim, and Sen 2009). In addition to symbolic value (i.e., conspicuousness value), Vigneron and Johnson (1999) identify four other sources of value that luxury goods provide their owners as compared to non-luxury goods: unique value, social value, emotional value, and quality.

In addition to providing these five sources of value, luxury products can also be a symbol for moral qualities (Baron 1999), which influence one's moral self-image (Stellar and Willer 2014). Baron (1999) describes that consumers voice their morals with their wallets, such that they purchase or do not purchase goods (or an entire brand portfolio) given fit or dissimilarity with their morals. Thus, if luxury consumption is viewed as a moral (immoral) behavior, consumers “vote” with their wallets to purchase (or not purchase) the luxury good.

Religiosity & Luxury Consumption

Over 70% of consumers worldwide adhere to some sort of religious belief (Hunt and Penwell 2008). Additionally, explicit references to materialism as well as pride-based consumption and status consumption are made in religious scripture (Schmidt et al. 2014), which suggests that a consumer's religious background provides insight into motives for and response to luxury consumption. Specifically, Western religious scripture advocates against materialism and prideful consumption, with pride even being one of Catholicism's seven deadly sins. Religion serves as one of the most enduring sources of core values for consumers, which influences consumption motives, even at a subconscious level (Mathras et al. 2016; Minton and Kahle 2014).

Moral Emotions as a Mediator

Haidt (2003) describes moral emotions as “those emotions that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent” (p. 853). Moral emotions can reflect positive affect (e.g., awe, gratitude, compassion, love) or negative affect (e.g., guilt, shame, regret, remorse) (Haidt 2003). While positive affect can be experienced from improved self-esteem as consumers purchase items they feel reflect their personal identity well, it is possible that consumption of luxury goods could lead to negative affect as a result of post-purchase regret.

Such negative affect is emphasized across religious affiliations, with sin-associated consequences in Western religions and detachment from the self/cycles of rebirth in Eastern religions (Hunt and Penwell 2008; Schmidt et al. 2014). Given these relationships, and the prior theorizing on the relationship between religiosity and luxury consumption, it is expected that negative moral emotions, but not positive moral emotions, mediate the relationship between religiosity and evaluations of luxury products. Thus:

Hypothesis 1: Negative moral emotions mediate the relationship between religiosity and evaluative measures of luxury products.

Conspicuousness Value as a Mediator

Purchasing high-priced luxury goods, particularly for the purpose of advertising one's status is likely to be considered indulgent consumption behavior. Previous research reveals that feelings of guilt and regret are common emotional consequences of indulgent consumption for some consumers (Keaveney, Huber, and Herrmann 2007; Ramanathan and Williams 2007). For example, religious consumers may view the purchase of luxury goods as being wasteful unless they are able to provide a sound justification for purchasing such goods (Schwarz and Xu 2011). Additionally, both Eastern and Western religious scripture discourages materialism and prideful consumption, with pride being one of Catholicism's seven deadly sins. (Hunt and Penwell 2008).

To reduce these negative emotions, religious consumers may justify the purchase of luxury goods by focusing on product quality, social benefits, or that they deserve a high-priced luxury good (emotional value). Therefore, while other motivations for purchasing luxury exist, the conspicuous value of luxury products to display one's wealth, status and power is more likely to be linked to negative moral emotions than other reasons.

Hypothesis 2: Conspicuousness mediates the relationship between religiosity and negative moral emotions for luxury products.

Moral versus Marketplace Mindsets

A moral mindset represents thinking that is ethical, virtuous, and worthy, while a marketplace mindset focuses on economic attainment, a prosperous free-market, and commercial advancement. Research assessing moral mindsets, especially in comparison to marketplace mindsets, is very limited (Ben-Nun and Levitan 2011) and mostly examines direct effects of priming moral mindsets on general

moral judgments (c.f., VanBavel et al. 2012; Wheatley and Haidt 2005).

Interestingly, emphasizing moral goals can reduce cognitive dissonance by reducing concern about overspending (i.e., attainment of moral goals) (Förster 2009), which is directly reflective of luxury consumption. Research also suggests such assessment of the future (e.g., with goals) serves as what they term a “moral regulatory function” where consumers use a projection tactic to imagine their future self in judging and deciding on current morally questionable behaviors (Klein, Lowrey, and Otnes 2015). Therefore, priming religious consumers that have specific, easily attainable moral goals should result in increased luxury consumption because of heightened awareness of one’s positive self-affect. In contrast, consumers that are less religious do not follow explicit moral guidelines and may instead indicate decreased luxury consumption desires after exposure to moral mindset primes given negative affect about one’s self.

Thus:

Hypothesis 3: Moral (marketplace) mindsets increase luxury evaluations for highly (less) religious consumers.

Study 1: Mediation Through Motives and Moral Emotions

This study identifies the role of negative moral emotions (H1) in the relationship between religiosity and luxury consumption. In addition, the role of conspicuousness as a reason for luxury consumption is explored (H2).

Method

Students ($n=167$, $M_{age} = 21.0$, 49% female) at a Mountain West university completed a survey which asked about their purchase intentions and moral affect for a luxury perfume, reasons for purchasing a luxury perfume, attitudes towards luxury branded products in general, and, lastly, religiosity.

Results

Mediation through Moral Emotions. First, simple mediation through moral emotions was tested. The relationship between the I/E religiosity interaction term and purchase intentions was mediated by negative moral emotions (CI: .01, .13) but not positive moral emotions (CI: -.01, .07). Similarly, the relationship between the I/E religiosity interaction term and perceived morality of purchasing luxury perfume was mediated by negative moral emotions (CI: .01, .04) but not positive moral emotions (CI: -.01, .04). Consumers that were high in both intrinsic and extrinsic religiosity had the most negative moral emotions, while it was the consumers that were low in intrinsic and high in extrinsic religiosity (i.e., behaving religiously just for show) that experienced the least negative moral emotions.

Serial Mediation through Reasons and Negative Emotions. A series of regression models were used to determine if the I/E religiosity interaction term significantly influenced any of the five reasons for purchasing luxury products (perceived social value, conspicuousness, uniqueness, emotional value, quality). The I/E religiosity interaction term only significantly influenced reasoning to purchase luxury perfume because of its perceived conspicuousness ($\beta = .70$, $p < .01$). Given that conspicuousness was the only reason significantly influenced by the I/E religiosity interaction term, only this reason is explored further with serial mediation analyses using Hayes’ PROCESS macro (Model 6). Results show that the only significant serial mediation model is through conspicuousness reasoning as well as negative moral emotions. See Figure 1a for a complete a list of

coefficients for all three dependent variables (purchase intentions, perceived morality and attitude towards luxury goods).

Study 2

This study seeks to replicate the findings of Study 1 in addition to examining moderation effects with mindset type – moral or marketplace (H3a). It is expected that religiosity is positively correlated with luxury consumption when consumers are primed with a moral mindset, but the opposite pattern of effects occurs when consumers are primed with a marketplace mindset.

Method

Respondents ($n=142$, $M_{age} = 48.2$, 54% female) were recruited an online panel. Respondents were randomly assigned to one condition of a 2 (mindset: moral, marketplace) between-subjects design. After exposure to condition, participants proceeded to indicate their purchase intentions and moral affect for two product categories: luxury perfume and luxury sunglasses. In addition, respondents were asked to evaluate reasons for purchasing a luxury good, attitudes towards luxury branded products in general, and, lastly, religiosity.

Independent Variables. To manipulate mindset, respondents completed a word unscrambling task that contained 10 scrambled words associated with either a morality or marketplace mindset. All other measures were identical to those used in study 1.

Results

Mediation through Moral Emotions. A series of hierarchical regression models were used to examine direct effects of religiosity and mindset as well as the interaction of these variables on the dependent variables. Analyses were run for luxury perfume first and then replicated with luxury sunglasses. The interaction of intrinsic religiosity and experimental condition (moral vs. market mindset) significantly influenced consumers’ intent to purchase a luxury perfume ($\beta = -.19$, $p < .01$), perceived morality of purchasing luxury perfume ($\beta = -.18$, $p < .05$), and attitude towards luxury products ($\beta = -.17$, $p < .05$). In addition, the interaction of extrinsic religiosity and experimental condition significantly influenced consumers’ intent to purchase a luxury perfume ($\beta = -.23$, $p < .01$), perceived morality of purchasing luxury perfume ($\beta = -.19$, $p < .05$), and attitude towards luxury products ($\beta = -.22$, $p < .05$). Because both types of religious orientation (intrinsic and extrinsic) were found to influence the dependent variables in a similar manner, a composite religiosity variable was created which combined both orientations. This new composite religiosity variable was used in all subsequent analyses.

Next, a mediational analysis was utilized which determined that the relationship between the religiosity x mindset interaction term on intent to purchase a luxury perfume was significantly mediated by negative moral emotions (CI: -.30, -.06) but not positive moral emotions (CI: -.07, .14). Consumers that are high in religiosity and primed with a moral mindset have the least negative moral emotions as a result of purchasing luxury perfume, while it is the consumers that are less religious and primed with a moral mindset (i.e., behaving religiously just for show) that experienced the most negative moral emotions.

Similarly, the relationship between the religiosity x mindset (moral vs. marketplace) interaction term and perceived morality of purchasing luxury perfume was also only mediated by negative moral emotions (CI: -.15, -.01). The influence of the religiosity x mindset interaction term on general attitudes toward luxury consumption was also only significantly mediated by negative moral emotions (CI: -.18, -.02). Identical results were found using luxury sunglasses as the product category.

Serial Mediation through Conspicuousness and Negative Emotions. Results indicate that conspicuousness as well as negative moral emotions mediate the relationship between the religiosity x mindset interaction term and luxury perfume purchase intentions, perceived morality and attitude towards luxury goods. See Figure 1b for complete list of coefficients for all three dependent variables (purchase intentions, morality and attitude towards luxury goods).

Discussion

Similar to Study 1, negative moral emotions (but not positive) as well as luxury motives continue to mediate the relationship between religiosity and luxury consumption evaluations. Also, in support of H3, mindset type (moral vs. marketplace) interacts with religiosity to influence negative moral emotions and luxury product evaluations. As expected, highly religious consumers that are primed with a moral (marketplace) mindset report lower (higher) negative affect and, accordingly, have higher (lower) evaluations of luxury products. The opposite pattern of effects occurs for less religious consumers.

General Discussion

This research provides a novel perspective on luxury consumption in showing that moral emotions are a driving factor in evaluations of luxury products, and consumers' religiosity influences these emotions. First, the relationship among religiosity and luxury consumption evaluations was explored to find that consumers high in both intrinsic and extrinsic religiosity had the poorest evaluations. The highest luxury product evaluations came from consumers low in intrinsic but high in extrinsic religiosity (i.e., partaking in religiosity mostly just for show). Second, mediation through moral emotions revealed that negative (but not positive) moral emotions influenced luxury consumption evaluations (inclusive of perceptions of luxury consumption being a moral issue). Third, the moderating influence of moral/marketplace mindset was explored, to show that, interestingly, moral mindsets produced fewer negative moral emotions and more positive evaluations of luxury products for consumers high in religiosity.

Of particular interest for theory is the counterintuitive finding that a moral mindset actually improves evaluation of what some would consider an immoral behavior (luxury consumption). Previous research has found that beliefs regarding consumption that originate from religious scripture should result in religious consumers having more negative moral emotions toward luxury consumption (Westaby 2005). However, the opposite was found in our studies – priming a moral mindset leads to fewer negative moral emotions and more positive evaluations of luxury products. In terms of theory, our findings suggest the presence of a moral halo effect, such that priming a moral mindset makes religious consumers feel better about themselves and this halo then transfers to evaluation of other attitude objects that previously were perceived as immoral, including luxury products (as the results of Study 1 show).

Additionally, another interesting finding from this research is the mediating role of negative moral emotions but no mediation with positive moral emotions. Haidt (2003) described that moral emotions encompass both positive and negative elements. While, we expected that negative moral emotions would play a more prominent role in luxury product evaluations given the emphasis in sin and detachment in religious scripture (Hunt and Penwell 2008; Schmidt et al. 2014), our findings are still fascinating given that priming a particular mindset produces more positive evaluations of luxury consumption for some consumers. Suggesting that a much larger portion of consumer

reasoning for consumption is driven by avoidance of these negative moral emotions (i.e. regret and guilt).

REFERENCES

- Baron, Jonathan (1999), "Consumer Attitudes About Personal and Political Action," *Journal of Consumer Psychology*, 8 (3), 261-75.
- Ben-Nun, Pazit B. and Lindsey C. Levitan (2011), "We're Closer Than I Thought: Social Network Heterogeneity, Morality, and Political Persuasion," *Political Psychology*, 32 (4), 643-65.
- Burroughs, James E. and Aric Rindfleisch (2002), "Materialism and Well-Being: A Conflicting Values Perspective," *Journal of Consumer Research*, 29 (3), 348-70.
- Dubois, Bernard, Gilles Laurent, and Sandor Czellar (2001), "Consumer Rapport to Luxury: Analyzing Complex and Ambivalent Attitudes," working paper: HEC Paris.
- Eastman, Jacqueline K., Ronald E. Goldsmith, and Leisa R. Flynn (1999), "Status Consumption in Consumer Behavior: Scale Development and Validation," *Journal of Marketing Theory and Practice*, 7 (3), 41-52.
- Förster, Jens (2009), "Knowing Your Customer Better: The Strength of a Self-Regulatory Value Approach," *Journal of Consumer Psychology*, 19 (2), 124-28.
- Geiger-Oneto, Stephanie, Betsy D. Gelb, Doug Walker, and James D. Hess (2013), "'Buying Status' by Choosing or Rejecting Luxury Brands and Their Counterfeits," *Journal of the Academy of Marketing Science*, 41 (3), 357-72.
- Grossman, Gene M. and Carl Shapiro (1988), "Foreign Counterfeiting of Status Goods," *Quarterly Journal of Economics*, 103 (412), 79-100.
- Haidt, Jonathan (2003), "The Moral Emotions," in *Handbook of Affective Sciences*, ed. Richard J. Davidson, Klaus R. Scherer and H. Hill Goldsmith, New York: Oxford University Press, 852-70.
- Hunt, John and Dan Penwell (2008), *Amg's Handi-Reference World Religions and Cults*, Chattanooga, TN: AMG Publishers.
- Keaveney, Susan M, Frank Huber, and Andreas Herrmann (2007), "A Model of Buyer Regret: Selected Prepurchase and Postpurchase Antecedents with Consequences for the Brand and the Channel," *Journal of Business Research*, 60 (12), 1207-15.
- Kivetz, Ran and Itamar Simonson (2002), "Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence," *Journal of Consumer Research*, 29 (2), 199-217.
- Klein, Jill G., Tina M. Lowrey, and Cele C. Otnes (2015), "Identity-Based Motivations and Anticipated Reckoning: Contributions to Gift-Giving Theory from an Identity-Stripping Context," *Journal of Consumer Psychology*, 25 (3), 431-48.
- LaBarbera, Priscilla A. and Zeynep Gurhan (1997), "The Role of Materialism, Religiosity, and Demographics in Subjective Well-Being," *Psychology & Marketing*, 14 (1), 71-97.
- Mathras, Daniele, Adam B. Cohen, Naomi Mandel, and David G. Mick (2016), "The Effects of Religion on Consumer Behavior: A Conceptual Framework and Research Agenda," *Journal of Consumer Psychology*, 26 (2), 298-311.
- Minton, Elizabeth A. and Lynn R. Kahle (2014), *Belief Systems, Religion, and Behavioral Economics: Marketing in Multicultural Environments*, New York, NY: Business Expert Press.

- Ramanathan, Suresh and Patti Williams (2007), "Immediate and Delayed Emotional Consequences of Indulgence: The Moderating Influence of Personality Type on Mixed Emotions," *Journal of Consumer Research*, 34 (2), 212-23.
- Rindfleisch, Aric, James E. Burroughs, and Nancy Wong (2005), "Religiosity and Brand Commitment: A Multicultural Perspective," *Asia Pacific Advances in Consumer Research*, 6, 153-54.
- (2009), "The Safety of Objects: Materialism, Existential Insecurity, and Brand Connection," *Journal of Consumer Research*, 36 (1), 1-16.
- Schmidt, Roger, Gene C. Sager, Gerald T. Carney, Albert C. Muller, Kenneth J. Zanca, Julius J. Jackson, C. Wayne Mayhall, and Jeffrey C. Burke (2014), *Patterns of Religion*, Boston, MA: Wadsworth.
- Schwarz, Norbert and Jing Xu (2011), "Why Don't We Learn from Poor Choices? The Consistency of Expectation, Choice, and Memory Clouds the Lessons of Experience," *Journal of Consumer Psychology*, 21 (2), 142-45.
- Stellar, Jennifer E. and Robb Willer (2014), "The Corruption of Value Negative Moral Associations Diminish the Value of Money," *Social Psychological and Personality Science*, 5 (1), 60-66.
- Swinyard, William R., Ah-Keng Kau, and Hui-Yin Phua (2001), "Happiness, Materialism, and Religious Experience in the Us and Singapore," *Journal of Happiness Studies*, 2 (1), 13-32.
- VanBavel, Jay J., Dominic J. Packer, Ingrid J. Haas, and William A. Cunningham (2012), "The Importance of Moral Construal: Moral Versus Non-Moral Construal Elicits Faster, More Extreme, Universal Evaluations of the Same Actions," *PloS one*, 7 (11), e48693.
- Vigneron, Franck and Lester W. Johnson (1999), "A Review and a Conceptual Framework of Prestige-Seeking Consumer Behavior," *Academy of Marketing Science Review*, 1, 1-15.
- (2004), "Measuring Perceptions of Brand Luxury," *Journal of Brand Management*, 11 (6), 484-506.
- Weber, Max (1958), *The Protestant Ethic and the Spirit of Capitalism*, London, UK: Routledge.
- Westaby, James D. (2005), "Behavioral Reasoning Theory: Identifying New Linkages Underlying Intentions and Behavior," *Organizational Behavior and Human Decision Processes*, 98 (2), 97-120.
- Wheatley, Thalia and Jonathan Haidt (2005), "Hypnotic Disgust Makes Moral Judgments More Severe," *Psychological Science*, 16 (10), 780-84.
- Wilcox, Keith, Hyeong Min Kim, and Sankar Sen (2009), "Why Do Consumers Buy Counterfeit Luxury Brands?," *Journal of Marketing Research*, 46 (2), 247-59.

Cultural Capital and Taste Distinctions in Urban India

Tanuka Ghoshal, Indian School of Business, India

Rishtee Batra, Indian School of Business, India

Russell Belk, York University, Canada

EXTENDED ABSTRACT

We revisit and reinterpret the interwoven relationship between cultural capital and consumption patterns (e.g., Bourdieu 1984; Holt 1998; Üstüner and Thompson 2012) in a dynamic, diverse and hierarchical society, and uncover the contextually important modifying role of empowerment. Bourdieu (1984) presents social life as a multidimensional status game in which people draw on three different resources- economic (financial resources), social (group affiliations and relationships), and cultural (distinctive tastes, skills and knowledge) capital, in a competition for status or symbolic capital (power). Different classes have different taste cultures and use different status consumption strategies that express and constitute their economic and cultural capital. Holt (1998) proposes modifications to Bourdieu's theory of cultural capital structured consumption in the American context, while Üstüner and Holt (2010) find the western model of status consumption inadequate to explain the nuances of distinctive consumption patterns in a less industrialized country like Turkey. Cultural capital and consumption has not been investigated in a hierarchical and culturally diverse society like India, where economic chasms create stark differences in habitus across classes and castes, and society continues to be deeply patriarchal. With a similar goal to Holt (1998) and Üstüner and Holt (2010), we extend Bourdieu's (1984) original analysis of taste and cultural capital by updating the framework to reflect important parameters in the modern Indian context. We suggest that differences in lifestyles, values, tastes and consumption can be understood through a modified framework of cultural capital that takes into account issues pertaining to differences in hierarchy, symbolic capital and gender inequalities.

We conduct ethnographic fieldwork documenting consumption preferences of 28 Indian women with different socioeconomic backgrounds in three different Indian cities. Women from patriarchal societies often occupy a lower position of power and status, resulting in lower symbolic capital, as compared to men (Sobh and Belk, 2011). The gender gap index, a measure of gender disparity developed by the World Economic Forum, finds India ranked 101 out of 136 countries, while the gender ratio stood at a mere 940 women per 1000 men in 2015 as a result of unabated female feticide. This discrepancy is likely to be accentuated among lower social classes (Bhattacharya and Belk, 2017), with education and empowerment of women continuing to be a challenge. As such we expect female disempowerment to be rooted in the habitus and be the biggest impediment to cultural capital acquisition, and consumption to be structured within these boundaries.

Empowerment emerges as the key factor interwoven with cultural capital among Indian women, with low cultural capital (LCC) informants being significantly disempowered both before and after marriage, and high cultural capital (HCC) informants being significantly more empowered through education and employment. LCCs, in contrast to HCCs, demonstrate lower powers of decision-making and higher subjugation to social and consumption norms imposed by their husbands' families. Most of them had gotten married at young ages without even seeing their husbands before the wedding, many cutting short their dreams of higher education. Seemingly "empowering" strategies adopted by the LCCs were, on the contrary, from an etic perspective, least likely to be empowering in practice. For example, marriage was seen as an opportunity to climb the social ladder, with hypergamy (marriage above one's social status) being a common objective for the LCCs. However, three informants who

had married above their social standing were even more subjugated by their husbands' families compared to the others. From mundane daily household decisions (such as what to cook) to deciding what clothes they could wear, to more significant decisions such as choosing a school for their children, all were decided by the husband and his family. Hypergamy was therefore not the panacea they may have hoped for, prior to marriage. Similarly, giving birth to more children- sons in particular- was erroneously seen as a means to improve their position in the social hierarchy. Ultimately children of the LCC women only become canvases for fulfilling their own aspirations with respect to education or freedom of expression.

Consistent with research suggesting that individuals suffering from low personal control have an increased belief in God (Laurin, Kay and Moscovitch 2008), our LCCs strongly believe that external powers control their destinies. Consequently they indulge in precautionary consumption such as stringent religious rituals, and using superstitious artifacts (that "ward off the evil eye," for example). An important point of difference in tastes from Holt's (1998) U.S. context is the role of consumption objects, which may have lost relevance in the less hierarchical and more anonymous American culture, but are still of paramount importance in this hierarchical society where material consumption marks a relatively easy way to convey one's social standing and attain respect from other members of society (Vikas et al 2015). LCCs feel empowered by acquisition of such consumption objects- however, this objectified cultural capital does little to enhance their symbolic capital. While institutionalized cultural capital such as that acquired via education and employment would be truly empowering, lower class women are prevented from such acquisition by virtue of symbolic domination. In this sense they remain trapped in a quagmire of disempowerment (Belk and Ghoshal, 2017). Their identities are defined by their families and communities via taste conformation to the social norm, and they project their aspirations for more empowered identities onto their children. Meanwhile HCC women are empowered to define their individual identities through taste distinctions, and show proclivity towards acquisition of institutionalized cultural capital such as expertise in specialized domains.

In this research we offer the novel proposition that it is challenging for LCCs to build on their embodied cultural capital, primarily determined by their habitus, due to lack of empowerment. In this sense symbolic capital determines cultural capital, and symbolic domination determines taste, that conforms to community norms. We also find that while LCCs covet the acquisition of objectified cultural capital, and aspire to marry above their social standing, these do nothing to empower them. Only institutionalized forms of cultural capital such as education and employment would help them negotiate a higher position in the social strata continuum.

REFERENCES

- Belk, Russell W. and Tanuka Ghoshal (forthcoming), "The Kafka Quagmire for the Poor in India," *Journal of Marketing Management*.
- Bhattacharyya, Arundhati and Russell W. Belk (2017), "Technology Metaphors and Impediments to Technology Use among the Involuntarily Poor," in Maryann McCabe and Elizabeth Brody, eds., *Cultural Change from the Perspective of Anthropology in Business*, Lexington, MA: Lexington Books.

- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgment of Taste*, trans. R. Nice. London: Routledge.
- Holt, Douglas B. (1998), "Does Cultural Capital Structure American Consumption?" *Journal of Consumer Research* 25, no. 1: 1-25.
- Laurin, Kristin, Aaron C. Kay, and David A. Moscovitch (2008), "On the Belief in God: Towards an Understanding of the Emotional Substrates of Compensatory Control," *Journal of Experimental Social Psychology* 44, no. 6: 1559-62.
- Sobh, Rana and Russell W. Belk (2011), "Privacy and Gendered Spaces in Arab Gulf Homes," *Home Cultures*, 8 (3), 317-40
- Üstüner, Tuba and Douglas B. Holt (2010), "Toward a Theory of Status Consumption in Less Industrialized Countries," *Journal of Consumer Research*, 37 (1), 37-56.
- Üstüner, Tuba, and Craig J. Thompson (2012), "How Marketplace Performances Produce Interdependent Status Games and Contested Forms of Symbolic Capital," *Journal of Consumer Research*, 38 (5), 796–814.
- Vikas, Ram Manohar, Rohit Varman, and Russell W. Belk (2015), "Status, Caste, and Market in a Changing Indian Village," *Journal of Consumer Research* 42, no. 3: 472-498.

Activating Multiple Facets of the Self: How Self-Concept and Brand Personality Can Influence Self-Brand Connections

Marilyn Giroux, Auckland University of Technology, New Zealand

Bianca Grohmann, Concordia University, Canada

EXTENDED ABSTRACT

Nowadays, it is crucial for companies to connect more with consumers and to create emotional brand connections (Malär et al. 2011). Brand managers need to understand how people can express themselves and reflect their identities through their product consumption. Previous research has demonstrated that individuals can use brands to identify with a specific reference group (Escalas and Bettman 2005), to differentiate themselves from undesired groups (Berger and Heath 2007) and to boost their self-esteem (Sirgy 1982).

This research explores what is the importance of identity-related brand personality in the creation of self-brand connections. For example, does the sincere, wholesome and truthful brand personality of Dove reach more the actual self of consumers with its endearing aspect, while the glamorous, sexy and charming aspect of Victoria's Secret trigger more the ideal self of consumers? Drawing on the literature on personal and social identity, this paper investigates the effects of the self-concept of identity on the self-brand connections for different brand personalities to determine how brands can focalize on the bonding between the brand and the self-concept.

Based on the reasoning above, the authors propose the congruence between self-concept and brand personality leads to stronger self-brand connections. Therefore, the influence of the individual actual self on self-brand connections is stronger for sincere brands (H1). The influence of the individual ideal self on self-brand connections is stronger for sophisticated brands (H2). Furthermore, the presence of identity threat leads to stronger self-brand connections for the corresponding brand personality (sincere and sophisticated). Finally, the identity threat moderates the effect of the primed identity (actual self and ideal self) on brand-self connections for the different brand personalities.

In the first study, a survey (N=328) was conducted with 10 real brands identified as representing strongly one dimension of the brand personality in two pretests. In this survey, the results supported the influence of congruence between the self-concept and the brand personality on self-brand connections. First, actual self-congruence has a positive effect for both brand personalities. Even if this effect is positive for sophisticated brands ($B=.304, p < .001$), this effect becomes even stronger for brands that are associated with sincere brands ($.822, p < .001$). In support of H1, the effect of the actual self-congruence is stronger for sincere brands compared to sophisticated brands ($X^2SoI=18.99 \Delta d.f. =1 p < .001$). Ideal self-congruence, however, has a significant stronger positive effect for brands that are sophisticated ($B=.554, p < .001$) compared to sincere brands ($B_{sincere}=.0139, p < .001$) in support of H2 ($X^2SoI=5.82 \Delta d.f. =1 p < .001$).

In study 2, participants (n=123) were randomly assigned to a 2 (self-concept: actual self, ideal self) x 2 (brand personality: sincere, sophisticated). An ANOVA with self-concept and brand personality as between-participants factors revealed the predicted interaction in support of hypothesis 1 ($F(1, 122)= 7.49, p < .01$). The simple effects reveal that when participants were primed with an ideal self-concept, they had more positive self-brand connections with sophisticated brands (vs. sincere brands) ($M_{sophisticated} = 5.29$ vs. $M_{sincere}=3.35; F(1, 122)= 3.58, p < .001$). Conversely, participants who were primed with actual self-concept showed more self-brand connections with sincere brands ($M_{sincere} = 5.40$ vs. $M_{sophisticated} = 2.58; F(1, 122)= 3.78, p < 0.01$).

Experiment 3 (N=115) was a 2 (brand personality: sincere, sophisticated) X 2 (threat: continuity-related, self-esteem). Participants completed a reliving task that manipulated the different threats. Participants randomly assigned to the *self-esteem threat condition* were asked to write about a time in which you felt intense failure in an intellectual domain, a time that you felt as if you were not very smart. In the *Continuity-Related Threat*, participants had to write about a time where something important change in their identity. The ANOVA revealed that the interaction between identity threat and brand personality significantly predicted self-brand connections ($F(1, 114)=13.28, p < .001$). As predicted in H3, in the continuity threat condition, participants were more inclined to connect with the sincere brands ($M= 4.55$) than with the sophisticated brands ($M= 3.30, F(1,114)= 3.04, p < 0.01$). In contrast, those primed with a self-esteem threat connected more with sophisticated brands ($M=4.50$) than with sincere brands ($M= 3.75, F(1,114)= 2.08 p < 0.05$).

Study 4 tests whether the moderation effect of identity threat on the relationship between the primed identity and brand personality on self-brand connections. In a 2 (prime self-concept: actual self, ideal self) x 3 (threat: absent, continuity-related, self-esteem) x 2 (brand personality: sincere, sophisticated) between-subjects experimental design, 328 subjects participated in the study. In an ANOVA using primed self-concept, brand personality and primed threat as between-participant factors, a three-way interaction was observed ($F(1, 327) = 8.99, p < .01$). The simple effects reveal that participants who faced no identity threat showed a pattern of results parallel to prior studies. For these individuals, self-brand connections were again elevated when primed with an actual self-concept for sincere brands ($M_{sincere} = 5.27$ vs. $M_{sophisticated} = 4.22, F(1, 327)=5.25, p < 0.05$) and when primed with an ideal self-concept for sophisticated brands ($M_{sincere} = 4.03$ vs. $M_{sophisticated} = 5.02, F(1, 327)=4.91, p < 0.05$). Conversely, for sincere brands, people who faced a continuity threat connected significantly more with the brand when primed with an actual self-concept compared an ideal self-concept ($M_{actual} = 6.22$ vs. $M_{ideal} = 3.77; F(1, 327)=8.39, p < 0.001$). Finally, subjects who were primed with self-esteem threat connected more deeply with sophisticated brands when primed with an ideal self-concept ($M_{ideal} = 6.00$ vs. $M_{actual} = 4.12; F(1, 327)=6.87, p < 0.01$). These results demonstrate that the effects of threats were only significant for identity-relevant brands. Thus, the effect of congruence was positive only when threat-relevant identity had first been primed (e.g., continuity and actual self), but was negative when threat-irrelevant identity had first been primed.

In conclusion, the present research expands our knowledge about the role of self-concept by demonstrating that its effects on self-brand connections for different brand personalities. The present results demonstrate that managers should consider the congruence between consumers' identity and their brand personality to create stronger connections with the consumers.

REFERENCES

- Aaker, Jennifer L., Susan Fournier, and Adam S. Brasel (2004), "When Good Brands Do Bad", *Journal of Consumer Research*, 31 (1), 1-16.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (2), 139-168.

- Berger, Jonah and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34 (2), 121-134.
- Escalas, Jennifer Edson and James R. Bettman (2003), "You Are What They Eat: The Influence of Reference Groups on Consumers' Connections to Brands", *Journal of Consumer Psychology*, 13 (3), 339-348.
- Escalas, Jennifer Edson and James R. Bettman (2005), "Self-Construal, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32 (3), 378-389.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343-373.
- Malär, Lucia, Harley Krohmer, Wayne D. Hoyer, and Bettina Nyffenegger (2011), "Emotional Brand Attachment and Brand Personality: The Relative Importance of the Actual and the Ideal Self," *Journal of Marketing*, 75 (4), 35-52.
- Sirgy, Joseph M. (1982), "Self-Concept in Consumer Behavior: A Critical Review," *Journal of Consumer Research*, 9 (3), 287-300.
- Swaminathan, Vanitha, Karen L. Page, and Zeynep Gurhan-Canli, Z. (2007), "'My' Brand or 'Our' Brand: The Effects of Brand Relationship Dimensions and Self-Construal on Brand Evaluations," *Journal of Consumer Research*, 34 (2), 248-259.

Certainty of Popularity: Extending Naive Theories of Popularity with Uncertainty Reduction

Robert P.G. Goedegebure, Wageningen University, The Netherlands
Erica van Herpen, Wageningen University, The Netherlands
Hans C.M. van Trijp, Wageningen University, The Netherlands

EXTENDED ABSTRACT

Consumers often assume that products are popular for a good reason (Surowiecki, 2004). Those reasons are informed by the naive theories they hold (Deval et al., 2013). One strand of literature, based on information cascades, emphasizes *product (quality) inferences* as explanatory mechanism (Bikhchandani et al., 1998) in the link between popularity and choice. Yet, prior research shows that consumers do not always infer high quality from popularity (Becker, 1991). Quality inferences appear to mainly arise when additional quality cues are linked to popularity cues. So, it may not be the popularity, rather the additional quality cue that drives the inferences (Muchnik et al., 2013). Indeed, there may be other mechanisms through which popularity by itself triggers choice (Parker & Lehmann, 2011). We propose a complementary mechanism, currently overlooked in literature, namely that consumers use popularity to reduce uncertainty that revolves around product quality. Consumers value a product's performance that does not disappoint and aim to reduce probability of disappointment before purchase. A product may be preferred for a performance that does not disappoint, even if it is not the highest quality (Meyer, 1981; Rust et al., 1999).¹ Given that consumers look at, and follow others, out of reasons of safety and certainty (Griskevicius et al., 2009; Raafat et al., 2009), we propose that the effect of popularity on choice is largely driven by uncertainty reduction.

Consumers may however draw on multiple naive theories, as inferences are contextually influenced (Loersch & Payne, 2011). Hence, consumers may also use popularity to assess the moral, societal value of an action (Gigerenzer, 2010), driven by considerations reflecting right or wrong human conduct (Reidenbach & Robin, 1990). The primary objective of this study is to explicate the process through which popularity exerts influence on choice through product-quality related inferential mechanisms. Yet, in doing so, we take into account, and measure, the extent to which popularity may be used to draw socially-related inferences where we distinguish between inferences of social approval, and inferences of societal value.

First, we demonstrate the existence of four types of inferences in three studies. In these three studies (1A: $N = 47$ / 1B: $N = 39$ / 1C: $N = 36$ students) participants evaluated a popular product (wine / cheese / beer) compared to a regular product as a product is always popular relative to competing products. Across the studies, participants inferred that the popular product would be less likely to disappoint ($t_s > 2.80$, $p_s < .01$), indicating uncertainty reduction. Additionally, participants inferred the popular product to have a higher societal value ($t_s > 2.45$, $p_s < .05$). This preliminary evidence is in line with our proposed route of uncertainty reduction, over and above existing mechanisms. The mechanisms proposed in previous literature where not consistently found. Inferences of quality were only made for cheese ($t_{1B} (38) = 7.63$, $p < .001$), and inferences of social value only for beer ($t_{1C} (35) = 3.97$, $p < .001$). We extend the study with a mixed-design choice experiment ($N = 120$) with the objective to examine if the effect of popularity on choice is mediated by inferences of uncertainty reduction. Participants overwhelmingly chose the popular wines (70% – 78%). Mediation results demonstrate the relevance of uncertainty reduction as an inference in explaining this popularity effect, over and above the effect of quality inferences. Inferences of uncertainty reduction and quality perception mediate (β 's

$<.05$) the effect of popularity on intention (β , ns) and choice ($\beta <.05$). Although popularity evoked inferences of social and societal value, these did not mediate.

Studies 1 and 2 have thus shown that consumers may draw multiple inferences from a single popularity cue. We propose that the context moderates this effect such that, in a product context, a popular product's profile reflects properties of product quality and the uncertainty around that quality, whereas, in a social context, these effects are attenuated. In study 3 ($N = 290$) we test this in a 4-group between subjects design. We manipulate four contexts (c.f. Ma & Roese, 2014) in which participants choose products (across categories) and evaluate the inferential properties. We find that, specifically in a context focussed on product-properties, participants overwhelmingly use popularity to reduce uncertainties revolving the quality of a product ($t_s > 3.85$, $p_s < .001$). Participants make these inferences also in a societal context ($t = 4.11$, $p < .001$), yet to a lesser extent ($F_{condition} (3,286) = 3.246$, $p < .07$). These results demonstrate the relevance of inferences of uncertainty reduction and are in line with our expectations.

Reduction of uncertainty revolving quality is a novel inferential route that mediates the relation between popularity and choice. Consumers consistently make inferences of uncertainty reduction with the help of a popularity cue, and this influences product choice. We demonstrate that uncertainty reduction is a relevant, impactful inference resulting from product popularity. Consumers appear to look at others to gather information about product performance (Bikhchandani et al., 1998), yet not only to infer higher quality, but to diminish uncertainty. This resembles biological tendencies to follow the crowd out of reasons of safety (Griskevicius et al., 2009; Raafat et al., 2009). In addition, across studies, we demonstrate that consumers draw upon different naive theories, as evidenced by the inferences of societal value. These inferences offer explanations for popularity beyond current perspectives that emphasize social inferences as explanatory mechanism (Cialdini et al., 1990).

The results have important implications for practitioners. Consider for example the introduction of foreign products to new markets, where communicating local popularity would aid to reduce uncertainty and benefit the introduction. Or consider social marketing campaigns, that may struggle with consumers' concerns that 'healthy foods are less tasty than unhealthy foods' (Raghunathan et al., 2006) the authors find that when information pertaining to the assessment of the healthiness of food items is provided, the less healthy the item is portrayed to be, (1 and are likely to disappoint. Together, our results demonstrate the importance of popularity as a cue that consumers use in daily decisions to make choices they can be certain about.

REFERENCES

- Becker, G. S. (1991). A Note on Restaurant Pricing and Other Examples of Social Influences on Price. *Journal of Political Economy*, 99(5), 1109.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the Behavior of Others: Conformity, Fads, and Informational Cascades. *Journal of Economic Perspectives*, 12(3), 151–170.

- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*(6), 1015–1026.
- Deval, H., Mantel, S. P., Kardes, F. R., & Posavac, S. S. (2013). How Naive Theories Drive Opposing Inferences from the Same Information. *Journal of Consumer Research, 39*(6), 1185–1201.
- Dowling, G. R., & Staelin, R. (1994). A Model of Perceived Risk and Intended Risk-Handling Activity. *Journal of Consumer Research, 21*(1), 119.
- Gigerenzer, G. (2010). Moral satisficing: rethinking moral behavior as bounded rationality. *Topics in Cognitive Science, 2*(3), 528–54.
- Griskevicius, V., Goldstein, N. J., Mortensen, C. R., Sundie, J. M., Cialdini, R. B., & Kenrick, D. T. (2009). Fear and Loving in Las Vegas: Evolution, Emotion, and Persuasion. *Journal of Marketing Research, 46*(3), 384–395.
- Loersch, C., & Payne, B. K. (2011). The Situated Inference Model: An Integrative Account of the Effects of Primes on Perception, Behavior, and Motivation. *Perspectives on Psychological Science, 6*(3), 234–252.
- Ma, J., & Roese, N. J. (2014). The maximizing mind-set. *Journal of Consumer Research, 41*, 71–92.
- Meyer, R. (1981). A model of multiattribute judgments under attribute uncertainty and informational constraint. *Journal of Marketing Research, 18*(4), 428–441.
- Muchnik, L., Aral, S., & Taylor, S. J. (2013). Social influence bias: a randomized experiment. *Science (New York, N.Y.), 341*(6146), 647–51.
- Parker, J., & Lehmann, D. R. (2011). When shelf-based scarcity impacts consumer preferences. *Journal of Retailing, 87*(2), 142–155.
- Raafat, R. M., Chater, N., & Frith, C. (2009). Herding in humans. *Trends in Cognitive Sciences, 13*(10), 420–8.
- Raghunathan, R., Naylor, R. W., & Hoyer, W. D. (2006). The Unhealthy = Tasty Intuition and Its Effects on Taste Inferences, Enjoyment, and Choice of Food Products. *Journal of Marketing, 70*(4), 170–184.
- Reidenbach, R. E., & Robin, D. P. (1990). Toward the development of a multidimensional scale for improving evaluations of Business Ethics. *Journal of Business Ethics, 9*(8), 639–653.
- Rust, R. T., Inman, J. J., Jia, J., & Zahorik, a. (1999). What You Don't Know About Customer-Perceived Quality: The Role of Customer Expectation Distributions. *Marketing Science, 18*(1), 77–92.
- Surowiecki, J. (2004). *The Wisdom of Crowds*. Random House Inc.

Opening the Black Boxes of Consumer Misbehaviors: Insights from Studying Online Trolling

Maja Golf-Papez, University of Canterbury, New Zealand

Ekant Veer, University of Canterbury, New Zealand

EXTENDED ABSTRACT

During the past decade, researchers and practitioners have shown an increased interest in how people misbehave in their role as consumers (Daunt and Greer 2015). Several studies have explored how some consumers act “in a thoughtless or abusive way, causing problems for the firms, its employees, and other customers” (Lovelock and Wirtz 2016, 524). Most of these studies have taken a dispositional perspective, explaining consumer misbehaviors by referring to the characteristics and predispositions of misbehaving consumers (Daunt and Greer 2015). At the same time, perpetrators of consumer misbehaviors have been in the foreground of existing misbehaviors-management practices. This paper offers and advocates an alternative approach to understanding and managing consumer misbehaviors. Using actor-network-theory (ANT), we suggest that consumer misbehaviors cannot be attributed only to perpetrators but should rather be seen as effects of networks of all kinds of actors (Latour 2005).

To better understand the assemblages that allow and perpetuate consumer misbehavior, we studied online trolling behaviors. Trolling involves deliberate, deceptive, and mischievous attempts to provoke reactions from other online users. In practice, trolling includes anything from offensively replying to customers under fake customer service accounts or posting misleading and damaging product tutorials to communicating with other online users in humorous but also aggressive ways. These behaviors closely correspond to the behaviors of so-called problem customers (Bitner, Booms, and Mohr 1994) and jaycustomers (Lovelock and Wirtz 2016). Their pervasiveness, their potential impacts on marketers, businesses, brands, and other consumers, and the fact that they are under-researched phenomena (Buckels, Trapnell, and Paulhus 2014) make trolling behaviors a relevant and insightful research context for investigating consumer misbehaviors.

In our study, we examined (1) what human and non-human entities are assembled in the performance of trolling and (2) what roles these entities play in the making of this form of online misbehavior. To do so, we adopted a case-study approach, investigating five different instances of trolling: playful trolling, shock trolling, online pranking of other consumers and businesses, fake customer-service trolling, and “good old-fashioned” trolling. The research data were drawn from 250 hours of nonparticipant observation of actors and their practices, seven in-depth interviews with trolls, more than 50 instances of instant messaging with trolls, bystanders, community managers, and targets, and a review of trolling-related documents. The analysis included identifying the actors and recording their relations and interactions. We performed within and cross-case analysis of the five actor-networks and engaged in open and axial coding to sort and categorize the identified actors.

Our findings reveal that online trolling is performatively constituted by a collection of human, nonhuman, and hybrid entities more or less interacting in concert with each other. These entities can be thematically categorized into *troll(s)* (i.e., the performer(s) of trolling), *target(s)* (i.e., persons or objects toward which trolling is directed), *medium* (i.e., an intervening channel through which trolling is conveyed), *audience* (i.e., the spectators of trolling), *other trolls* (i.e., other people engaging in trolling), *trolling artifacts* (i.e., materialized byproducts of trolling), *regulators* (i.e., actors engaged

in detecting inappropriate behavior and maintaining order online), and *revenue streams* (i.e., financial and nonfinancial rewards associated with trolling).

Different (categories of) actors play different roles in the performance of trolling. An assemblage of three interacting actors—(1) *troll(s)*, (2) *target(s)*, and (3) a *medium*—has to be enacted for trolling to emerge. Other actors play a role in stabilizing the network and sustaining trolling even when trolls, targets, and a medium are not participating fully. For example, *trolling artifacts* such as post-produced videos of live-stream trolling and screenshots of textual trolling are distributed through the network for months after a trolling event has occurred. While *audience* members play an active role in coproducing and sharing these artifacts, this is only one of the ways in which they encourage trolling. Two more are asking trolls for advice about how to go about trolling or demanding new trolling content from them. *Other trolls* fuel trolling, for example, by pretending to be targets, usually with the intention of attracting more people to their social media sites. With similar intentions, businesses and other actors from the category *revenue streams* approach trolls with requests for trolling, offering financial or nonfinancial types of compensation. Lastly, the enforcement actions of actors in the category *regulators* (e.g., use of downvote, delete, and ban buttons, or an online moderator giving personal warnings) sustain trolling by indicating to the trolls that their actions are getting the desired effect. For trolls, even the most severe penalties seem to be perceived as *modus operandi* if not a badge of honor.

Our study provides the theoretical and managerial implications. First, by studying an online form of consumer misbehavior, we contribute to a more rounded understanding of consumer misbehaviors, which have been up to now predominantly studied in traditional, offline retail settings. Second, by drawing on actor-network-theory we extend the current research on consumer misbehaviors by presenting an alternative, more holistic view of the problem of misbehaviors. We also contribute to research on ANT by revealing that, in the case of trolling, the lack of compliance among the actors may stabilize and energize the network rather than lead to its destabilization and failure (Callon 1984). Finally, our empirical findings, by illuminating the influence that ‘invisible’ actors such as audience and regulators have over the practices of misbehaving consumers, offer new possibilities for management of these misbehaviors. As a way forward in tackling consumer misbehaviors, in particular trolling, we suggest that marketing practitioners and scholars focus on developing control mechanisms that will eliminate or minimize the effects associated with the (problematic) interactions between the actors. If we keep concentrating only on attacking the misbehaving consumers, then we are most likely just displacing the consumer misbehavior to other times and places.

REFERENCES

- Bitner, Mary Jo, Bernard H. Booms, and Lois A. Mohr (1994), “Critical Service Encounters: The Employee’s Viewpoint,” *Journal of Marketing*, 58(4), 95–106.
- Buckels, Erin E., Paul D. Trapnell, and Delroy L. Paulhus (2014), “Trolls Just Want to Have Fun,” *Personality and Individual Differences*, 67, 97–102.

- Callon, Michel (1984), "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay," *The Sociological Review*, 32(S1), 196–233.
- Daunt, Kate L. and Dominique A. Greer (2015), "Unpacking the Perceived Opportunity to Misbehave: The Influence of Spatio-Temporal and Social Dimensions on Consumer Misbehavior," *European Journal of Marketing*, 49(9/10), 1505–26.
- Latour, Bruno (2005), *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford ; New York: Oxford University Press.
- Lovelock, Christopher H. and Jochen Wirtz (2016), *Services Marketing: People, Technology, Strategy*, Eighth edition, New Jersey: World Scientific Publishing.

“That’s embarrassing!”

Effects of Brand Anthropomorphism on Intimate Disclosure

Anais Gretry, Radboud University Nijmegen, The Netherlands

Csilla Horvath, Radboud University Nijmegen, The Netherlands

Nina Belei, Radboud University Nijmegen, The Netherlands

EXTENDED ABSTRACT

1. Introduction

Marketers typically strive to collect information about their consumers in an attempt to foster consumer-brand relationships. However, research has revealed that consumers are generally reluctant to divulge information about themselves to brands, especially when the information requested becomes intimate. In light of this consumer disclosure reluctance, several marketing studies have investigated the factors influencing disclosure behavior (Acquisti, et al., 2012; John, et al., 2011; Moon, 2000; White, 2004). Although these studies offer insights into the conditions under which consumers are more likely to self-disclose, a thorough Q of how particular brand positioning strategies might affect consumer propensity to reveal information to the brand is still missing from the literature. One positioning strategy that marketers frequently use to foster relationships with consumers is brand anthropomorphization, the act of endowing the brand with humanlike characteristics. Approximately 31% of the brands in the IRI marketing dataset pursue this strategy (see Kwak, Puzakova, & Rocereto, 2015). Given the high prevalence of brand anthropomorphization, the lack of research about its effect on self-disclosure is striking.

Anthropomorphized (vs. non-anthropomorphized) brands facilitate consumer-brand relationships because they provide quasi-social experiences (Aggarwal & McGill, 2012). Once a brand is anthropomorphized, it becomes possible for consumers to enter into a quasi-social relationship with it. Social interactions are pleasurable and lead consumers to experience positive affect (Wang, Baker, Wagner, & Wakefield, 2007). However, research has begun to illuminate unexpected drawbacks of employing an anthropomorphic strategy. In specific contexts such as product wrongdoing (Puzakova, Kwak, & Rocereto, 2013), this positioning strategy has been shown to lead to negative consumer response because anthropomorphized brands are perceived as being mindful. Considering that people are generally reluctant to engage in intimate self-disclosure because of fear of embarrassment (White, 2004) and that brand anthropomorphization leads to the perception that the brand is capable of evaluating others (Epley & Waytz, 2009), we expect that rather than facilitating consumer-brand exchanges, an anthropomorphic brand positioning strategy might have a negative effect on consumer intimate self-disclosure.

2. Studies

Across three experiments, we provide evidence that brand anthropomorphism negatively influences consumers’ disclosure of intimate information. These effects stem from the perception that anthropomorphized brands are mindful and capable of evaluating others, thereby eliciting higher consumer embarrassment associated with intimate self-disclosure. We further demonstrate that indirect questioning (i.e., asking respondents to answer questions from the perspective of another person) offers a good tactic to mitigate the negative effects of brand anthropomorphism on intimate self-disclosure, because it reduces consumer embarrassment.

All three experiments examined actual consumer disclosure to a brand rather than mere disclosure intentions, thereby obtaining

data most closely resembling real consumer behavior. Consistent with prior research (Altman & Taylor, 1973; Collins & Miller, 1994; Moon, 2000), self-disclosure was measured along two dimensions, namely depth and breadth. Depth refers to the quality of information disclosed and was measured using independent judges. The judges rated each disclosure using a five-point scale (1 = “low intimacy”; 5 = “high intimacy”). Breadth refers to the quantity of information disclosed and was measured using a simple word count.

Study 1 investigated whether brand anthropomorphism negatively influences the consumer disclosure of intimate information. We employed a 2 (brand: anthropomorphized vs. non-anthropomorphized) \times 2 (question: intimate vs. non-intimate) between-subjects experiment. 150 participants recruited from Mechanical Turk online panel (46% female; $M_{Age} = 32$ years) were randomly assigned to one of the four conditions. We gave participants the cover story that they would be participating in two related studies. In the first study, participants received information on a fictitious dating brand; they were shown either an anthropomorphized or non-anthropomorphized version. We manipulated brand anthropomorphism with a combination of visual and verbal humanlike elements. Participants learned that the brand was a European dating site that planned to expand to North America and that, as part of the expansion strategy, it had designed a survey to gain insight into how North Americans feel about themselves and about romantic relationships. Participants were then asked to complete the brand survey. Consistent with prior research (Jourard & Jaffe, 1970; Moon, 2000), the survey consisted of three questions on romantic relationships that were either low or high in intimacy. The second study was a questionnaire from the experimenters in which participants were asked to provide their reactions to the brand survey they had just completed and their general beliefs about the brand; this included the manipulation check questions and control variables (i.e., general propensity to self-disclose, product involvement, and gender). Results revealed that participants disclosed less intimate information to the anthropomorphized brand than to the non-anthropomorphized one. These effects occurred both in terms of disclosure depth and breadth.

Study 2 served four purposes. First, we aimed to replicate Study 1 with a different product category and to a different disclosure topic. Second, we tested whether embarrassment mediates the negative effect of brand anthropomorphism on consumers’ disclosure of intimate information. Third, we examined an alternative account according to which consumers are less likely to trust an anthropomorphized (vs. non-anthropomorphized) brand, feeling that it might have a humanlike mind with an evil intention to misuse intimate information (Puzakova, et al., 2013). We employed a 2 (brand: anthropomorphized vs. non-anthropomorphized) \times 2 (question: intimate vs. non-intimate) between-subjects experiment. 184 participants, recruited from Mechanical Turk online panel (all women; $M_{Age} = 33$ years) were randomly assigned to one of the four conditions. Participants received information on a fictitious feminine brand. The manipulation of brand anthropomorphism was similar to that of Study 1. Participants learned that the brand produced sanitary napkins and that, as part of its research and development program, it was conducting a survey to gain insight into feminine hygiene issues. Participants were then invited to complete the brand survey. The survey consisted

of four questions on feminine hygiene issues that were either low or high in intimacy. Participants were then redirected to a questionnaire from the experimenters in which they were asked to provide their reactions to the brand survey they had just completed; this included the manipulation check questions as well as questions related to embarrassment, brand trust, and control variables (i.e., mood, product involvement, involvement with feminine hygiene, and gender). The results of Study 2 replicated the negative effect of brand anthropomorphism on intimate self-disclosure. These effects again occurred both in terms of disclosure depth and breadth. Importantly, Study 2 provided insight into the process through which brand anthropomorphism affects intimate self-disclosure via embarrassment. In addition, we strengthened our theorization by ruling out an alternative account according to which consumers are less likely to trust an anthropomorphized (vs. non-anthropomorphized) brand.

In **Study 3**, we examined whether indirect questioning mitigates the negative effect of brand anthropomorphism on intimate self-disclosure. In addition, we aimed to further reveal the role of embarrassment as an underlying mechanism by showing that the moderating effect of indirect questioning on self-disclosure occurs through embarrassment. The rationale for this study was that if an anthropomorphized brand decreases the disclosure of intimate information because it elicits higher embarrassment, then the negative effect should be reduced when the consumer's self is perceived as less threatened, that is, when consumers are asked intimate information in an indirect way. We employed a 2 (brand: anthropomorphized vs. non-anthropomorphized) \times 2 (questioning method: direct vs. indirect) between-subjects experiment. 95 undergraduate students from a North American university (62% female) were randomly assigned to one of the four conditions and followed procedures identical to those reported in previous studies. Participants received information on a fictitious clothing brand. They learned that the brand was a European clothing brand that planned to expand to North America and that, as part of the expansion strategy, it had designed a survey to gain insight into North Americans consumers. The manipulation of brand anthropomorphism was similar to that of the previous studies. The questioning method was manipulated between participants. We told participants that the brand was planning to create an advertising campaign aimed at North American consumers. The campaign would aim to illustrate very intense romantic relationships. For this reason, information about how North Americans feel about very intense romantic relationships was sought. Insights from people's real life experiences would provide inspiration for the advertisements. Accordingly, the brand survey consisted of four highly intimate questions. Consistent with prior research (Fisher, 1993; Fisher & Tellis, 1998; Sengupta, et al., 2002), we asked participants to answer the questions from their own perspective (direct condition) versus from the perspective of the average North American (indirect condition). Participants were then redirected to a questionnaire from the experimenters in which they were asked to provide their reactions to the brand survey they had just completed; this included the manipulation check questions as well as questions related to embarrassment and control variables (i.e., general propensity to self-disclose, mood, product involvement, self-image concerns, and gender). The results of Study 3 showed that the questioning method (direct vs. indirect) moderates the effect of brand anthropomorphism on consumers' disclosure of intimate information. These results underscored our key assertions that brand anthropomorphism negatively affects intimate self-disclosure (both in terms of depth and breadth) when questions are asked in a direct style and that indirect questioning mitigates this negative effect. More importantly, Study 3 showed that when consumers are asked for intimate information in a direct way, brand an-

thropomorphism increases embarrassment and consequently lowers self-disclosure. In contrast, when consumers are asked for intimate information in an indirect way (i.e., about a typical other), the negative effect of brand anthropomorphism on embarrassment and subsequently on disclosure disappear.

3. Theoretical Contribution

This research contributes to the marketing literature in four important ways. First, we are the first to demonstrate that brand anthropomorphization has important implications for consumers' self-disclosure to brands, an issue that currently receives considerable attention in both the marketing literature and in practice. In doing so, the present work extends the recent line of research that shows negative effects of brand anthropomorphization in diverse domains, such as computer games, product wrongdoing, price fairness, and risk perception (Kim, Chen, & Zhang, 2016; Kim & McGill, 2011; Kwak, et al., 2015; Puzakova, et al., 2013). Second, we investigate the moderating effect of the questioning method (direct vs. indirect) and show that indirect questioning mitigates the negative effect of brand anthropomorphism on intimate self-disclosure. Third, we elucidate the mechanism underlying these effects. Specifically, we demonstrate that embarrassment mediates the interactive effect of brand anthropomorphism and questioning method on intimate self-disclosure. Fourth and importantly, most consumer research focuses on one side of the consumer-brand relationship: how consumers perceive a brand. In contrast, the current paper taps into the other side of the relationship: the inference made by the consumer about how the brand might perceive him or her. We thus provide a more complete picture of the relationship between a brand and a consumer and, in particular, of the consumer-brand dialogue occurring inside the consumer's mind (Blackston & Lebar, 2015).

4. Managerial Implications

Our research shows that brand anthropomorphization, a positioning strategy commonly employed by marketers to better connect with consumers, has an unintended and adverse effect on consumers' disclosure of intimate information. We do not suggest that marketers should avoid the use of anthropomorphic strategies but rather that they should be aware of the negative consequences of these positioning strategies.

Furthermore, our results offer marketers guidance as to how to overcome the unintended negative effect of brand anthropomorphism and to more efficiently grasp the benefits of this positioning strategy. Specifically, we show that indirect attempts to obtain intimate information facilitate consumers' propensity to self-disclose.

Finally, it is not uncommon for marketers to ask consumers to engage in relatively intimate self-disclosure. For example, online dating sites typically ask (potential) members to respond to surveys regarding their feelings about relationships and sex. Online dating sites are extremely popular among consumers; brands such as Match.com, eHarmony, or OkCupid gather more than 30 million users who produce an unprecedented amount of data (Statistic Brain, 2016). Similarly, the condom brand, Durex, regularly conducts sex surveys as part of their research program by asking thousands of adult consumers how they feel about sex and what impact this has on other aspects of their lives (Durex, 2012). Beyond relationship-related and sexual information, asking consumers about their income, food habits, alcohol consumption, body type, medical information and even their age is also likely to be perceived as intimate. Thus, our findings have relevance to many sectors, including the banking, food, beverage, clothing, and very importantly, public health industries.

5. Limitations and directions for further research

Future research should examine the extent to which the negative effect of brand anthropomorphism on intimate self-disclosure occurs if the brand gradually escalates from superficial to intimate questions. Moon (2000) found that consumers are more likely to disclose intimate information to a computer when they have first been "warmed" up through introductory questions. In contrast, Acquisti, et al. (2012) found that a question appears to be more (less) intimate if preceded by a more innocuous (a more intimate) question, which ultimately affects a respondent's propensity to answer the question. An exploration of the order in which questions of varying intimacy are asked and how this order alters the effect of brand anthropomorphism on consumer self-disclosure is therefore an important avenue for further research.

Additionally, we conducted our studies using fictitious brands. This allowed us to cleanly manipulate brand anthropomorphism while controlling for preexisting perceptions of and relationships with an existing brand across conditions. Further research could delve deeper by employing existing brands with which consumers have developed a relationship. White (2004) showed that consumers with relatively deep (vs. shallow) relationship perceptions were more reluctant to divulge intimate information. We therefore expect that employing existing brands would further enhance the negative effect of brand anthropomorphization on intimate self-disclosure.

REFERENCES

- Acquisti, A., John, L. K., & Loewenstein, G. (2012). The impact of relative standards on the propensity to disclose. *Journal of Marketing Research*, 49(2), 160-174.
- Aggarwal, P., & McGill, A. L. (2012). When brands seem human, do humans act like brands? Automatic behavioral priming effects of brand anthropomorphism. *Journal of Consumer Research*, 39(2), 307-323.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart & Winston.
- Blackston, M., & Lebar, E. (2015). Constructing consumer-brand relationships to better market and build business. In S. Fournier, M. Breazeale & J. Avery (Eds.), *Strong brands, strong relationships*. New York: Routledge.
- Chen, Z., & Berger, J. (2013). When, why, and how controversy causes conversation. *Journal of Consumer Research*, 40(3), 580-593.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*, 116(3), 457-475.
- Durex. (2012). Global Sex Survey. In (Vol. 2016).
- Epley, N., & Waytz, A. (2009). Mind perception. In S. T. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 498-541). New York: John Wiley & Sons.
- Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, 20(2), 303.
- Fisher, R. J., & Tellis, G. J. (1998). Removing social desirability bias with indirect questioning: Is the cure worse than the disease? In J. W. Alba & J. W. Hutchinson (Eds.), *Advances in consumer research* (Vol. 25, pp. 563-567). Provo, UT: Association for Consumer Research.
- Greene, W. (2008). Functional forms for the negative binomial model for count data. *Economics Letters*, 99(3), 585-590.
- John, L. K., Acquisti, A., & Loewenstein, G. (2011). Strangers on a plane: Context-dependent willingness to divulge sensitive information. *Journal of Consumer Research*, 37(5), 858-873.
- Jourard, S. M., & Jaffe, P. E. (1970). Influence of an interviewer's disclosure on the self-disclosing behavior of interviewees. *Journal of Counseling Psychology*, 17(3), 252-257.
- Kim, S., Chen, R. P., & Zhang, K. (2016). Anthropomorphized helpers undermine autonomy and enjoyment in computer games. *Journal of Consumer Research*, 43(2), 282-302.
- Kim, S., & McGill, A. L. (2011). Gaming with Mr. Slot or gaming the slot machine? Power, anthropomorphism, and risk perception. *Journal of Consumer Research*, 38(1), 94-107.
- Kwak, H., Puzakova, M., & Rocereto, J. F. (2015). Better not smile at the price: The differential role of brand anthropomorphization on perceived price fairness. *Journal of Marketing*, 79(July), 56-76.
- Moon, Y. (2000). Intimate exchanges: Using computers to elicit self-disclosure from consumers. *Journal of Consumer Research*, 26(4), 323-339.
- Puzakova, M., Kwak, H., & Rocereto, J. F. (2013). When humanizing brands goes wrong: The detrimental effect of brand anthropomorphization amid product wrongdoings. *Journal of Marketing*, 77(3), 81-100.
- Sengupta, J., Dahl, D. W., & Gorn, G. J. (2002). Misrepresentation in the consumer context. *Journal of Consumer Psychology*, 12(2), 69-79.
- Statistic Brain. (2016). Online Dating Statistics. In (Vol. 2016).
- Wang, L. C., Baker, J., Wagner, J. A., & Wakefield, K. (2007). Can a retail web site be social? *Journal of Marketing*, 71(3), 143-157.
- White, T. B. (2004). Consumer disclosure and disclosure avoidance: A motivational framework. *Journal of Consumer Psychology*, 14(1-2), 41-51.

How Tweet Readability and Brand Hedonism Affect Consumer Engagement

Anais Gretry, Radboud University Nijmegen, The Netherlands

Scott W. Davis, University of Houston - Downtown, USA

Csilla Horvath, Radboud University Nijmegen, The Netherlands

Nina Belei, Radboud University Nijmegen, The Netherlands

EXTENDED ABSTRACT

1. Introduction

In their attempts to increase consumer engagement with their brands, marketers usually post brief messages on their social media pages. Consumer engagement is a key measure of consumer-brand relationships, associated with strong self-brand connections, loyalty, and brand usage intentions (Hollebeek, Glynn, and Brodie 2014). In a social media context, measures of engagement usually involve consumer acts such as liking or sharing (e.g., re-tweeting) a brand's message (Stephen, Sciandra, and Inman 2015).

Social media platforms derive much of their appeal from their short formats, which enable quick and easy consumption, anywhere (Lee 2014), and makes users more likely to read and share branded messages, especially through their mobile devices. For example, Twitter constrains users to messages (i.e., "tweets") that consist of no more than 140 characters. Such length restrictions require brands to craft their communication artfully (e.g., use abbreviations and acronyms) and rely on various social media-specific features (e.g., hashtags, at-mentions, emojis) to convey short, but appealing messages. Such efforts in turn can make tweets relatively complex and difficult to read and comprehend though (Davenport and DeLine 2014; Temnikova, Vieweg, and Castillo 2015).

Despite rich research on brand communication in social media, we lack a clear understanding of how the readability of messages disseminated by brands on social media affects consumer responses. If consumers experience difficulties reading branded messages to which they are exposed, the power of social media communication to leverage engagement would decrease significantly. We address this critical gap by examining two important questions: How does the ease of reading branded tweets affect consumer engagement with brands? Are there specific brand characteristics for which the effects differ?

2. Theoretical Background

To answer our research questions, we draw on literature pertaining to processing fluency (Lee and Aaker 2004; Lee and Labroo 2004). Substantial research shows that consumers respond more positively to messages that feel easy to process, and message readability contributes to processing ease (Rennekamp 2012). Therefore, tweets that are easy to read seemingly might increase consumers' propensity to engage with the brand, whereas tweets perceived as hard to read should deter engagement. However, it is unclear whether such predictions apply to all types of brands. For example, the level of hedonism associated with a brand might moderate the effect of readability on consumer responses, such that easy-to-read tweets negatively (positively) influence consumer engagement with more (less) hedonic brands. Hedonic brands already are expected to be unique, uncommon, and exclusive (e.g., Mantonakis et al. 2013; Pocheptsova, Labroo, and Dhar 2010), so an inference that a message from a more hedonic brand is uncommon and exclusive might invoke positive consumer responses (Mantonakis et al. 2013). Consumers might draw such inferences if a message is more difficult to read, which signals that it is less familiar (Pocheptsova, Labroo, and Dhar 2010; Song and Schwarz 2009). That is, we anticipate that reading

difficulty might enhance consumer engagement for more hedonic brands but decrease it for less hedonic brands.

3. Data Collection

We used Twitter's publicly available application programming interface (API) to collect a sample of branded tweets. The final data set of 24,960 branded tweets covers the period from January 1, 2015, to March 25, 2016. We selected brands from *Forbes*'s list of the 100 most valuable brands but excluded 4 brands that did not have a Twitter account, had not tweeted in the past three years, or did not tweet primarily in English.

The 96 valuable brands represent 19 broad industry categories, such as technology (e.g., IBM), automotive (e.g., Mercedes-Benz), consumer packaged goods (e.g., Danone), and financial services (e.g., Goldman Sachs). For each brand, we collected the last 3,200 tweets it posted, which is the maximum number of tweets that can be retrieved per account with Twitter's API. Of these 3,200 tweets per account, we filtered out replies to specific consumers such that we retained tweets intended for all consumers and visible to the brand's entire audience. Next, we limited the number of tweets to the most recent 300 per brand, to ensure balanced repartition across brands. Finally, we limited our data set to tweets from 2015 and beyond, to diminish the potential noise resulting from Twitter's updates to its platform over time.

4. Measures

There are two main levels of analysis for this study: tweet and brand levels. Message readability and consumer engagement are tweet-level variables; brand hedonism is a brand-level variable.

Message readability. Consistent with recent research (Venturi et al. 2015), we examined a set of eight stylistic features as proxies for readability measures: (1) tweet length, (2) average word length, (3) frequency of non-words, (4) noun-to-verb ratio, (5) average parse tree depth (syntactic measures reflecting sentence complexity), (6) frequency of hashtags, (7) frequency of at-mentions, and (8) frequency of emojis. For each frequency measure, we used relative rather than absolute frequencies to control for the length of the tweet, which likely correlates with the absolute frequencies. We treated the eight readability variables independently, to gauge the individual effect of each readability variable on consumer engagement.

We classified the eight readability variables into four broader readability categories (Venturi et al. 2015): (1) raw text features (tweet length and average word length), (2) lexical features (frequency of non-words), (3) syntactic features (noun-to-verb ratio and average parse tree depth), and (4) Twitter-specific features (frequency of hashtags, at-mentions, and emojis). According to prior literature, the first three broad categories all decrease the ease with which people read messages. Virtually no empirical research has investigated the effect of Twitter-specific features on message readability though (cf. Davenport and DeLine 2014; Temnikova, Vieweg, and Castillo 2015), so predictions about their effects on perceived reading ease are less straightforward.

Consumer engagement with brands. We measured the number of shares (users clicking "retweet") and likes (users clicking "like") that each tweet received. We used the total counts of shares and likes

at the time the data were collected. We use a relative rather than an absolute engagement measure to ensure that the results are not driven by audience size.

Level of brand hedonism. For each brand, we measured the level of hedonism by relying on ratings from human judges, 200 participants whom we recruited from Mechanical Turk. They evaluated brands in terms of how fun, exciting, thrilling, and pleasurable the brand was, on a 7-point scale anchored by “not at all” (1) and “extremely” (7). We mean-centered the variable to ensure our analyses were interpretable.

Control variables. We included several control variables: the valence of the tweet (i.e., whether a tweet is positive or negative; Berger and Milkman 2012); whether the tweet comprises includes rich media (de Vries, Gensler, and Leeflang 2012); and the frequency of tweets posted by the brand (Kumar et al. 2016). Additionally, we employed time and industry fixed effects. The time fixed effects control for the respective year of branded tweets (e.g., Homburg, Ehm, and Artz 2015). We created a dummy variable for 2015, with 2016 as the referent. As we noted previously, the 96 brands cover 19 industrial sectors (*Forbes* 2016), so we rely on industry fixed effects to control for industry-level unobserved heterogeneity. We created 18

dummy variables representing each industry category, with “transportation” as the referent.

5. Model Specification

Before we present the model we used to investigate the effects of message readability and brand hedonism on consumer engagement, we address some pertinent issues. First, the two dependent variables (i.e., share and like) were highly skewed, so we used their logarithmic transformations to approximate a normal distribution (e.g., Hennig-Thurau, Wiertz, and Feldhaus 2015; Stephen, Sciandra, and Inman 2015). The transformation is $\ln(1 + \text{variable})$, where we add 1 to prevent taking logs of 0. Second, because tweets were nested within brands, we applied hierarchical linear modeling (Hayes 2006) to account for possible interdependence among tweets within a brand.

We estimated a model for each dependent variable separately. Equations 1–8 provide an overview of our statistical model for the share dependent variable for tweet i by brand j :

Tweet Level 1:

$$(1) \text{LN}(\text{SHARE}_{ij} + 1) = \gamma_{0j} + \sum_{m=1 \text{ to } 8} \beta_{mj}(\text{READ}_{mij_GMC}) + \beta_{9j}\text{MEDIA}_{ij} + \beta_{10j}\text{POS}_{ij} + \beta_{11j}\text{Y2015}_{ij} + \sum_{n=1 \text{ to } 18} \beta_{(11+n)j} \text{INDUSTRY}_{nij} + \epsilon_{ij}$$

Brand Level 2:

$$(2) \gamma_{0j} = \gamma_{00} + \sum_{m=1 \text{ to } 8} \beta_{0m}\overline{\text{READ}_{mj}} + \beta_{09}\text{FRECOM}_j + \beta_{010}\text{HED}_j + \sum_{m=1 \text{ to } 8} \beta_{0(10+m)}(\overline{\text{READ}_{mj}} \times \text{HED}_j) + \mu_j$$

$$(3) \beta_{mj} = \beta_{m0} + \beta_{m1}(\text{HED}_j), \text{ with } m \text{ ranging from 1 to 8.}$$

$$(4) \beta_{9j} = \beta_{90}$$

$$(5) \beta_{10j} = \beta_{100}$$

$$(6) \beta_{11j} = \beta_{110}$$

$$(7) \beta_{(11+n)j} = \beta_{(11+n)0}, \text{ with } n \text{ ranging from 1 to 18.}$$

Then the final model can be written as follows:

$$(8) \text{LN}(\text{SHARE}_{ij} + 1) = \gamma_{00} + \sum_{m=1 \text{ to } 8} \beta_{0m}\overline{\text{READ}_{mj}} + \beta_{09}\text{FRECOM}_j + \beta_{010}\text{HED}_j + \sum_{m=1 \text{ to } 8} \beta_{0(10+m)}(\overline{\text{READ}_{mj}} \times \text{HED}_j) + \sum_{m=1 \text{ to } 8} \beta_{m0}\text{READ}_{mij_GMC} + \sum_{m=1 \text{ to } 8} \beta_{m1}(\text{READ}_{mij_GMC} \times \text{HED}_j) + \beta_{90}\text{MEDIA}_{ij} + \beta_{100}\text{POS}_{ij} + \beta_{110}\text{Y2015}_{ij} + \sum_{n=1 \text{ to } 18} \beta_{(11+n)0}\text{INDUSTRY}_{nij} + \epsilon_{ij} + \mu_j$$

where

$\text{LN}(\text{SHARE} + 1)$ = logarithm transformation of the share variable.

READ_{m_GMC} = group-mean centered measure of the m^{th} readability variable.

MEDIA = rich media variable.

POS = content positivity variable.

Y2015 = time fixed effects (whether tweet was posted in 2015, with 2016 as the referent year).

INDUSTRY_n = industry fixed effects (whether tweet was posted from a brand belonging to the n^{th} industry, from Industry_1 = aerospace to Industry_{18} = telecom, and with transportation as the referent industry category).

FRECOM = brand communication intensity.

HED = brand hedonism.

m = number of readability variables.

n = number of industry categories.

γ_{00} = brand-level intercepts.

γ = parameters to be estimated in the models.

ϵ_{ij} = random error at the tweet level (i.e., Level 1 residual variance; assumed normally distributed with a mean of 0 and a variance of σ_ϵ).

μ_j = random error at the brand level (i.e., Level 2 residual variance; assumed normally distributed with a mean of 0 and a variance of σ_μ).

Model Results

The results in Table 1 reveal that many message readability characteristics significantly affect consumer engagement, and the level of hedonism moderates most of them.

Table 1: Effects of Message Readability and Brand Hedonism on Consumer Engagement

Variables	Share			Like		
	γ	SE	p-Value	γ	SE	p-Value
Intercept	-.20	2.30	.93	.89	2.78	.75
<i>Within-group effects (tweet-level)</i>						
Control variables						
POS	-.01	.02	.58	.03	.03	.30
MEDIA	.14***	.01	.00	.24***	.01	.00
Message readability						
READ ₁ _GMC (Tweet length)	.01***	.00	.00	.00	.00	.58
READ ₂ _GMC (Average word length)	.00	.01	.57	-.01	.01	.34
READ ₃ _GMC (Non-words)	-.57*	.33	.09	-1.05***	.41	.01
READ ₄ _GMC (Noun-verb ratio)	-.01***	.00	.00	-.01***	.00	.00
READ ₅ _GMC (Average parse tree depth)	-.01***	.00	.01	.00	.00	.31
READ ₆ _GMC (Hashtag)	.26***	.07	.00	.24***	.09	.01
READ ₇ _GMC (At-mentions)	-.30***	.10	.00	-.22*	.12	.07
READ ₈ _GMC (Emojis)	.90***	.10	.00	1.13***	.12	.00
Message readability brand hedonism						
READ ₁ _GMC (Tweet length) * HED	-.01***	.00	.00	-.01***	.00	.00
READ ₂ _GMC (Average word length) * HED	-.02***	.01	.00	-.02**	.01	.03
READ ₃ _GMC (Non-words) * HED	.81**	.35	.02	1.05***	.43	.01
READ ₄ _GMC (Noun-verb ratio) * HED	.00*	.00	.06	.00	.00	.20
READ ₅ _GMC (Average parse tree depth) * HED	.01***	.00	.01	.01**	.00	.02
READ ₆ _GMC (Hashtag) * HED	.02	.08	.82	-.23**	.10	.02
READ ₇ _GMC (At-mentions) * HED	.12	.11	.25	-.22*	.13	.10
READ ₈ _GMC (Emojis) * HED	-.38***	.13	.00	-.54***	.16	.00
<i>Between-group effects (Brand-level)</i>						
Control variables						
FREQCOM	.00	.00	.09	.00	.00	.16
Message readability						
\overline{READ}_1 (Tweet length)	-.02	.05	.68	-.05	.06	.38
\overline{READ}_2 (Average word length)	.27	.35	.45	.21	.43	.62
\overline{READ}_3 (Non-words)	38.94	25.29	.13	31.99	3.54	.30
\overline{READ}_4 (Noun-verb ratio)	-.19	.20	.35	-.16	.25	.51
\overline{READ}_5 (Average parse tree depth)	.03	.09	.77	.07	.11	.56
\overline{READ}_6 (Hashtags)	-5.05	2.39	.04	-4.68	2.88	.11
\overline{READ}_7 (At-mentions)	-4.57	5.11	.38	-6.08	6.18	.33
\overline{READ}_8 (Emojis)	-1.35	4.95	.79	.24	5.98	.97
Brand hedonism						
HED	.79	2.74	.77	1.38	3.31	.68
Message readability brand hedonism						
\overline{READ}_1 (Tweet length) * HED	.00	.05	.94	.00	.07	.96
\overline{READ}_2 (Average word length) * HED	-.22	.46	.64	-.30	.56	.59
\overline{READ}_3 (Non-words) * HED	-22.17	25.60	.39	-15.09	3.92	.63
\overline{READ}_4 (Noun-verb ratio) * HED	-.37	.24	.12	-.39	.29	.18
\overline{READ}_5 (Average parse tree depth) * HED	.13	.11	.24	.16	.14	.25
\overline{READ}_6 (Hashtags) * HED	.48	2.91	.87	.50	3.52	.89
\overline{READ}_7 (At-mentions) * HED	2.69	5.78	.64	3.14	6.99	.66
\overline{READ}_8 (Emojis) * HED	.04	1.19	1.00	-1.90	12.31	.88

Fixed effects

Y2015	-.11***	.01	.00	-.20***	.01	.00
INDUSTRY ₁ (Aerospace)	.63	.53	.24	.41	.64	.53
INDUSTRY ₂ (Alcohol)	.82	.49	.10	.59	.60	.33
INDUSTRY ₃ (Apparel)	.25	.42	.54	.15	.50	.77
INDUSTRY ₄ (Automotive)	.29	.35	.41	.18	.42	.67
INDUSTRY ₅ (Beverage)	.18	.40	.66	-.01	.49	.98
INDUSTRY ₆ (Business service)	-.42	.52	.43	-.80	.63	.21
INDUSTRY ₇ (Consumer packaged goods)	.21	.33	.53	.13	.40	.76
INDUSTRY ₈ (Diversified)	-.04	.41	.92	-.23	.49	.65
INDUSTRY ₉ (Financial services)	-.18	.33	.58	-.29	.40	.47
INDUSTRY ₁₀ (Heavy equipment)	-.02	.46	.97	.13	.55	.81
INDUSTRY ₁₁ (Leisure)	.92*	.50	.07	.89	.60	.14
INDUSTRY ₁₂ (Luxury)	.76**	.38	.05	.63	.45	.17
INDUSTRY ₁₃ (Media)	-.36	.39	.35	-.68	.47	.15
INDUSTRY ₁₄ (Oil/Gas)	-.26	.54	.63	-.49	.65	.46
INDUSTRY ₁₅ (Restaurants)	-.05	.42	.90	-.04	.50	.94
INDUSTRY ₁₆ (Retail)	-.08	.38	.83	-.10	.46	.83
INDUSTRY ₁₇ (Technology)	-.07	.33	.83	-.40	.40	.32
INDUSTRY ₁₈ (Telecom)	-.11	.45	.81	-.11	.55	.84

* $p \leq .10$.** $p \leq .05$.*** $p \leq .01$.

Effects of message readability on consumer engagement. In line with our expectations, we find that the lexical and syntactic features negatively influence consumer engagement. Whereas tweet length, a raw text feature, exerts a significant, positive effect on the share variable, the effects of the other two raw text features (tweet length and average word length) on other consumer engagement measures are not significant. Among the Twitter-specific features, our results indicate mixed effects. The use of at-mentions negatively influences consumer engagement, but hashtags and emojis have positive effects on both consumer engagement variables. In terms of effect sizes, non-words and emojis exert the strongest effects.

Moderating role of brand hedonism. Brand hedonism significantly moderates the effect of all readability measures on consumer engagement. The results for the lexical and syntactic features support our hypotheses. When brand hedonism is low, a tweet with greater lexical and syntactic complexity receives fewer shares and likes. We observe opposite effects for brands with high levels of hedonism. The moderating effect of brand hedonism on the raw text features (tweet length and average word length) also is unexpected. Specifically, longer tweets and longer words in a tweet increase consumer engagement with less hedonic brands, but they reduce it for more hedonic brands. Finally, brand hedonism significantly moderates the effects of two Twitter-specific readability features on consumer engagement: the use of hashtags and the use of emojis. For a low level of brand hedonism, more hashtags and emojis increase consumer engagement. At a high level of brand hedonism though, these two Twitter-specific features reduce consumer engagement. We find no significant moderating effect of brand hedonism for the use of at-mentions.

We conducted several additional analyses and robustness checks using (1) an alternative engagement measure, (2) an alternative measure for the lexical readability features, and (3) a wider sample including tweets made by brands during the years 2013. The results confirmed our main analyses.

6. Theoretical Implications

This study offers three important contributions. First, we advance social media literature (e.g., de Vries, Gensler, and Leeflang 2012; van Laer and de Ruyter 2010) by deepening understanding of how message style affects consumer engagement with brands through microblogging services such as Twitter. This first empirical investigation of message readability on Twitter reveals the nuanced effects of a tweet's readability, according to the hedonic nature of a brand. Second, this research contributes to message readability (Sawyer, Laran, and Xu 2008; Venturi et al. 2015) and processing fluency (Lee and Aaker 2004) literature, in that it challenges the conventional wisdom that clearer, more fluent, and easier-to-read communication universally results in more positive consumer responses. The level of brand hedonism is one important brand characteristic that moderates the impact of message readability on consumer brand engagement. Third, we contribute to readability research by examining various readability characteristics and determining how they interact with brand hedonism to affect consumer engagement. Specifically, we consider traditional readability characteristics (e.g., raw text, lexical and grammatical features), as well as characteristics specific to social media, such as hashtags (#), at-mentions (@), and emojis.

7. Managerial Implications

Our findings suggest that even before they start crafting a specific message, marketers should account for the hedonistic nature of their brands. Less hedonic brands will tend to benefit from clearer, more readable messages, but brands that are more hedonic require less readability (and perhaps more fun, novelty, and eccentricity). Such insights are particularly relevant for brands such as Google, which fulfills a rather functional task for consumers (i.e., search for information online) but also is perceived primarily as hedonic. Thus, it likely benefits from short, fancy, eccentric messages, rather than more elaborate ones that use simple language. At the same time, and somewhat counterintuitively, a brand such as Google could enhance its chances of garnering shares and likes if it refrains from using

too many social media-specific features (e.g., at-mentions, hashtags, emojis), which result in less engagement among consumers in our study. Marketing managers thus can use these results to guide their efforts to write impactful, engaging tweets.

8. Limitations and Further Research

We focused on consumer engagement on Twitter, a popular social media platform that offers an effective research context. Brands generally conduct social media strategies across a range of platforms though, including Facebook, LinkedIn, and YouTube. Our findings should hold in other social media platforms that allow brands to post short text messages and encourage consumers to engage with those messages, but additional research could seek to replicate our findings on other social media platforms. Second, we used two metrics for consumer engagement, namely, shares and likes, which are prevalent metrics and marketing objectives in social media settings, with widely available data. But other measures also are worth considering, such as whether consumers comment on messages, visit the websites of the brands that post messages, or buy more products from these brands.

REFERENCES

- Berger, Jonah and Katherine L. Milkman (2012), «What Makes Online Content Viral?» *Journal of Marketing Research*, 49 (2), 192-205.
- Davenport, James R. and Robert DeLine (2014), «The Readability of Tweets and Their Geographic Correlation with Education.» (accessed June 8, 2016), [available at <http://arxiv.org/abs/1401.6058>].
- de Vries, Lisette, Sonja Gensler, and Peter S. H. Leeflang (2012), «Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing.» *Journal of Interactive Marketing*, 26 (2), 83-91.
- Forbes (2016), «The World's Most Valuable Brands.» (accessed June 8, 2016), [available at <http://www.forbes.com/powerful-brands/>].
- Hayes, Andrew F. (2006), «A Primer on Multilevel Modeling.» *Human Communication Research*, 32 (4), 385-410.
- Hennig-Thurau, Thorsten, Caroline Wiertz, and Fabian Feldhaus (2014), «Does Twitter Matter? The Impact of Microblogging Word of Mouth on Consumers' Adoption of New Movies.» *Journal of the Academy of Marketing Science*, 43 (3), 375-94.
- Hollebeck, Linda D., Mark S. Glynn, and Roderick J. Brodie (2014), «Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation.» *Journal of Interactive Marketing*, 28 (2), 149-65.
- Homburg, Christian, Laura Ehm, and Martin Artz (2015), «Measuring and Managing Consumer Sentiment in an Online Community Environment.» *Journal of Marketing Research*, 52 (5), 629-41.
- Kumar, Ashish, Ram Bezawada, Rishika Rishika, Ramkumar Janakiraman, and P. K. Kannan (2016), «From Social to Sale: The Effects of Firm-Generated Content in Social Media on Customer Behavior.» *Journal of Marketing*, 80 (1), 7-25.
- Lee, Angela Y. and Jennifer L. Aaker (2004), «Bringing the Frame Into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion.» *Journal of Personality and Social Psychology*, 86 (2), 205-18.
- Lee, Angela Y. and Aparna A. Labroo (2004), «The Effect of Conceptual and Perceptual Fluency on Brand Evaluation.» *Journal of Marketing Research*, 41 (May), 151-65.
- Lee, Dokyun, Kartik Hosanagar, and Harikesh S. Nair (2014), «The Effect of Social Media Marketing Content on Consumer Engagement: Evidence from Facebook.» Working paper, The Wharton School.
- Lee, Kevan (2014), «Infographic: The Optimal Length for Every Social Media Update and More.» (accessed July 13, 2016), [available at <https://blog.bufferapp.com/optimal-length-social-media>].
- Mantonakis, Antonia, Bryan Galiffi, Ummugulsum Aysan, and Randi Beckett (2013), «The Effects of the Metacognitive Cue of Fluency on Evaluations about Taste Perception.» *Psychology*, 4 (3), 318-24.
- Pocheptsova, Anastasiya, Aparna A. Labroo, and Ravi Dhar (2010), «Making Products Feel Special: When Metacognitive Difficulty Enhances Evaluation.» *Journal of Marketing Research*, 47 (6), 1059-69.
- Rennekamp, Kristina (2012), «Processing Fluency and Investors' Reactions to Disclosure Readability.» *Journal of Accounting Research*, 50 (5), 1319-54.
- Sawyer, Alan G., Juliano Laran, and Jun Xu (2008), «The Readability of Marketing Journals: Are Award-Winning Articles Better Written?» *Journal of Marketing*, 72 (1), 108-17.
- Stephen, Andrew T., Michael R. Sciandra, and J. Jeffrey Inman (2015), «Is It What You Say or How You Say It? How Content Characteristics Affect Consumer Engagement with Brands on Facebook.» Working paper, University of Oxford.
- Song, Hyunjin and Norbert Schwarz (2008), «If It's Hard to Read, It's Hard to Do: Processing Fluency Affects Effort Prediction and Motivation.» *Psychological Science*, 19 (10), 986-8.
- Temnikova, Irina, Sarah Vieweg, and Carlos Castillo (2015), «The Case for Readability of Crisis Communications in Social Media.» in 24th International World Wide Web Conference. Florence, Italy.
- van Laer, Tom and Ko de Ruyter (2010), «In Stories We Trust: How Narrative Apologies Provide Cover for Competitive Vulnerability after Integrity-violating Blog Posts.» *International Journal of Research in Marketing*, 27 (2), 164-74.
- Venturi, Giulia, Tommaso Bellandi, Felice Dell'Orletta, and Simonetta Montemagni (2015), «NLP-Based Readability Assessment of Health-Related Texts: a Case Study on Italian Informed Consent Form.» in The Sixth International Workshop on Health Text Mining and Information Analysis, Association for Computational Linguistics (Ed.). Lisbon, Portugal.

Choosing Unhealthy to Appear Warm: How Consumers Signal Personality Traits via Food Choice

Marija Grishin, University of Kansas, USA
Yexin Jessica Li, University of Kansas, USA
Jenny G. Olson, University of Kansas, USA
Surendra N. Singh, University of Kansas, USA

EXTENDED ABSTRACT

Food consumption is an inherently social activity, as most of our meals are consumed in the presence of at least one other person (Redd and de Castro 1992). Because food choices are often observed by dining partners, consumers can (and often do) modify their eating behavior in order to create a particular impression (Vartanian 2015). Drawing upon previous research on food choice, the stereotype content model, and social cognition, we examine the role of impression management on food choice in social contexts.

Our social interactions are heavily influenced by the need to signal warmth and/or competence as the two fundamental dimensions of social cognition (Fiske et al. 1999, 2002). Warmth typically includes evaluations of kindness, trustworthiness, and helpfulness (Aaker et al. 2010), while competence includes perceptions of effectiveness, power, and skillfulness (Hoegg and Lewis 2011). Warmth and competence are central to social judgments as they “account almost entirely for how people characterize others” (Fiske, Cuddy, and Glick 2007, 78).

We propose that consumers associate different types of food with traits that fall along the fundamental dimensions of warmth and competence. Many food associations are developed as a result of the social context in which the food was consumed and are likely learned from an early age. For instance, unhealthy foods like waffles, eggs and bacon are strongly associated with family, sharing and happiness (Moisio, Arnould, and Price 2004). In contrast, rules about delaying dessert till after a more nutritious meal has been consumed or forcing children to eat vegetables result in healthy foods being associated with discipline and restraint (Cooke et al. 2011; Lupton 1994). Because of the inherent link between unhealthy (healthy) food and warmth (competence), we hypothesize that consumers are more likely to consume unhealthy (healthy) food when they are motivated to convey warmth (competence). We also propose that consumers’ tendency to choose unhealthy (healthy) food is driven by warmth- and competence-related associations of the food such that consumers motivated to appear warm (competent) are more likely to choose food positioned with warmth (competence) traits, regardless of food type.

As an initial test of our hypothesis, we administered a **field survey** (N=219) at a local restaurant. Patrons who were dining with at least one other person were approached by servers at the end of their meal and asked to fill out a survey indicating their purpose of visit (business or casual), and the perceived healthiness of their meal. Results revealed that participants dining with friends or family rated their meals as significantly less healthy than participants who came in for business meetings. To further examine the casual relationship between impression management goals and food choice, we conducted three experiments.

Our **first experiment** (N=206) tests the hypothesis that consumers will be more likely to choose unhealthy (healthy) food when they are motivated to appear warm (competent). We also included a control condition with no impression goal to measure default consumption preferences. The experiment had a 3 (Impression Goal: Warmth vs. Competence vs. Control) \times 2 (Food Type: Healthy, Unhealthy) mixed-model design with food type as a within-subjects factor.

We informed participants that they have been assigned to convey a specific impression (warmth or competence) to another person. As a measure of our main dependent variable, we told participants to imagine going to lunch with the other person and asked them to indicate their likelihood of choosing a healthy or unhealthy meal. The results revealed a significant interaction between impression goal and food choice. Participants motivated to appear warm (competent) were more likely to order an unhealthy (healthy) than healthy (unhealthy) meal. There were no significant differences in likelihood of choosing healthy or unhealthy food among participants in the control condition.

Experiment 2 (N=92) was designed to further test our predictions in an incentive-compatible choice task. Participants were asked to select products that they believe convey either warmth or competence and would get to keep the products if successful at conveying the impression. The experiment was a two-cell (Impression Goal: Warmth vs. Competence) between-subjects design. Participants chose one of two snacks (M&M’s—unhealthy choice, and Raisins—healthy choice). Results revealed that participants motivated to convey warmth were more likely to choose the unhealthy snack than participants who were motivated to convey competence.

In **experiment 3** (N=150), we test food stereotypes as the underlying mechanism of the effect of impression management on food choice. The experiment had a 2 (Impression Goal: Warmth vs. Competence) \times 2 (Food Description: Consistent, Inconsistent) \times 2 (Food Type: Healthy, Unhealthy) mixed-model design with Food Type serving as a within-subjects factor.

Participants were told to imagine that they recently moved into a new town and “would like to find a job” (competence condition) or “would like to make friends” (warmth condition) and that they and their potential employer (friend) are going to a new restaurant. Participants were presented with two meals—healthy and unhealthy. The two meals included a “chef’s note” which in the consistent condition matched the food type; i.e. the healthy food had competence-related description, and the unhealthy food had warmth-related description. In the inconsistent condition, the descriptions were reversed. Participants were asked to indicate their likelihood of choosing each dish.

The results revealed a significant interaction between impression goal, food description and food type. Results in the consistent description condition replicated previous findings such that participants motivated to appear warm (competent) were more likely to order an unhealthy (healthy) than healthy (unhealthy) meal. However, in the inconsistent food description condition, participants motivated to appear warm (competent) were *less* likely to order an unhealthy (healthy) than healthy (unhealthy) meal.

This research demonstrated that the two fundamental dimensions of social cognition influence our food choices such that that motivation to appear warm (competent) significantly increases the likelihood of choosing unhealthy (healthy) foods. Moreover, we demonstrate that food healthiness is used as an impression management tactic because of the inherent associations between unhealthy (healthy) food and warmth (competence). Finally, our results show that unhealthy choices can be inhibited by positioning unhealthy food as possessing competence-related associations.

REFERENCES:

- Aaker, Jennifer, Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits Are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37 (2), 224-37.
- Cooke, Lucy J., Lucy C. Chambers, Elizabeth V. Añez, and Jane Wardle (2011), "Facilitating or Undermining? The Effect of Reward on Food Acceptance. A Narrative Review," *Appetite*, 57 (2), 493-97.
- Fiske, Susan T., Amy J. C. Cuddy, and Peter Glick (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 11 (2), 77-83.
- Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu (2002), "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition," *Journal of Personality and Social Psychology*, 82 (6), 878-902.
- Fiske, Susan T., Juan Xu, Amy C. Cuddy, and Peter Glick (1999), "(Dis)respecting versus (Dis)liking: Status and Interdependence Predict Ambivalent Stereotypes of Competence and Warmth," *Journal of Social Issues*, 55 (3), 473-89.
- Hoegg, Joandrea and Michael V. Lewis (2011), "The Impact of Candidate Appearance and Advertising Strategies on Election Results," *Journal of Marketing Research*, 48 (5), 895-909.
- Lupton, Deborah (1994), "Food, Memory and Meaning: The Symbolic and Social Nature of Food Events," *The Sociological Review*, 42 (4), 664-85.
- Moisio, Risto, Eric J. Arnould, and Linda L. Price (2004), "Between Mothers and Markets: Constructing Family Identity through Homemade Food," *Journal of Consumer Culture*, 4 (3), 361-84.
- Redd, Marie, and John M. De Castro (1992), "Social Facilitation of Eating: Effects of Social Instruction on Food Intake," *Physiology & Behavior*, 52 (4), 749-54.
- Vartanian, Lenny R. (2015), "Impression Management and Food Intake. Current Directions in Research," *Appetite*, 86, 74-80.

Reducing the Social Desirability Bias of Self- Reported Value Orientation by Measuring Values via a Picture-Based Scale

Andrea Groeppel-Klein, Saarland University, Germany

Sarah Kobel, Saarland University, Germany

EXTENDED ABSTRACT

For decades, values have been said to be “one of the most powerful explanations of, and influence on, consumer behavior” (Clawson and Vinson 1978) and can guide people’s actions (Schwartz 1992). According to Inglehart (1971, 2008), an intergenerational value shift should take place in society: Materialistic values (e.g., safety or wealth) should be replaced by post-materialistic values (e.g., quality of life). However, Inglehart’s predicted shift of values has been criticized (Brym et al. 2016; Tranter and Western 2010). Even though the importance of post-materialistic values has increased, materialistic values are still important (Segev, Shoham, and Gavish 2015) owing to political or economic incidents. Inglehart and Norris (2016) explain this phenomenon as a backlash against cultural change. Another reason for Inglehart’s misprediction may be the social desirability bias (SDB) of surveys, which can lead to underreporting of materialistic values. The SDB is considered either to reduce the validity of measured insights into consumers’ value orientations (King and Bruner 2000), or as an additional source of value reflection (Fisher and Katz 2000), indicating that faking allegedly esteemed values can hint at the relevance of a topic. In our article, we focus on the first perspective by developing and validating a new measurement tool.

Empirical research within the last five decades has used different value measurement approaches. What all the methods have in common is their pure verbal measurement. The Rokeach Value Survey (RVS) (1973) seeks to obtain insights into people’s value hierarchy by asking them to rank 36 values. However, this method is criticized for being ipsative, for the strict value rank-order and the item choice itself (Braithwaite and Law 1985). Schwartz (1992) developed the theory of basic human values, suggesting 10 basic values as trans-situational goals, varying in importance and serving as guiding principles in a person’s life. He developed a survey (SVS) inviting participants to rate a broad range of single values (different varieties of each value) as guiding principles, based on a complex nine-point scale, ranging from -1 (opposed to my values) to 7 (very important). Hence, a high level of abstract thought is necessary for using the SVS successfully (Schwartz et al. 2001). Therefore, the survey might be vulnerable for SDB. For similar reasons, Kahle’s (1983) more parsimonious “List of Values” seems to be affected by SDB as it also uses rating scales (Fisher and Katz 2000; Lee, Soutar, and Louviere 2007).

Verbal measurement techniques, especially if they require abstract thinking skills (Torelli and Kaikati 2009) may induce rationalization processes in respondents and therefore diminish the possibility of obtaining intuitive and spontaneous answers. Individuals tend to reflect well on themselves (Randall and Fernandes 1991) and are therefore likely to give socially desirable answers (Zerbe and Paulhus 1987). Many verbal measures, especially if consumers only have to change the rating scale figure, face this problem. In the context of value measurement, studies (e.g. Fisher and Katz 2000) indicate that lots of values are affected by this problem. The degree to which value self-reports are affected by SDB depends on the value’s potential to present oneself in a favorable light (Fisher and Katz 2000). Over-reporting is likely to occur if values seem socially acceptable, whereas under-reporting is expected for socially undesirable values (Neeley and Cronley 2004; Roxas and Lindsay 2012). In today’s research, universalism values, for example, play an important role

(Doran 2009; Vermeir and Verbeke 2006; Yamoah et al. 2016) as ethical consumption is requested as a social standard (Auger and Devinney 2007), thus increasing the risk of SDB (over-reporting). A materialistic orientation on the other hand faces the problem of being underreported, as negative social consequences are expected (Mick 1996). For many years, researchers have been interested in the scale of SDB occurrences and who over- and underreports (De Jong, Fox, and Steenkamp 2015). The “pure” indirect questioning technique (Schwartz et al.’s (2001) PVC approach, in which consumers indicate to what extent the description of another person is congruent with their own personality is a mixture of direct and indirect technique) uses questions like, “What would the typical other do?” (Fischer and Tellis 1998) and is problematic if personal values and hierarchies have to be discovered. Many researchers therefore use the Marlowe-Crowne Social Desirability Scale (or modifications) to detect SDB as a personality variable and ascertain whether or not a respondent is generally concerned with social approval and conforming to societal conventions (which may affect the validity of the survey). However, clever consumers might see through this verbal scale or misconstrue it so that inconsistencies appear (King and Bruner 2000).

Nevertheless, consumer research has a strong interest in obtaining insights into consumers’ real value orientations because values can guide behavior. Manufacturers and retailers wish to adjust marketing strategies according to the values of their target groups. Enlarging the share of fair trade or regional products, for example, may be a consequence of consumers’ increased interest in universalistic values, whereas more security officers in shopping centers may be a result of growing safety needs. However, this requires a valid method to measure values. Pictorial scales are expected to reduce SDB by facilitating intuitive answers without cognitive filtering and evaluation of the social effects (Groeppel-Klein et al. 2010). Furthermore, pictorial scales could increase enjoyment and response rates.

Development of a Picture-Based Scale and Validation Studies

To map out a pictorial scale, different steps are necessary. We paid particular attention to careful validation (Groeppel-Klein et al. 2010), and to the scale’s ability to reduce SDB in a self-reporting questionnaire.

Step 1: Identification of values and value varieties

Both materialist (Segev et al. 2015) and post-materialist (Ladhari and Tchegnina 2015) values play a part in contemporary marketing research and practice. Beyond the relevance of materialism (especially power) and post-materialism (especially universalism) values, such as stimulation or hedonism might be important, especially in consumer behavior. Schwartz’ (1992) 10 basic human values served as a theoretical foundation. However, some of these values are abstract and complex.

Schwartz et al. (2012) therefore deliver a detailed description of these abstract dimensions. Our goal in step 1 was to discover subtle facets of values (rather than broad supercategories) that are more apperceptive and can specifically be used in a consumption context. Results of a thorough literature review and the descriptions of Schwartz et al. (2012) served as a basis for qualitative focus group

discussions (one at Saarland University, three in grocery stores in Germany; $n = 20$ (five participants per group); $M_{\text{age}} = 50.2$ years, $SD = 25.7$). According to the results of the focus groups, we identified 26 subtle value facets that might be relevant for consumer behavior.

Step 2: Selection of suitable pictures for value visualization

Five coders checked various commercial image databases to find pictures that represent the values identified in step 1 (screening of 10,000 pictures). In search for suitable and unambiguous pictures, the coders were guided by each value's description offered by Schwartz et al. (2012). Particular attention was paid to the pictures' diversity. This was necessary because in step 3 we compare whether single pictures or picture collages (representing different facets) are more effective in identifying values. Twenty pictures were selected for each value, later reduced to five or six by expert judgement. So, 135 single pictures were chosen for further investigation.

Step 3: Validation studies

Verbal Validation (3a). Sixty-nine participants (students and employees of Saarland University in Germany, 54% female; $M_{\text{age}} = 25.61$ years, $SD = 7.54$) were asked to allocate either single pictures or picture collages to a value list. Participants were told that the list showed different aspects that are more or less important in peoples' lives. Each picture respectively each collage could only be allocated to one value in the list. All but one picture collages were assigned correctly to the value list (the collage for "considering the future" was assigned correctly to the value list by only 55.3% of the respondents whereas the percentages of respondents assigning all the other collages correctly to the corresponding value ranged between 76.3% and 100% and were on average much higher than in the single picture condition, demonstrating a superiority of picture collages). Next, 106 further participants (61% female; $M_{\text{age}} = 24.76$ years, $SD = 7.59$) were asked to provide unaided labeling of the stimuli. Again, the collages outperformed the single pictures with respect to correct value identification (20 of 26 values labeled correctly in the collage condition, whereas in the single picture condition, only 18 values were labeled correctly). As values are abstract in nature (Torelli and Kaikati 2009), picture collages seem to represent them more accurately than single pictures do. To reduce the image material, recipients completing the labeling task for the collages were also asked to rank the pictures in each collage according to which picture best represents the corresponding value. A clear order emerged for all of the 20 correctly labeled collages.

Stack Sort Analysis (3b). To test the validity of the picture collages more comprehensively (and to further increase it) and also to control for the six values that were not identified in the verbal validation task, a stack sort analysis was conducted with 160 participants (60% female; $M_{\text{age}} = 24.74$ years, $SD = 8.93$) at Saarland University. Step 3a shows that picture collages represent value varieties better than single pictures. The pictures in the collages used in step 3a were the results of step 2. To discover whether consumers regard the same pictures as related, participants were asked to sort a number of pictures by perceived coherence. They were completely free to choose the number of stacks and the number of pictures per stack. To avoid cognitive overload, the number of pictures was subdivided into three units, so each participant was only shown pictures representing one-third of the 26 value varieties. Using co-assignment rates of all pairs of pictures for hierarchical cluster analysis (Ward's procedure), 22 of the 26 value categories were replicated, which means 22 clusters consisted of the same pictures that were chosen via step 2 and used in step 3a. The values "tolerance", "diversity" and "purposefulness" could not be replicated. For these categories, pictures were replaced and tested subsequently until the values were identified correctly.

Owing to the results of the stack sort task, "possession of money" and "prestige" formed one instead of two clusters; this was not changed.

Comparison of Labeled Versus Unlabeled Picture Collages

Based on these studies, the final pictorial scale for measuring peoples' value orientations consists of 25 picture collages, each with three pictures. In a further step, labeled versus unlabeled collages were tested. On the one hand, labeling the collages might help dispel ambiguity and make the scale easier to use. Additionally, time needed to capture the intended value and therefore to fulfil the task might be shorter for labeled collages. On the other hand, labeling the collages with verbal stimuli may again lead to a SDB. As reducing this bias is one of the major goals of a pictorial scale, the unlabeled scale should be at least as good as the labeled scale with respect to performance, handling and enjoyment. To examine this, 52 students (between-subjects-design, $n = 26$ per group; 55.7% female; $M_{\text{age}} = 22.31$ years, $SD = 3.01$) were asked to attribute the 25 value collages (either with or without labeling) to a stimulus. A famous football club (FC Bayern Munich) and the pharmacist's profession were chosen as stimuli. Based on expert judgement and website information, a broad variety of values compatible with the two stimuli were defined (appreciation, possession of money / prestige, success, dominance, purposefulness, friendship, excitement, quality, tolerance, diversity, and trust for Bayern Munich; security, quality, family, health, and trust for the pharmacist's profession). The two scale formats did not differ with regard to time needed to fulfil the task ($t(50) = 0.993$, NS) or with regard to the number of correct and incorrect attributed values. Afterwards, participants were asked to evaluate the collages (either with or without labeling) with regard to handling and enjoyment. Results show that the different scale formats did not significantly differ with regard to handling, and unlabeled collages were more pleasant for participants than labeled ones ($t(50) = 2.273$, $p = .027$).

Comparing Verbal Versus Pictorial Scales Concerning SDB

In the last step, the final unlabeled pictorial scale was tested against a verbal scale in relation to SDB. For the verbal scale, we used parts of the SVS (Schwartz 1992). In a group discussion with 11 participants at Saarland University as a pretest, seven (of the 25) values were identified as potentially sensitive, that is they might trigger social desirability concerns (Tourangeau and Yan 2007). Six of these seven values appear to have a high self-presentation potential (e.g., social justice or openness to something new), thus leading to expected over-reporting by recipients. One value (dominance) tends to be viewed more negatively, so under-reporting was expected. Eighty-one participants (50.4% female, $M_{\text{age}} = 32.19$ years, $SD = 13.75$) were asked to rate the importance of these values as guiding principles on either a verbal or a pictorial seven-point scale. Results show that the six values for which over-reporting was expected scored higher in the verbal (vs. pictorial) scale condition (e.g., openness to something new: $M_{\text{verbal}} = 5.48$, $M_{\text{pictorial}} = 3.71$), whereas dominance, for which under-reporting was expected, scored lower in the verbal than the pictorial scale condition ($M_{\text{verbal}} = 1.65$, $M_{\text{pictorial}} = 2.38$). It can therefore be concluded that verbal value scales are, compared to pictorial scales, more affected by over- (or under-)reporting of sensitive items, and therefore by SDB.

After the value rating, people read different scenarios, each presenting a typical behavior associated with the tested values. The description was either mirroring the specific value or was contradictory to it. For instance, participants read a scenario about themselves in which they want to get rid of old CDs, actually knowing that CDs

are not allowed to be thrown in the garbage, but have to be disposed of properly in special waste. This takes time and effort. Participants were asked to indicate the likelihood of performing the behavior described in the scenario on a seven-point scale (one single statement per described behavior for likelihood measurement, e.g. "How likely is it that you would dispose of the CDs in the garbage nevertheless?", 1 = not at all likely, 7 = very likely). Different studies (Eyal et al. 2009; Torelli and Kaikati 2009) use this method to reveal significant correlations between values and the likelihood of showing a value-congruent behavior. As the likelihood of performing the described behavior is measured with verbal scales and the behaviors explained in the scenarios seem to have high self-presentation potential (as values do, because the described behavioral reactions refer to specific values), this verbal self-reported likelihood of showing the described value-congruent behavior is expected to be influenced by SDB for the same reason value self-reports are. I.e., if somebody over-reports the importance of, for example, environmentalism values for reasons of social desirability, this person is also likely to over-report the likelihood of showing a described environmentally friendly behavior. Therefore, if the correlation between those measures is high, SDB seems obvious. Hence, in a further step, we tested whether significant correlations between value importance and likelihood of performing a described value-congruent behavior only occur for value importance measured with verbal, but not with pictorial scales. Results show that for five of the seven values tested, the expected effect occurred in the verbal condition, reinforcing the assumption that value measurement by using pictorial instead of verbal scales reduces the risk of SDB.

General Discussion

This article illustrates the development of a pictorial scale for science and practice to measure peoples' value orientations with substantially reduced SDB. A thorough literature review and qualitative focus group discussions were conducted to identify subtle variants of values with importance for consumer research. Several steps were taken to assure the validity of the developed pictorial scale. Our study shows that picture collages outperform single pictures and do not need additional labeling for comprehension and handling. Additionally, our results show that verbal scales (compared to pictorial scales) have a higher risk to be fraught with over-reporting (or under-reporting if the expected social consequences are negative) and are therefore biased. Furthermore, significant correlations between value importance and the self-reported likelihood of performing a verbally described value-congruent behavior only occurred if value importance was measured with verbal scales. This leads again to the assumption that pictorial scales are less affected by SDB than verbal scales. However, an alternative explanation is also imaginable: correlations between verbally measured values and verbally measured likelihoods of performing a described value-congruent behavior might always be higher (because of the same modality) than correlations between pictorial and verbal stimuli (different modalities). Future research could address this problem, e.g. by observing actual behavior (instead of measuring the likelihood of showing a hypothetical behavior described in a scenario). But as values can be more or less abstract, they might influence either near or distant future behavior. Studies comparing values' influence on actual behavior therefore should regard the potentially moderating effect of temporal distance (Torelli and Kaikati 2009).

The importance of investigation into ethical consumption is increasing. People claim to care for the environment, but organic products still only account for a minor share of turnover. Simultaneously, the (seemingly) increasing concern for ethical values might

lead to an under-reporting of materialistic values (which are opposed to universalism values and therefore might be associated with negative social consequences), that might nevertheless be important for consumers' buying decisions. Under-reporting of these values might therefore bias the results of verbal surveys. Pictorial scales provide insights into consumers' true value orientations without SDB, which might contribute to deeper understanding of this phenomenon and enable manufacturers and retailers to focus more accurately on consumers' actual needs to get true data to use for aligning their marketing strategies.

The new measurement approach could be used to analyze the relevance of values for customer-retailer- as well as for customer-brand-relationships. Two studies conducted in Germany using the here developed picture scale on a touchscreen monitor (figure 1) showed promising results that a match of consumers' and retailers' values can be beneficial for both. Manufacturers and retailers could therefore try to match their positioning concerning diverse values with people's most relevant values to share a common value basis and encourage long-term relationships. To do that, true (unbiased) data is needed – and could be provided by pictorial scales. Beyond that, the two studies conducted revealed that using picture scales is enjoyable for respondents – even if the interviews lasted 45 up to 60 minutes. So the developed approach seems to enable researchers to analyze comprehensive and complex issues without causing a fatigue effect.

REFERENCES

- Auger, Pat and Timothy M. Devinney (2007), "Do What Consumers Say Matter? The Misalignment of Preferences with Unconstrained Ethical Intentions," *Journal of Business Ethics*, 76 (4), 361–83.
- Braithwaite, Valerie A. and Henry G. Law (1985), "Structure of human values: Testing the adequacy of the Rokeach Value Survey," *Journal of personality and social psychology*, 49 (1), 250–63.
- Brym, Robert J., John W.P. Veugelers, Jonah Butovsky, and John Simpson (2004), "Postmaterialism in unresponsive political systems: The Canadian case," *Canadian Review of Sociology*, 41 (3), 291–318.
- Clawson, C. Joseph and Donald E. Vinson (1978), "Human Values: a Historical and Interdisciplinary Analysis," in *NA - Advances in Consumer Research*, Vol. 5, ed. Kent Hunt, Ann Arbor, MI: Association for Consumer Research, 396–402.
- De Jong, Martijn G., Jean-Paul Fox, and Jan-Benedict EM Steenkamp (2015), "Quantifying Under- and Overreporting in Surveys Through a Dual-Questioning-Technique Design," *Journal of Marketing Research*, 52 (6), 737–53.
- Doran, Caroline Josephine (2009), "The role of personal values in fair trade consumption," *Journal of Business Ethics*, 84 (4), 549–63.
- Eyal, Tal, Michael D. Sagristano, Yaacov Trope, Nira Liberman, and Shelly Chaiken (2009), "When values matter: Expressing values in behavioral intentions for the near vs. distant future," *Journal of Experimental Social Psychology*, 45 (1), 35–43.
- Fisher, Robert J. and James E. Katz (2000), "Social-Desirability Bias and the Validity of Self-Reported Values," *Psychology & Marketing*, 17 (2), 105–20.
- Fisher, Robert J. and Gerard J. Tellis (1998), "Removing social desirability bias with indirect questioning: is the cure worse than the disease?," in *NA-Advances in Consumer Research*, Vol. 25, ed. Joseph W. Alba and J. Wesley Hutchinson, Provo, UT: Association for Consumer Research, 563–67.

- Groepel-Klein, Andrea, Oliver Hupp, Philipp Broeckelmann, and Anja Dieckmann (2010), "Measurement of Emotions Elicited By Advertising," in *NA - Advances in Consumer Research*, Vol. 37, ed. Margaret C. Campbell, Jeff Inman, and Rik Pieters, Duluth, MN: Association for Consumer Research, 497–98.
- Inglehart, Ronald (1971), "The silent revolution in Europe: Intergenerational change in post-industrial societies," *American political science review*, 65 (4), 991–1017.
- _____ (2008), "Changing values among western publics from 1970 to 2006," *West European Politics*, 31 (1-2), 130–46.
- Inglehart, Ronald and Pippa Norris (2016), "Trump, Brexit, and the rise of Populism: Economic have-nots and cultural backlash," *Faculty Research Working Paper Series*, Harvard Kennedy School, Cambridge, MA 02138.
- Kahle Lynn R. (1983), *Social Values and Social Change: Adaptation to Life in America*, New York, NY: Praeger.
- King, Maryon F. and Gordon C. Bruner (2000), "Social desirability bias: A neglected aspect of validity testing," *Psychology & Marketing*, 17 (2), 79–103.
- Ladhari, Riadh and Nina Michèle Tchegnina (2015), "The influence of personal values on Fair Trade consumption," *Journal of Cleaner Production*, 87 (January), 469–77.
- Lee, Julie Anne, Geoffrey N. Soutar, and Jordan Louviere (2007), "Measuring values using best-worst scaling: The LOV example," *Psychology & Marketing*, 24 (12), 1043–58.
- Mick, David G. (1996), "Are Studies of Dark Side Variables Confounded by Socially Desirable Responding? The Case of Materialism," *Journal of Consumer Research*, 23 (2), 106–19.
- Neeley, Sabrina M. and Maria L. Cronley (2004), "When research participants don't tell it like it is: pinpointing the effects of social desirability bias using self vs. indirect-questioning," in *NA - Advances in Consumer Research*, Vol. 31, ed. Barbara E. Kahn and Mary Frances Luce, Valdosta, GA: Association for Consumer Research, 432–33.
- Randall, Donna and Maria F. Fernandes (1991), "The Social Desirability Bias in Ethics Research," *Journal of Business Ethics*, 10 (11), 805–17.
- Rokeach, Milton (1968), "The role of values in public opinion research," *Public Opinion Quarterly*, 32 (4), 547–59.
- _____ (1973), *The nature of human values*, New York, NY: Free press.
- Roxas, Banjo and Val Lindsay (2012), "Social Desirability Bias in Survey Research on Sustainable Development in Small Firms: An Exploratory Analysis of Survey Mode Effect," *Business Strategy and the Environment*, 21, 223–35.
- Schwartz, Shalom H. (1992), "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries," *Advances in experimental social psychology*, 25, 1–65.
- Schwartz, Shalom H. and Wolfgang Bilsky (1990), "Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications," *Journal of personality and social psychology*, 58 (5), 878–91.
- Schwartz, Shalom H., Gila Melech, Arielle Lehmann, Steven Burgess, Mari Harris, and Vicki Owens (2001), "Extending the Cross-Cultural Validity of the Theory of Basic Human Values With a Different Method of Measurement," *Journal of Cross-Cultural Psychology*, 23 (5), 519–42.
- Schwartz, Shalom H., Michele Vecchione, Ronald Fischer, Alice Ramos, Kursad Demirutku, Ozlem Dirilen-Gumus, Jan Cieciuch, Eldad Davidov, Constanze Beierlein, Markku Verksalao, Jan-Erik Lönnqvist, and Mark Konty (2012), "Refining the theory of basic individual values," *Journal of personality and social psychology*, 103 (4), 663–88.
- Segev, Sigal, Aviv Shoham, and Yossi Gavish (2015), "A closer look into the materialism construct: the antecedents and consequences of materialism and its three facets," *Journal of Consumer Marketing*, 32 (2), 85–98.
- Torelli, Carlos J. and Andrew M. Kaikati (2009), "Values as predictors of judgments and behaviors: the role of abstract and concrete mindsets," *Journal of personality and social psychology*, 96 (1), 231–47.
- Tourangeau, Roger and Ting Yan (2007), "Sensitive questions in surveys," *Psychological bulletin*, 133 (5), 859–83.
- Tranter, B. and Mark Western (2010), "Overstating value change: Question ordering in the postmaterial values index," *European Sociological Review*, 26 (5), 571–83.
- Vermeir, Iris and Wim Verbeke (2006), "Sustainable food consumption: Exploring the consumer "attitude-behavioral intention" gap," *Journal of Agricultural and Environmental ethics*, 19 (2), 169–94.
- Yamoah, Fred, Rachel Duffy, Dan Petrovici, and Andrew Fearn (2016), "Towards a framework for understanding fairtrade purchase intention in the mainstream environment of supermarkets," *Journal of Business Ethics*, 136 (1), 181–97.
- Zerbe, Wilfred J. and Delroy L. Paulhus (1987), "Socially desirable responding in organizational behavior: A reconception," *Academy of Management Review*, 12 (2), 250–64.

Awareness and Relevance of Health Claims at the Point-of-Sale

Andrea Groeppel-Klein, Saarland University, Germany

Stephanie Kliebenstein, Saarland University, Germany

Markus Freichel, Saarland University, Germany

EXTENDED ABSTRACT

Unhealthy eating habits and related diseases, such as obesity and cardiovascular diseases, cause serious challenges for national health systems (Cawley and Meyerhoefer 2012). Thus, policymakers have a strong interest to address this problem. Authorities hope that health claims on food packages help consumers to identify and buy healthier food options at the Point-of-Sale. According to the US FDA (2015), “A health claim characterizes the relationship between a substance and a disease or health-related condition [...]”. To ensure a high level of consumer protection, in the US as well as in Europe the use of health claims is regulated. In Europe, the HC regulation of the European Commission (since 2012) only allows companies to use a claim of the authorized EFSA list. Our research aims at providing a broad understanding of how these authorized health claims affect consumer behavior.

In an exploratory field study, we manipulated olive oils and registered sales data. The original package was manipulated by attaching a sticker to the bottleneck. Three alternative stickers were presented in a real supermarket, each for two weeks: A sticker (1) with a generic claim (claim without any reference to nutrition or health), (2) with a nutrition claim, and (3) with a health claim. All claims were in line with the EU regulation 1924/2006. The collected sales data served as reference values (benchmark) for comparison with the results of further lab experiments using the same stimuli in simulated shopping tasks. Our first lab study was a purchase simulation with (mobile) eye tracking. In a second lab study, we measured consumers' electrodermal reaction while being confronted with the products. Sales data, eye tracking data and arousal measurement delivered consistent finding that consumers seem to (unconsciously) avoid the long and complex health claim. This is in line with findings of Newman, Howlett and Burton (2014), showing that consumers have limited resources when comparing health information. Based on this finding and with regard to the fact that daily food choices are typically based on routine, fast decision making and low involvement (Lähteenmäki 2014), we hypothesize that health claims should consist of familiar (comprehensible) expressions in order not to discourage consumers from further consideration. As advertising literature emphasizes the risk of wear out effects, we further hypothesize that the health message (the combination of substance and health function) should have an innovative character. When consumers already know the substance and function combination (e.g., that Vitamin C contributes to the function of the immune system), the health claim has limited informational value. Finally, we assume that priming consumers with a health theme will increase the accessibility of health claims.

In our main study, we tested our hypotheses by conducting a purchase simulation with eye tracking in a close-to-reality shopping situation. Participants were confronted with a shelf of juices and a shelf of cereals and were asked to carry out simulated shopping tasks: to buy a bottle of juice and a packet of cereals.

As hypothesized, we find that a health claim receives more visual attention when it contains familiar wording than when it contains at least one unfamiliar expression. Furthermore, we reveal that when a health claim delivers a new health message, the claim evokes more visual attention than a health claim that delivers an already well-known health message. Mediation analysis shows that this effect mediates the influence of the independent variable on choice behavior: When a health claim delivers a comprehensible but new health message, the carrier product is chosen more often than when the health claim delivers a well-known health message. This effect is mediated by visual attention

to the health claim. Thus, whenever it is possible, health claims should be formulated in a familiar (comprehensible) way, but they should deliver a new health information. The question that arises is what one can do when regulation only allows to promote an already well-known health message. Thus, in our main study, we added a second shelf (the shelf of cereals) in which we addressed this question. We find that the effectiveness of a health claim delivering a well-known health message can be enhanced when the claim is combined with a picture that evokes claim-congruent health associations. However, data suggests that this final finding only applies to brands that are perceived as healthy brands.

In contrast to our expectation, priming does not increase visual attention to the health claim. However, with regard to priming, our results have methodological implications. Analysis of primed consumers' survey data shows that these participants report attitudes that are contrary to their actual behavior. Therefore, we assume that social desirability bias or cognitive filters might have reduced the validity of our survey data. Although further research is needed to explain this gap between reported attitudes and actual behavior, the finding underlines the importance of our approach to mainly focus on research methods like purchase simulations, eye tracking, arousal measurement and the analysis of actual sales data.

Our results should be considered by authorities, companies and scientists. For policymakers, we provide empirical evidence on how health claims should be formulated in order to maximize their effectiveness. The findings should help companies to identify effective health claims. Finally, consumer researchers are encouraged to further investigate open questions. Further research should analyze how the health claim with changed wording performs compared to a nutrition claim, why there is a gap between reported attitudes and actual behavior when consumers are primed, why the strategy of adding a claim-congruent picture to a familiar health claim only works on healthy brands and whether the results can be transferred to other health claims. Shedding light into these questions will further enhance our understanding of how health claims can guide consumers to buy healthier food options at the Point-of-Sale.

REFERENCES

- Cawley, John and Chad Meyerhoefer (2012), “The medical care costs of obesity: An instrumental variables approach,” *Journal of Health Economics*, 31 (1), 219-30.
- EU regulation 1924/2006: “Regulation No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods,” *Official Journal of the European Union*, L404/9.
- Lähteenmäki, Liisa (2014), “Consumer interpretation of nutrition and other information on food and beverage labels,” in *Advances in Food and Beverage Labelling: Information and Regulations*, ed. Paul Berryman, Cambridge: Woodhead Publishing, 133-48.
- Newman, Christopher L., Elizabeth Howlett, and Scot Burton (2014), “Shopper Response to Front-of-Package Nutrition Labeling Programs: Potential Consumer and Retail Store Benefits,” *Journal of Retailing*, 90 (1), 13-26.
- US FDA (2015), <https://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm207974.htm>, last checked on 03/03/2017.

Heirlooms as a Passage Mechanism for Achievement-Based Values

Daniel Grossman, University of Cincinnati, USA

Ryan Rahinel, University of Cincinnati, USA

EXTENDED ABSTRACT

Drawing from the literature, we define heirlooms as objects that have been successively bequeathed within families from an older generation to a younger generation (Curasi, Price, & Arnould, 2004; Bradford, 2009). Heirlooms are often created out of objects that are associated with positive memories in the original owner's life (Price, Arnould & Curasi, 2000; Bradford, 2009). This research asks whether specific subtypes of positive associations are stronger catalysts for heirloom creation than others.

We find objects tied to memories of achievement (vs. enjoyment) are more likely to be chosen to become heirlooms. Process evidence suggests that this happens because of an underlying motivation to establish accomplishments as a core family value in hopes that it inspires future generations to aspire for achievements in their own right. In this regard, such heirlooms appear to be less about creators ensuring their legacies are never forgotten, but more about creators leveraging their achievements to motivate the creation of a larger, collective legacy by their broader families.

Study 1 is a single-celled within-subject design that sought to use stories of actual heirlooms to ascertain the original associations of such objects. We surveyed participants by having them list real heirlooms within their own families and posed several questions about them tapping into the heirloom's memory associations. A paired t-test revealed that heirloom stories were more strongly associated with themes of achievement ($M = 6.22$, $SD = .93$), than themes of enjoyment ($M = 5.37$, $SD = 1.72$; $t(49) = 1.67$, $p = .001$). Providing further evidence of this effect, participants believed that the original owner of the heirloom associated the item more with an accomplishment he/she was proud of ($M = 5.34$, $SD = 1.49$) than an event s/he found fun or enjoyable ($M = 4.70$, $SD = 1.75$; $t(49) = 2.23$, $p = .030$). This pattern of results provides preliminary evidence that heirlooms are more associated with accomplishments and achievements than events or memories that are enjoyable or fun.

The purpose of study 2 was to test the effect from a creator's (rather than receiver's) point of view. This experiment is a between-subject a 2 (object association: achievement vs. enjoyment) x 2 (gift purpose: heirloom vs. donation) design, in that participants were either asked to read a short passage about a pair of sunglasses that they associated with an achievement-based memory (running a marathon) vs an enjoyment-based memory (an unforgettable cruise), and then participants were asked to imagine that they were looking for an item to pass down to a child as a family heirloom vs looking for item to give their best friend as a going-away gift before he/she moves away. A 2 X 2 ANOVA on how suitable the sunglasses would be for the gift purpose yielded a significant interaction between object association and gift purpose ($F(1, 136) = 4.38$, $p = .038$), which we decomposed with planned contrasts. Confirming our main prediction, participants were more likely to consider using the sunglasses as an heirloom when they were associated with achievement ($M = 3.76$) than enjoyment ($M = 2.65$; $t(67) = -2.46$, $p = .016$). This pattern did not hold when considering the sunglasses for a donation to a charity auction ($M_s 3.93$ vs. 4.23 , $SD = 2.05$; $t(65) = .60$, $p = .552$). This pattern of results confirms our core prediction, as participants were more likely to consider making a given object an heirloom when the object was associated with a momentous achievement as compared to an enjoyable event. Notably, this occurred despite the events and object being equally positive and important to the original possessor.

In the study 3 we build on these findings by considering the underlying motivational process for this effect. We repeat the procedure of study 2 (using a new control condition) and then add five groups of mediator items representing five different potential mediators that previous qualitative work suggests could be driving our effect.

-Mediator items Group 1: *The Expressing Love Hypothesis*. Represents that giving away these sunglasses in this situation would express their love to the recipient.

-Mediator items Group 2: *The Safe Home Hypothesis*. Represents that giving away these sunglasses in this situation would insure a safe home for the special object.

-Mediator items Group 3: *The Personal Legacy Hypothesis*. Represents that giving away these sunglasses in this situation would enhance the owner's personal legacy and help them achieve symbolic immortality.

-Mediator items Group 4: *The Familial Values Hypothesis*. Represents that giving away these sunglasses in this situation would help facilitate their familial values to the recipient.

-Mediator items Group 5: *The Encourage to Achieve Hypothesis*. Represents that giving these sunglasses in this situation would influence the recipient to achieve more in his/her own right.

We successfully replicate our effects from study 2. Using Hayes's PROCESS macro we find serial mediation of our effect in the heirloom condition with mediator items Group 4 and Group 5 ($LLCI = .7463$, $ULCI = 1.8965$), and find that mediator items Groups 1, 2, and 3 do not mediate our effect. This provides evidence that consumers find objects associated memories of achievement (vs enjoyment) as more suitable heirlooms not because they always want to be remembered and want to live on symbolically for generations (personal legacy / symbolic immortality), not because they want to find a safe home for the item (insure good for the special object), not simply to express their love to the recipient... But rather because they want the recipient to know their own family's legacy of successes in hopes that it will influence the recipient to strive to achieve more in his/her own right.

These findings illustrates that objects associated with memories of achievement are more likely to be chosen as a family heirloom than objects associated with enjoyment and identify which processes suggested by the literature are responsible the effect. Such findings have implications for both firms wishing to extend the life of the objects they produce and heirloom recipients now able to connect with the underlying motives of the original possessing ancestors.

REFERENCES

- Bradford, T. W. (2009). Intergenerationally gifted asset dispositions. *Journal of Consumer Research*, 36(1), 93-111.
- Curasi, Carolyn Folkman, Linda L. Price, and Eric J. Arnould (2004), "How Individuals' Cherished Possessions Become Families' Inalienable Wealth," *Journal of Consumer Research*, 31 (3), 609-22.
- Price, Linda L., Eric J. Arnould, and Carolyn Folkman Curasi (2000), "Older Consumers' Disposition of Special Possessions," *Journal of Consumer Research*, 27 (2), 179-201.
- (1994), "Special Possessions and the Expression of Material Values," *Journal of Consumer Research*, 21 (3), 522-33.

Brand Hypocrisy from a Consumer Perspective: Scale Development and Validation

Amélie Guèvremont, Université du Québec à Montréal, Canada

EXTENDED ABSTRACT

Although consumers develop mainly positive relationships with brands (Fournier 1998), there is increasing interest in understanding negative brand perceptions (Fournier and Alvarez 2013). This is particularly relevant in a context in which skeptical consumers scrutinize all manner of brand actions. Consumers accuse brands of being insincere (Maehle, Otnes, and Supphellen 2011), inauthentic (Thompson and Arsel 2004) and dishonest (Lee, Motion, and Conroy 2009). Recently, criticism levied has resulted in the emergence of perceptions of brand hypocrisy. Volkswagen, for example, was accused by consumers of hypocritical behavior for deceiving the public and cheating on diesel emissions tests (Delacroix 2015). Brands such as Unilever, McDonald's and Budweiser have also come under fire for corporate hypocrisy (Griner 2013; Northrup 2015; Kotz 2014). These examples raise important questions: Do consumers perceive brands as hypocritical? What are the factors underpinning this perception? What are the consequences of these perceptions? This study explores the meaning of brand hypocrisy from a consumer perspective and develops a measurement scale.

Saying one thing and doing another illustrates the nature of human hypocrisy (Martinie and Fointiat 2010). Researchers in psychology (Batson et al. 1997), philosophy (Grant 1997), management (Fassin and Buelens 2011), or organizational ethics (Fortin and Fellenz 2008) have studied significations and demonstrations of hypocrisy. In marketing, no research has focused exclusively on understanding the nature of brand hypocrisy from a consumer perspective. It is however increasingly relevant to study negative inferences towards brands (Fournier and Azarel 2013). Hypocrisy is said to be an important determinant of consumer firms' evaluation (Wagner, Lutz, and Weitz 2009), but its exact nature remains unknown in a consumer-brand context. This study addresses this issue. The next paragraphs present the development of a brand hypocrisy scale across four studies (Churchill 1979).

Study 1: Item Generation

47 participants (mean_{age}=43) from an online panel were asked to think and write about what a hypocritical brand would be and to list brands that they perceived as hypocritical. Answers provided by participants (e.g., "McDonald's: Their salads are not as healthy as they claim to be", "Coca-Cola: It promotes itself as fun and hip when it is actually bad for you", "KFC: KFC and breast cancer... totally nonsensical!") were analysed and enriched with the literature to develop an initial set of 142 items capturing the concept of brand hypocrisy (e.g., "This brand says and does different things," strongly disagree/strongly agree).

Study 2: Content validity.

Four marketing experts indicated how representative each item is of hypocrisy as it relates to brands. An item was removed/modified if one expert rated it as poor or mentioned it was ambiguous, or two experts rated it as fair. A list of 94 items remained.

Study 3: Initial administration

285 adults (mean_{age}=42) from an online panel were asked to think about a brand that they considered hypocritical and to rate it on the 94 items. A four-factor solution emerged following a principal component exploratory factor analysis. After removal of items (low loadings/high cross-loadings), 48 items remained and were interpret-

ed in light of the items and the literature. The four dimensions are: *image hypocrisy* (a brand's false appearances and failure to deliver on promises, e.g., "This brand pretends to be something it is not"), *mission hypocrisy* (a brand's negative, unacknowledged impact on people or society, e.g., "This brand pretends to be good for people but is not"), *message hypocrisy* (a brand promoting unrealistic values and unachievable goals through its communications; e.g. "This brand pushes consumers towards unrealistic goals), *social hypocrisy* (a brand's social activities unconnected to brand essence and perceived as strategic, e.g., "This brand supports charitable causes for marketing purposes"). A confirmatory factor analysis (AMOS-20) was computed and model was improved (modification indices>3.84; Bagozzi and Yi 1998; model comparisons). The final model is a four-factor correlated model (12 items, 3/dimension) (NNFI=.97, CFI=.98, SRMR=.04, RMSEA=.07, $\chi^2(48)=93.46, p<.001$). Psychometric characteristics and discriminant validity between dimensions were satisfactory.

Study 4: Discriminant and predictive validity

180 adults from an online panel (mean_{age}=43) were asked to think about a brand that is either hypocritical or non hypocritical and to evaluate it. The four-factor model showed good fit (NNFI=.98, CFI=.99, SRMR=.02, RMSEA=.06). Discriminant validity between the dimensions and related constructs was tested: image hypocrisy with corporate hypocrisy (Wagner et al. 2009), mission hypocrisy with integrity dimension of brand authenticity (reverse scale) (Morhart et al. 2009), message hypocrisy with symbolism dimension of brand authenticity (reverse scale) (Morhart et al. 2015), social hypocrisy with the integrity dimension of brand personality in a non-profit context (reverse scale) (Venable et al. 2005). Results (e.g., confidence intervals, Anderson and Gerbing 1988; average variance vs. squared correlation, Fornell and Larcker 1981) confirmed discriminant validity. An overall comparison of brand hypocrisy with corporate hypocrisy (Wagner et al. 2009), further supported discriminant validity. Regarding predictive validity, the impact of hypocrisy on negative word-of-mouth and brand distance (Grégoire, Tripp and Legoux 2009) was tested. Regression results indicate that three hypocrisy factors are predictors ($ps<.05$) of negative word-of-mouth (image $\beta=.26$ /mission $\beta=.51$ /message $\beta=.16/R^2=.66$) and two ($ps<.05$) of distance (image $\beta=.37$ /mission $\beta=.47/R^2=.63$). Predictive validity was also verified through structural equations. The first-order factors loaded on a global hypocrisy variable and significantly predicted negative word-of-mouth ($\gamma=.83, p<.001$) and distance ($\gamma=.80, p<.001$).

This research provides a comprehensive understanding of brand hypocrisy and develops a scale for measuring it. Results show that brand hypocrisy is a multidimensional construct comprising four dimensions. A brand can be perceived as hypocritical in instances of the following: i) If it fails to put words into actions (image hypocrisy), ii) If it negatively impacts society or consumer wellbeing (mission hypocrisy), iii) If it conveys images that are unrealistic or unattainable (message hypocrisy); and, iv) If it supports social responsibility activities for strategic considerations only (social hypocrisy). This research enriches the understanding of negative inferences attributed to brands by consumers, a neglected area in the literature (Fournier and Alvarez 2013). It contributes to the brand avoidance literature (Lee et al. 2009) by showing that perceptions of hypocrisy constitute an important determinant of negative behavior directly in-

volving consumers (i.e. brand distance) and the people around them (i.e. negative word-of-mouth).

REFERENCES

- Anderson, James C. and David W. Gerbing. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (3), 411-25.
- Bagozzi, Richard P. and Youjae Yie (1988), "On the Evaluation of Structural Equation Models," *Journal of the Academy of Marketing Science*, 16 (1), 74-94.
- Batson, Daniel C., Diane Kobryniewicz, Jessica L. Dinnerstein, Hannah C. Kampf, and Angela D. Wilson (1997), "In a Very Different Voice: Unmasking Moral Hypocrisy," *Journal of Personality and Social Psychology*, 72 (6), 1335-48.
- Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February) 64-73.
- Delacroix, Xavier (2015), "Volkswagen, la Deuxième Mort de Max Weber," [http:// www.lemonde.fr/economie/article/2015/09/30/volkswagen-la-deuxieme-mort-de-max-weber_4777885_3234.html](http://www.lemonde.fr/economie/article/2015/09/30/volkswagen-la-deuxieme-mort-de-max-weber_4777885_3234.html)
- Fassin, Yves and Marc Buelens (2011), "The Hypocrisy-Sincerity Continuum in Corporate Communication and Decision Making: A Model of Corporate Social Responsibility and Business Ethics Practices," *Management Decision*, 49 (4), 586-600.
- Fornell, Claes and David F. Larcker (1981), "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics," *Journal of Marketing Research*, 78 (2), 382-88.
- Fortin, Marion and Martin R. Fellenz (2008), "Hypocrisies of Fairness: Towards a More Reflexive Ethical Base in Organizational Justice Research and Practice," *Journal of Business Ethics*, 78 (3), 415-33.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343-73.
- Fournier, Susan and Claudio Alvarez (2013), "Relating Badly to Brands," *Journal of Consumer Psychology*, 23 (2), 253-64.
- Grant, Ruth Weissbourd (1997), *Hypocrisy and Integrity: Machiavelli, Rousseau, and the Ethics of Politics*, Chicago: University of Chicago Press.
- Grégoire, Yany, Thomas M. Tripp, and Renaud Legoux (2009), "When Customer Love Turns Into Lasting Hate: The Effects of Relationship Strength and Time on Customer Revenge and Avoidance," *Journal of Marketing*, 73 (6), 18-32.
- Griner, David (2013), "5 Reasons Why Some Critics are Hating on Dove's Real Beauty Sketches Video," <http://www.adweek.com/adfreak/5-reasons-why-some-critics-are-hating-doves-real-beauty-sketches-video-148772>
- Kotz, Deborah (2014), Five Olympics Commercials with a Healthy Dose of Hypocrisy," <http://archive.boston.com/lifestyle/health/blogs/daily-dose/2014/02/21/five-olympics-commercials-with-healthy-dose-hypocrisy/LXPb0sNoRrFIG22M2tHv2L/blog.html>
- Lee, Michael S.W., Judith Motion, and Denise Conroy (2009), "Anti-Consumption and Brand Avoidance," *Journal of Business Research*, 62 (2), 169-80.
- Maehle, Natalia, Cele Otnes, and Magne Supphellen (2011), "Consumers' Perceptions of the Dimensions of Brand Personality," *Journal of Consumer Behaviour*, 10(5), 290-303.
- Martinie, Marie-Amélie and Valérie Fointiat (2010), "Enfreindre Sans Craindre: Tolérance à la Dissonance dans le Paradigme de l'Hypocrisie," *Psychologie Française*, 55 (1), 41-7.
- Morhart, Felicitas, Lucia Malär, Amélie Guèvremont, Florent Girardin, and Bianca Grohmann (2015), "Brand Authenticity: An Integrative Framework and Measurement Scale," *Journal of Consumer Psychology*, 25 (2), 200-18.
- Northrup, Laura (2015), "Budweiser Mocks Craft Beer Snobs, Sells Craft Beers," <https://consumerist.com/2015/02/02/budweiser-mocks-craft-beer-snobs-sells-craft-beers/>
- Thompson, Craig J. and Zeynep Arsel (2004), "The Starbucks Brandscape and Consumers' (Anticorporate) Experiences of Glocalization," *Journal of Consumer Research*, 31 (3), 631-42.
- Venable, Beverly T., Gregory M. Rose, Victoria D. Bush, and Faye W. Gilbert (2005), "The Role of Brand Personality in Charitable Giving: An Assessment and Validation," *Journal of the Academy of Marketing Science*, 33 (3), 295-312.
- Wagner, Tillmann, Richard J. Lutz, and Barton A. Weitz (2009), "Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions," *Journal of Marketing*, 73 (6), 77-91.

Processing Moving Numbers: How Update Frequency Influences Magnitude Judgments

Manissa P. Gunadi, Erasmus University Rotterdam, The Netherlands
Christophe Lembregts, Erasmus University Rotterdam, The Netherlands

EXTENDED ABSTRACT

Consumers' lives are pervaded with quantitative information. While individuals used to only evaluate static quantitative information, recent developments allow for dynamic representations in which numbers are regularly updated. For example, the health tracker Fitbit displays the number of steps that updates in accordance to one's movement. On their website, Kickstarter, the global crowdfunding platform, displays up-to-date funding metrics for each project. In this paper, we examine how the frequency of updates of such dynamic figures influences how people form judgments about the figure's magnitude.

Consider two versions of an indicator. The first version displays updates at a lower frequency, and in larger step-sizes between each change (e.g. going from 0, 25, 50, and finally 100). The second updates at a higher frequency, and in smaller step-sizes (e.g. 0, 1, 2, 3..., 100). The focal question of this research is whether individuals' magnitude judgment of the end-point (e.g., 100) is affected by the frequency of which information was updated (low vs. high).

One could predict that if the indicators all have identical starting points, end points, and total change, change should be noticed equally (Weber 1834). This implies that magnitude judgments should not differ. However, we could also predict that more frequent updates may lead to increased magnitude judgments. That is, an identical numerical value would be judged as larger when it is the result of high-frequency updates rather than low-frequency updates. We propose that this effect emerges because, when evaluating number magnitude, people rely on frequency information (i.e. frequency of updates) even when this information is irrelevant. Prior work has shown that people are particularly equipped to evaluate frequency information (Butterworth 2000, 2001, 2007). Consequently, when judging perceptual presentations of quantity, consumers rely on the number of elements, such that an identical quantity is judged larger when it consists of more elements (Alba et al. 1994, 1999). Analogously, we predict that consumers will judge an identical magnitude to be larger when the indicators displaying the magnitude updates more frequently.

In a series of studies, we show that, when asked, people express a preference for indicators with a higher update frequency—but increasing frequency of updates leads to increased magnitude judgments, which in turn results in an over-prediction of future data-points. We then moderate this effect by shifting people's attention to the size of increase or step-size (Bagchi and Li 2011).

We employed the following general procedure in our studies, though context may vary per study (e.g. Kickstarter campaigns, game scoreboard). Participants were first given some information about the context. We then created two versions of an indicator, which differed in frequency of updates that they display. In the *low-frequency* indicator there were 4 updates occurring every 15 seconds; in the *high-frequency* indicator, there were 120 updates, every 0.5 seconds. The starting point, end point, and total change are always held constant across both versions. The indicators were animated GIF images that could be loaded to the online platform of our studies. Participants then viewed the respective indicator for one minute and continued with answering a set of measures.

In our pilot study, upon viewing both versions of the indicator in random order, participants exhibited overwhelming preference for the high-frequency version, and seemed to believe that this version is more informative and can help them keep better track of incoming information.

Results from Study 1 confirmed our prediction that, compared to low-frequency or no-frequency, increasing frequency of updates leads to increased magnitude judgments. Even though as observed in the Pilot study people's lay belief favors higher frequency, in reality, increasing frequencies could sway people's judgments.

In Study 2, we tested the prediction that increasing speed of updates would lead to increased magnitude judgments, and this in turn resulted in an inflated prediction regarding points in a future point in time. Additionally, contrary to previous studies, in this study we used indicators displaying a decreasing figure. We found corroborating evidence, showing that magnitude judgments mediate the relationship between frequency of updates and extrapolation of future data-points.

In Study 3, we document that this effect we observe is due to over-reliance on information regarding frequency. If one's attention was more directed to the size of every increase (i.e. step-size), the difference in magnitude judgments diminishes.

Our work contributes to existing research on numerosity, as we extend prior work by examining how individuals draw inferences from dynamic quantitative information, as opposed to static forms (cf. Adaval 2013). In times when self-quantification is ever-present, researchers have started to investigate the influence of measurement on consumer behavior (e.g. Etkin 2016). Measurement is strongly tied with provision of (possibly constant) information, and collectively our findings shed light on how dynamic presentations of information can influence consumer judgments and the possible unintended consequences thereof, which we believe is of crucial importance.

REFERENCES

- Adaval, Rashmi (2013), "Numerosity and Consumer Behavior," *Journal of Consumer Research*, 39 (5), xi-xiv.
- Alba, Joseph W., Susan M. Broniarczyk, Terence A. Shimp, and Joel E. Urbany (1994), "The Influence of Prior Beliefs, Frequency Cues, and Magnitude Cues on Consumers' Perceptions of Comparative Price Data," *Journal of Consumer Research*, 21(2), 219-35.
- Alba, Joseph W., Carl F. Mela, Terence A. Shimp, and Joel E. Urbany (1999), "The Effect of Discount Frequency and Depth on Consumer Price Judgments," *Journal of Consumer Research*, 26(2), 99-114.
- Bagchi, Rajesh and Xingbo Li (2011), "Illusionary Progress in Loyalty Programs: Magnitudes, Reward Distances, and Step-Size Ambiguity," *Journal of Consumer Research*, 37(5), 888-901.
- Butterworth, Brian (2000), *The Mathematical Brain*, New York: Macmillan.
- Butterworth, Brian (2001), "Statistics: What Seems Natural?," *Science*, 292(5518), 853c-55.
- Butterworth, Brian (2007), "Why Frequencies Are Natural," *Behavioral and Brain Sciences*, 30(3), 259-60.
- Etkin, Jordan (2016), "The Hidden Cost of Personal Quantification," *Journal of Consumer Research*, 42(6), 967-84.
- Hayes, Andrew F (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*, New York: Guilford Press.
- Pelham, B.W., Tin Tin Sumarta, and Laura Myaskovsky (1994), "The Easy Path From Many To Much: The Numerosity Heuristic," *Cognitive Psychology*, 26, 103-33.
- Weber, Ernst. H (1834), *De Pulsu, Resorptione, Auditu et Tactu. Anatationes Anatomicae et Physiologicae*. Leipzig: Koehler.

Less Choosing, More Doing! Procedural Control Inoculates Against the Allure of More Choice

Linda Hagen, University of Southern California, USA
Katherine Burson, University of Michigan, USA

EXTENDED ABSTRACT

A sense of control is essential to humans. Manipulating things in the environment is an infant's first step to self-awareness (Furby 1978) and mastering challenges through agentic behavior is key to feelings of competence (de Charms 1968; White 1959). Feeling in control is associated with virtually all aspects of wellbeing, from happiness to health (Lachman and Weaver 1998; Larson 1989), and one of the most robust psychological phenomena is people's striving for a sense of control (de Charms 1986). Consumer research shows that control is also important for customer satisfaction. People like actively partaking in product assembly because it addresses their need for control (Norton, Mochon, and Ariely 2012). Other research hints that choosing may also provide consumers with control: When perceiving little control, people are motivated to make multiple distinct product choices (Levav and Zhu 2009), and it has been posited that being offered more choice options—that is, a larger assortment—can function as a substitute for power and, more broadly, control (Inesi et al. 2011).

We explicitly test the idea that the widely acknowledged consumer preference for large assortments (Arnold, Oum, and Tigert 1983; Chernev 2003, 2006; Iyengar and Lepper 2000; McAlister and Pessemier 1982) is driven by a desire to feel in control. Furthermore, I find that giving consumers control in a more immediate way—by providing procedural control through greater behavioral involvement—eliminates the preference for larger assortments.

Study 1

Study 1 tested the basic assumption that desire for control attracts consumers to large assortments of choice options. If desire for control is a key driver, then states of low personal control should enhance people's preference for large assortments.

Method

One hundred and sixty business undergraduate lab participants (38.1% women) were induced with a sense of high or low personal control via a pre-tested fluency manipulation. Specifically, participants generated few [versus many] examples of things in their lives that they could control, which enhanced [reduced] their sense of personal control because this task feels easy [hard].

During an ostensible break participants were given the opportunity to select a pack of chocolates from a vending machine in a room next door. The vending machine was filled with packs of small assortment of chocolate (containing five chocolates of a single flavor) as well as packs of large assortment of chocolate (containing five chocolates of five different flavors, specifically all 5 flavors represented in the small-assortment packs). Participants' choice of assortment type was recorded.

Six participants guessed the hypothesis, and 25 participants chose not to get a snack. These individuals, who were distributed equally among conditions, were excluded from the analysis, though including them does not change the results.

Results and Discussion

A binary logistic regression with choice of chocolate packet as the dependent variable (single flavor assortment = 0, multi flavor assortment = 1) revealed that personal control significantly impacted assortment size choice ($\text{Exp}(B) = 2.5$, $\text{SE} = .42$, $\text{Wald } \chi^2(1) = 4.69$,

$p = .03$). As predicted, the choice share of the larger assortment was significantly greater in the low control condition (33.3%) than in the high control condition (16.7%). In other words, people in the low personal control condition were more likely to choose a large assortment of chocolates i) than people in the high personal control condition, and also ii) than would be expected under random choice.

These results show for the first time that lower control drives preference for larger assortments. This finding supports the basic hypothesis that a major reason why consumers prefer large over small assortments is that large assortments of choice options promise more control. With this relationship documented, we next shift our attention to the impact of procedural control on attenuating this preference. To do this, we move from people's general, abstract sense of control used in the first experiment to consumer contexts where procedural control through concrete behavioral involvement, along with assortment size, commonly varies in real life.

Study 2

Study 2 expanded upon this initial evidence that sense of control indeed plays a role in consumers' preference for large over small assortments by investigating the effects of *procedural* control in preference for large assortments. Specifically, this experiment examined the respective impact of decisional control (stemming from assortment size) and procedural control (stemming from behavioral involvement) on perceived control, as well as downstream effects that perceived control has on the attractiveness of the consumption experience. This extension tested two predictions: first, that procedural control through behavioral involvement meets consumers' need for control sufficiently, and second, that this makes decisional control from large assortments irrelevant, thus eliminating their attractiveness advantage.

Method

One hundred and ten participants recruited through Amazon's MTurk (45.5% women) imagined an ice cream parlor that offered high or low procedural control and a small or large assortment of toppings. Specifically, people read that they were at an ice cream shop where they [versus the clerk] would scoop one topping of their choice onto their ice cream, and that this ice cream shop had 3 [versus 15] different toppings available (not further specified).

Assortment Attractiveness Measure. Participants rated the attractiveness of the ice cream parlor ($1 = \text{not at all attractive}$ to $6 = \text{very attractive}$).

Perceived Control Measure. Afterwards, they responded to three items pertaining to perceived control, rating how much influence they would have, how responsible they would be, and to what degree the experience would be under their control ($1 = \text{not at all}$ to $6 = \text{very much}$, combined into an index of *Perceived Control*, $\alpha = .85$).

Manipulation Check for Perceived Choice. Further, participants indicated how much choice they felt this process offered ($1 = \text{very little}$ to $6 = \text{a lot}$). To ensure that this perceived choice question tapped into perceptions of choice options stemming from the breadth of the assortment, not from the number of decisions involved in the activity of topping one's ice cream, people rated how many options the assortment contained as well as how many decisions they would make at the ice cream parlor.

Results and Discussion

Nine participants failed an attention check regarding the number of topping options in the scenario and were thus excluded from the analysis.

Manipulation Check for Perceived Choice Results. As expected, there was a main effect of assortment size ($F(1, 97) = 24.79, p < .001$), such that people perceived more choice when given a large (versus small) assortment. As intended, this was driven by perceptions of the breadth of options in the assortment rather than of increased decision-making in the procedure.

Perceived Control. As predicted, there was a main effect of procedural control ($F(1, 97) = 4.07, p = .047$), such that participants in the high procedural control conditions, who imagined topping their ice cream themselves, perceived significantly more control ($M = 4.78, SD = .88$) than did participants in the low procedural control conditions, who imagined a clerk doing it ($M = 4.41, SD = 1.04$). This confirms the strength of the procedural control manipulation. In addition, there was a main effect of assortment size ($F(1, 97) = 4.42, p = .038$), such that people who imagined having many topping options felt they had greater control ($M = 4.78, SD = .89$) than did people who imagined having few topping options ($M = 4.43, SD = 1.03$). Importantly, however, the effect of assortment size on perceived control was qualified by a significant interaction with procedural control ($F(1, 97) = 7.74, p = .006$).

Follow-up contrasts revealed that only under low procedural control did a large assortment produce greater perceived control ($M = 4.86, SD = .89$) than a small assortment ($M = 3.96, SD = 1.00; F(1, 97) = 10.95, p = .001$). However, as predicted, under high procedural control, people perceived an equal degree of control, regardless of whether the assortment was small ($M = 4.84, SD = .88$) or large ($M = 4.71, SD = .91; F(1, 97) = .25, p = .62$).

Assortment Attractiveness Results. Results for attractiveness were analogous to those for perceived control. While procedural control did not have a main effect on attractiveness ratings ($F(1, 97) = .79, p = .378$), there was a main effect of assortment size ($F(1, 97) = 10.33, p = .002$), such that an ice cream shop with many toppings was significantly more attractive ($M = 5.02, SD = .99$) than an ice cream shop with few toppings ($M = 4.44, SD = 1.01$). More importantly, as predicted, the effect of assortment size on attractiveness was qualified by a significant interaction with procedural control ($F(1, 97) = 6.01, p = .011$).

Follow-up contrasts revealed a pattern similar to that for perceived control. Only under low procedural control was a large assortment more attractive ($M = 5.39, SD = .94$) than a small assortment ($M = 4.26, SD = .92; F(1, 97) = 15.47, p < .001$). Under high procedural control, people found the ice cream parlor equally attractive, regardless of whether the assortment was small ($M = 4.59, SD = 1.08$) or large ($M = 4.71, SD = .94; F(1, 97) = .21, p = .644$).

Furthermore, a bootstrapping mediation analysis provided evidence for moderated mediation (Hayes 2013). Specifically, only under low procedural control circumstances did choice exert its positive effect on attractiveness by enhancing perceived control, ($B = .39, CI = .13 - .77$), but not under high procedural control circumstances ($B = -.05, CI = -.28 - .16$).

This study revealed two important findings. First, though assortment size affects perceptions of choice, it does not inevitably lead to greater attractiveness of larger assortments. Only under low procedural control did more options enhance feelings of control; under high procedural control, options did not add anything. Second, the attractiveness of larger assortments mirrors perceptions of control. Only under low procedural control was the larger assortment more attractive. A mediation analysis formally corroborated the idea

that perceived control drives assortment attractiveness: People ultimately strive for control, and if they cannot actively exert procedural control, larger assortments of choice options are attractive as a control substitute. However, when they can actively exert control in the process, more choice options are meaningless.

Study 3

Study 3 tested the extension of these findings in a context where exerting high procedural control is more consequential and thus undesirable.

Method

One hundred and sixteen participants (50% women) recruited via MTurk considered going to a Korean restaurant where they would either have high or low procedural control and a small or large assortment of meats to choose from. Specifically, they imagined a Korean BBQ where they personally [versus a chef] grilled the food and they could select one of 3 [versus 15] meat options. Then they responded to the same focal dependent measures as in study 2.

Results and Discussion

Nine participants failed an attention check regarding the number of meat options in the scenario and were thus excluded from the analysis.

Perceived Control Results. As expected, there was a main effect of procedural control ($F(1, 103) = 44.30, p < .001$), such that high procedural control led to higher perceived control ($M = 5.18, SD = .72$) than low procedural control did ($M = 4.04, SD = 1.03$). This confirms the success of the procedural control manipulation. In this study, there was no main effect of assortment size ($F(1, 103) = 1.12, p = .292$), but once again there was a significant interaction between assortment size and procedural control ($F(1, 103) = 5.71, p = .019$).

Follow-up contrasts showed that, again, only under low procedural control did a larger assortment produce greater perceived control ($M = 4.33, SD = .93$) than a small assortment ($M = 3.75, SD = 1.04; F(1, 103) = 6.39, p = .013$). Once more, under high procedural control, people perceived an equal degree of control, regardless of whether the assortment was small ($M = 5.28, SD = .63$) or large ($M = 5.06, SD = .81; F(1, 103) = .82, p = .37$).

Assortment Attractiveness Results. Again, the results for attractiveness mirrored those for perceived control; only under low procedural control was a large assortment marginally more attractive ($M = 5.25, SD = .65$) than a small assortment ($M = 4.66, SD = 1.05; F(1, 103) = 3.28, p = .07$). Under high procedural control, people found the restaurant equally attractive, regardless of whether it offered a large ($M = 3.87, SD = 1.58$) or a small assortment ($M = 4.00, SD = 1.54; F(1, 103) = .14, p = .71$).

These results corroborate the evidence that the impact of large assortments stems from an associated sense of control. Further, it affirms that if control is conferred otherwise—through procedural control—the effect of having more choice options within large assortments is obliterated.

Study 4

Study 4 translated the question into a realistic brand choice setting using conjoint methodology.

Method

Three hundred and twelve business undergraduates (41% women) completed a choice-based conjoint study (Green and Srinivasan 1990) in which they read about pizza products involving no, low, or high procedural control (between-subjects) and chose between brands that featured small, medium, or large assortments of flavor

(within-subject). Specifically, participants made decisions about from-scratch pizza kits (i.e., rolling out dough, spreading sauce, dispersing toppings) [or design-your-own-pizza kits (i.e., only dispersing toppings) or frozen pizza (i.e., only removing pizza from package)] and chose between pizza brands that offered either 3, 6, or 9 flavors.

They made a total of 12 choices from different sets of pizzas that varied in the focal attribute—assortment size—as well as brand, price, and product rating. From these choices, we derived part-worths (i.e., utility) of different product attributes and attribute levels.

Results and Discussion

Procedural control had a significant effect on the marginal utility of having a larger assortment of flavors. Specifically, the marginal utility of increasing assortment size from small to medium was significant only in the no control ($B = .16$, $SE = .05$, $p < .01$) and low control conditions ($B = .18$, $SE = .09$, $p < .05$), but not in the high control condition ($B = .14$, $SE = .09$, $p > .13$).

General Discussion

Contributing to the literature on personal control generally and the emerging field of co-production and Do-It-Yourself products specifically, procedural control may be a more powerful conveyor of perceived control than breadth of choice. Adding to research on assortments, process evidence suggests that perceived control is an underlying driver of assortment attractiveness. Further, although having procedural control renders assortment size irrelevant for perceptions of control and thus attractiveness, the effect of greater perceived control need not always be positive: If it poses the risk of worse outcomes, consumers dislike exerting procedural control. Offering a suggestion to practitioners, offering co-production or other means of procedural control may be a suitable way for firms to stay attractive if they cannot offer large assortments as long as co-production is not viewed as detrimental to the experience (as was the case for the restaurant).

REFERENCES

- Arnold, Stephen J., Tae H. Oum, and Douglas J. Tigert (1983), "Determinant Attributes in Retail Patronage: Seasonal, Temporal, Regional, and International comparisons," *Journal of Marketing Research*, 20 (2), 149–57.
- Chernev, Alexander (2003), "When More is Less and Less is More: The Role of Ideal Point Availability and Assortment in Consumer Choice," *Journal of Consumer Research*, 30 (2), 170–83.
- _____ (2006), "Decision Focus and Consumer Choice among Assortments," *Journal of Consumer Research*, 33 (1), 50–59.
- De Charms, Richard (1968), *Personal Causation*. New York, NY: Academic Press.
- Furby, Lita (1978), "Possession in humans: An exploratory study of its meaning and motivation," *Social Behavior and Personality*, 6 (1), 49–65.
- Inesi, M. Ena, Simona Botti, David Dubois, Derek D. Rucker, and Adam D. Galinsky (2011), "Power and Choice Their Dynamic Interplay in Quenching the Thirst for Personal Control," *Psychological Science*, 22 (8), 1042–48.
- Iyengar, Sheena S., and Mark R. Lepper (2000), "When Choice is Demotivating: Can One Desire too Much of a Good Thing?," *Journal of Personality and Social Psychology*, 79 (6), 995–1006.
- Lachman, Margie E., and Suzanne L. Weaver (1998), "The Sense of Control as a Moderator of Social Class Differences in Health and Well-being," *Journal of Personality and Social Psychology*, 74 (3), 763–73.
- Levav, Jonathan, and Riu (Juliet) Zhu (2009), "Seeking Freedom through Variety," *Journal of Consumer Research*, 36(4), 600–10.
- McAlister, Leigh, and Edgar Pessemier (1982), "Variety-seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9 (3), 311–22.
- Norton, Michael I., Daniel Mochon, and Dan Ariely (2012), "The IKEA Effect: When Labor Leads to Love," *Journal of Consumer Psychology*, 22, 453–60.
- White, Robert W. (1959), "Motivation Reconsidered: The Concept of Competence," *Psychological Review*, 66 (5), 297–333.

Online Chameleons: The effects of Stylistic Mimicry of Nonverbal Cues on Consumer-Brand Interactions Online

Fatima M. Hajjat, Ithaca College, USA
Elizabeth G. Miller, University of Massachusetts, Amherst, USA

EXTENDED ABSTRACT

Employee interactions with consumers influence consumer-brand relationships and assessments of service quality (Bitner 1990). Although many of these interactions still occur as face-to-face communications (FTFC), a substantial amount has shifted to online platforms, generally known as computer-mediated communications (CMC), such as live chats and social media. Yet a central issue in CMC is whether social meaning is affected by the absence of nonverbal cues resulting in an impersonal and cold medium of communication (e.g., Rice and Love 1987). Social information processing (SIP) theory suggests that although CMC lacks nonverbal cues, communicators adapt their language, style and other cues to facilitate a stronger relationship development process (Walther et al. 2005). One such adaption is linguistic mimicry, defined as the “convergence on linguistic dimensions such as vocabulary or jargon as a way of signaling affinity toward their communication partner” (Scissors et al. 2008). We focus on nonverbal linguistic mimicry, specifically emoji and punctuation use, as it has been understudied in the marketing literature. The overarching goal of the research is to explore the potential ways in which consumers react to being mimicked by an employee during an online interaction and how that affects perceptions of consumer trust, satisfaction and rapport, all of which are important building blocks in establishing consumer-brand relationships.

We base our hypotheses on the mimicry literature which states that mimicry can foster positive interpersonal relationships (Stel and Vonk 2010), increase feelings of rapport, liking, affiliation, and closeness (Lakin et al. 2003), and induce feelings of a much smoother and more enjoyable interaction (Lakin and Chartrand 2003). However, research also shows that mimicry can have negative outcomes when applied to the wrong person or situation (e.g., Liu et al. 2011). Specifically, research shows that mimicry does not increase liking when one mimics a non-affiliative expression, such as anger (van der Velde et al. 2010), or is reminded of money (Liu et al. 2011). Therefore, we expect that in positive service interactions, mimicry will result in higher perceptions of trust, satisfaction and rapport (H1), while in negative service interactions, the effects of mimicry will be mitigated (H2).

We test our hypotheses across three between-subjects experiments. Our first two studies tested effects of mimicry using emoji mimicry (Study 1) and punctuation mimicry (Study 2). Study 1 ($n = 116$) used a 2 (service context: positive, negative) \times 2 (mimicry: present, absent) between subjects design. Participants were told that they were looking to purchase a laptop online (positive service context) or had a problem with a recent laptop purchase (negative service context) and had contacted the computer company for help. Participants were then shown a chat window containing their conversation with the company. The conversation included the use of an emoji by the consumer (participant) and this emoji use was either copied or not in the employee’s response. Our results revealed significant mimicry \times context interaction effects on trust ($F(1, 109) = 4.775, p < 0.05$), satisfaction ($F(1, 109) = 4.061, p < 0.05$) and rapport ($F(1, 109) = 3.868, p < 0.06$). In positive interactions, mimicry increased perceptions of employee trust, satisfaction, and rapport. These effects were mitigated in negative service interactions. These results support H1 and H2.

Study 2 ($n = 106$) adopted the same design as Study 1, but instead of using emoji, the customer added “!!!”; this punctuation use

was either mimicked or not by the employee. We observed a marginally significant mimicry \times context interaction for satisfaction ($F(1, 99) = 3.145, p < 0.08$) and a significant interaction for rapport ($F(1, 99) = 3.983, p < 0.05$), but there were no significant effects on trust. However, in contrast to H1, in the positive service context, mimicry reduced satisfaction and rapport. These effects were mitigated in the negative service context, consistent with H2.

We speculate that the difference in the effects of mimicry types are due to perceptions of rudeness (i.e., flaming). Research shows that the use of multiple punctuation marks in messages correlates with perceptions of flaming (Turnage 2007) between interactants online. In contrast, emoji can be used to mitigate perceptions of flaming (Thompson 1996) by expressing easily identifiable emotions. Therefore, we expect rudeness perceptions to mediate the effects of mimicry (H3).

To test H3, we ran a 2 (mimicry: present, absent) \times 2 (mimicry type: emoji, punctuation) between-subjects experiments with a new, neutral service context (consumer had a question about his order number). Study 3 ($n = 150$; student population) results indicate a significant mimicry presence \times type interaction on satisfaction ($F(1, 144) = 6.275, p < 0.05$), rapport ($F(1, 144) = 9.579, p < 0.05$), and rudeness perceptions ($F(1, 144) = 4.934, p < 0.05$). There was also a significant main effect of mimicry type ($F(1, 144) = 6.001, p < 0.05$) on trust, but the interaction with mimicry presence was not significant. As expected, participants reported higher perceptions of trustworthiness, satisfaction, and rapport and lower perceptions of rudeness of employees who mimicked their emoji use than those who mimicked their punctuation use. However, there were no significant differences in perceptions in the no mimicry condition. To investigate the mediating role of rudeness perceptions, we ran 3 mediation tests using Hayes’s (2012) PROCESS macro. As Figure 1 shows, rudeness perceptions mediated the relationships between mimicry type and all three DVs, thus supporting H3.

Our research makes several theoretical contributions. First, we extend the literature on mimicry and marketing communications by showing the effects of mimicry of nonverbal cues on interactions online. We show that not all online mimicry results in positive outcomes, therefore, expanding the mimicry literature on the moderating effects of mimicry type. We also provide a possible explanation for understanding the negative effects of punctuation mimicry, namely rudeness perceptions. Second, we expand the literature on consumer-brand relationships by identifying a possible tool for building successful relationships online. We show that successful implementation of online mimicry can foster positive consumer-brand relationships online, helping compensate for the lack of nonverbal cues in CMC. Finally, we expand the literature on trust formation by examining an online behavior that can build or deplete trust.

REFERENCES

- Bitner, Mary Jo (1990), “Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses,” *Journal of Marketing*, 54 (April), 69-82.
- Lakin, Jessica L., and Tanya L. Chartrand (2003). “Using nonconscious behavioral mimicry to create affiliation and rapport.” *Psychological science* 14, no. 4: 334-339.

- Lakin, Jessica L., Valerie E. Jefferis, Clara Michelle Cheng, and Tanya L. Chartrand (2003). "The chameleon effect as social glue: Evidence for the evolutionary significance of nonconscious mimicry." *Journal of nonverbal behavior* 27, no. 3: 145-162.
- Liu, Jia Elke, Kathleen D. Vohs, and Dirk Smeesters (2011). "Money and Mimicry When Being Mimicked Makes People Feel Threatened." *Psychological science*.
- Rice, Ronald E., and Gail Love (1987). "Electronic emotion socioemotional content in a computer-mediated communication network." *Communication research* 14, no. 1: 85-108.
- Scissors, Lauren E., Alastair J. Gill, and Darren Gergle (2008). "Linguistic mimicry and trust in text-based CMC." In *Proceedings of the 2008 ACM conference on Computer supported cooperative work*, pp. 277-280. ACM.
- Stel, Mariëlle, and Roos Vonk (2010). "Mimicry in social interaction: Benefits for mimickers, mimicked, and their interaction." *British Journal of Psychology* 101, no. 2: 311-323.
- Thompson, Philip A (1996). "What's fueling the flames in cyberspace? A social influence model." *Communication and cyberspace: Social interaction in an electronic environment* (1996): 293-311.
- Turnage, Anna K (2007). "Email flaming behaviors and organizational conflict." *Journal of Computer-Mediated Communication* 13, no. 1: 43-59.
- van der Velde, Sytske W., Diederik A. Stapel, and Ernestine H. Gordijn (2010). "Imitation of emotion: When meaning leads to aversion." *European Journal of Social Psychology* 40, no. 3: 536-542.
- Walther, Joseph B, Tracy Loh, and Laura Granka (2005). "Let me count the ways the interchange of verbal and nonverbal cues in computer-mediated and face-to-face affinity." *Journal of language and social psychology* 24, no. 1: 36-65.

Is My Failure Your Problem?

Examining Carryover Effects of Prior Consumer Failure on Customer Satisfaction

Matthew J. Hall, University of Nebraska-Lincoln, USA

Jamie D. Hyodo, University of Nebraska-Lincoln, USA

EXTENDED ABSTRACT

While extensive literature has examined consumer responses to firm and product failure (e.g., Folkes and Kotsos 1986), less research has considered consumer failure. Literature on consumer failure has been limited to failure in isolation of firm interactions (Baumeister 2002), or the impact of failure experienced during firm interactions on subsequent firm interactions (e.g., Folkes 1984). Our research leverages the Do-It-Yourself (DIY) domain to show that consumers' own failures influence how they perceive subsequent firm offerings addressing the failed task. While failure in this context has not been studied, evidence for potential consumer responses to such failure is mixed. From a goals perspective, task failure should elicit negative affect (Bagozzi and Pieters 1998), which is linked to negative consumption experiences (Alford and Sherrell 1996). However, from an attribution perspective, failure often signals increased task difficulty (Weiner 1985) which should increase satisfaction with subsequent firm completion of the task (Patterson, Johnson, and Spreng 1996).

To explain these competing hypotheses, we identified consumer mindset (Dweck and Leggett 1988) as a potential moderator. Those with a growth mindset believe that intelligence and ability are malleable and can be improved increased effort (Dweck 2006). They appreciate the ability of others and view failure as an opportunity to learn and improve (Blackwell, Trzesniewski, and Dweck 2007). Conversely, those with a fixed mindset believe that intelligence and ability are relatively stable and frequently experience negative affect in response to failure (Dweck, Chiu, and Hong 1995). This suggests that while growth-minded individuals view failure as a learning opportunity, fixed-minded individuals interpret the same situation as a threat to their self and confirmation of their lack of competence.

Self-efficacy was identified as another potential moderator as those with high self-efficacy tend to have higher involvement in a consumption domain (Xie, Bagozzi, and Troye 2008), which has been shown to amplify both positive and negative consumption experiences (Richins and Bloch 1991). Low self-efficacy, on the other hand, results in low involvement and less extreme reactions to failure (Weaver and Brickman 1974). We thus anticipate that consumers with high self-efficacy will have more involvement in the failed task, resulting in stronger responses to their failure and subsequent firm recovery. Additionally, we identified shame a potential mediating process to explain our hypothesized interaction effects because it is elicited by failure (McGregor and Elliot 2005), and is differentially impacted by mindset (Tracy and Robins 2006) and self-efficacy (Baldwin, Baldwin, and Ewald 2006).

We leveraged the DIY domain to test our hypotheses because DIY attempts often result in failure followed by elicitation of professional services to complete the failed task (Wolf and McQuitty 2011). We conducted four studies across two tasks and two populations. First, to reconcile our competing main effect hypotheses, Study 1 employed an undergraduate sample ($n=75$) and a technology task to show that consumers have higher satisfaction with firm offerings when they have previously attempted and failed the task ($M_{\text{Failure}} = 5.53$), compared with those who did not attempt the task prior to eliciting professional help ($M_{\text{NoTry}} = 4.93$; $F(1,71)=3.61, p=.04$).

Study 2 used an Mturk sample ($n=160$) and a plumbing-related task to confirm the moderating effect of mindset (measured variable) on post-failure carryover effects ($F_{\text{Interaction}}(1,156)=2.25, p=.05$). Our

findings suggest that the positive main effect of failure only occurs for those with more growth-oriented mindsets ($M_{\text{Failure}} = 6.84, M_{\text{NoTry}} = 6.2$; $F(1,156) = 13.9, p < .001$), while the effect for those with more fixed mindsets was nonsignificant ($F(1,156) = .84, NS$).

In Study 3, we replicated interaction effects from Study 2 by manipulating mindset to increase causal interpretability ($F(1,154)=8.17, p=.005$). We used an Mturk sample ($n=158$) to replicate the simple effect of failure for those in a growth mindset ($M_{\text{Failure}} = 6.42, M_{\text{NoTry}} = 5.68$; $F(1,154)=9.71, p=.002$), while again showing no effect for those in a fixed mindset ($F(1,154)=.86, NS$).

Study 4 was designed to test the moderating effect of self-efficacy and the mediating effect of shame on the hypothesized interactions. We replicated the procedure from Study 3 using an Mturk sample ($n=348$) and added measures for self-efficacy, shame, and potential competing affective mediators (Bolton, Keh, and Alba 2010). An ANOVA of failure, mindset, self-efficacy and their interactions on firm satisfaction revealed a three-way interaction ($F(1,340)=3.86, p=.05$) in which the previous two-way interaction (failure x mindset) emerged only for those with high self-efficacy (+1SD). As predicted, the interaction for those with low self-efficacy (-1SD) was nonsignificant. Hayes' (2013) PROCESS Model 12 revealed that shame mediated the relationship between failure and satisfaction for those with a growth mindset and average ($B=.14, SE=.06, 95\% \text{ C.I.}=[.03, .28]$) or above average self-efficacy ($B=.18, SE=.09, 95\% \text{ C.I.}=[.03, .38]$), but not for those with low self-efficacy ($B=.09, SE=.08, 95\% \text{ C.I.}=[-.05, .27]$). Similarly, mediation was observed for those with a fixed mindset and low ($B=-.25, SE=.09, 95\% \text{ C.I.}=[-.45, -.11]$) or average self-efficacy ($B=-.11, SE=.05, 95\% \text{ C.I.}=[-.24, -.02]$), but not high self-efficacy ($B=.03, SE=.08, 95\% \text{ C.I.}=[-.12, .19]$).

Overall, our findings show that consumer failures in isolation from firm interactions can impact firm outcomes. Specifically, we demonstrate that prior consumer failure positively impacts customer perceptions of firm actions for growth-minded individuals, while fixed-minded individuals have more adverse responses. Additionally, we show that those with a growth mindset are less satisfied with firm actions when they have not attempted the task. This suggests that it is not just failure that impacts satisfaction, but rather consumers' overall experience in the domain. Additionally, we find that these reactions are accentuated when task self-efficacy is high, but attenuated when self-efficacy is low. We also show that the previous effects are partially mediated by shame. By identifying shame as the mediating process in these interactions, we provide initial insights for managers to reduce negative outcomes following DIY failures. Reducing shame, priming a growth mindset, or reducing task-related efficacy should thus represent viable strategies for firms to elicit more positive outcomes following consumer failure.

REFERENCES

- Alford, Bruce L., and Daniel L. Sherrell (1993), "The Role of Affect in Consumer Satisfaction Judgments of Credence-based Services," *Journal of Business Research*, 37(1), 71-84.
- Bagozzi, Richard P., and Rik Pieters (1998), "Goal-directed Emotions," *Cognition and Emotion*, 12(1), 1-26.
- Baldwin, Kim M., John R. Baldwin, and Thomas Ewald (2006), "The Relationship among Shame, Guilt, and Self-efficacy," *American Journal of Psychotherapy*, 60(1), 1-21.

- Baumeister, Roy F. (2002), "Yielding to Temptation: Self-control Failure, Impulsive Purchasing, and Consumer Behavior," *Journal of Consumer Research*, 28(4), 670-676.
- Blackwell, Lisa S., Kali H. Trzesniewski, and Carol S. Dweck (2007), "Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention," *Child Development*, 78(1), 246-263.
- Bolton, Lisa E., Hean Tat Keh, and Joseph W. Alba (2010), "How Do Price Fairness Perceptions Differ Across Culture?" *Journal of Marketing Research*, 47(3), 564-576.
- Dweck, Carol S. (2006), *Mindset: The New Psychology of Success*, New York: RandomHouse.
- Dweck, Carol S., Chi-yue Chiu, and Ying-yi Hong (1995), "Implicit Theories and their Role in Judgments and Reactions: A Word from Two Perspectives," *Psychological Inquiry*, 6(4), 267-285.
- Dweck, Carol S., and Ellen L. Leggett (1988), "A Social-Cognitive Approach to Motivation and Personality," *Psychological Review*, 95(2), 256-273.
- Folkes, Valerie S. (1984), "Consumer Reactions to Product Failure: An Attributional Approach," *Journal of Consumer Research*, 10(4), 398-409.
- Folkes, Valerie S., and Barbara Kotsos (1986), "Buyers' and Sellers' Explanations for Product Failure: Who Done It?" *Journal of Marketing*, 50(2), 74-80.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*, Guilford Press.
- McGregor, Holly A., and Andrew J. Elliot (2005), "The Shame of Failure: Examining the Link Between Fear of Failure and Shame," *Personality and Social Psychology Bulletin*, 31(2), 218-231.
- Patterson, Paul G., Lester W. Johnson, and Richard A. Spreng (1996), "Modeling the Determinants of Customer Satisfaction for Business-to-Business Professional Services," *Journal of the Academy of Marketing Science*, 25(1), 4-17.
- Richins, Marsha L., and Peter H. Bloch (1991), "Post-purchase Product Satisfaction: Incorporating the Effects of Involvement and Time," *Journal of Business Research*, 23(2), 145-158.
- Tracy, Jessica L., and Richard W. Robins (2006), "Appraisal Antecedents of Shame and Guilt: Support for a Theoretical Model," *Personality and Social Psychology Bulletin*, 32(10), 1339-1351.
- Weaver, Donald, and Philip Brickman (1974), "Expectancy, Feedback, and Disconfirmation as Independent Factors in Outcome Satisfaction," *Journal of Personality and Social Psychology*, 30(3), 420-428.
- Weiner, Bernard (1985), "An Attributional Theory of Achievement Motivation and Emotion," *Psychological Review*, 92(4), 548-573.
- Wolf, Marco, and Shaun McQuitty (2011), "Understanding the Do-it-yourself Consumer: DIY Motivations and Outcomes," *AMS Review*, 1(3-4), 154-170.
- Xie, Chunyan, Richard P. Bagozzi, and Sigurd V. Troye (2008), "Trying to Prosume: Toward a Theory of Consumers as Co-creators of Value," *Journal of the Academy of Marketing Science*, 36(1), 109-122.

Going with the Flow-ency: The Role of Perceived Control on Fluency Effects

Jerry Han, University of Texas at Austin, USA

Claire Tsai, University of Toronto, Canada

EXTENDED ABSTRACT

Our perceptions of control fluctuate throughout our daily lives. For instance, experiences of putting in personal effort and obtaining the intended results can reinforce the belief that one has control. Conversely, being exposed to uncontrollable life events or being deprived of choice options can threaten this belief. In this paper, we show these incidental changes in perceived control can further affect how people make subsequent decisions. Specifically, we find that increasing perceived control can reduce the influence of cognitive feelings on judgment, thereby attenuating the effects of fluency. In contrast, lowering perceived control can facilitate the effects of fluency by increasing people's reliance on feelings when making judgments.

Prior research suggests that greater perceived control can cause people to become less vigilant in making evaluations because they tend to think of successful outcomes and engage in self-aiding thoughts (Bandura 1993; Skinner 1995). For instance, research on the illusion of control (Langer 1975; Biner et al. 2008) finds that people expect better outcomes when they believe they have control over the situation. This lowered vigilance in turn can reduce people's affective reaction toward decision-relevant information (e.g. Geer, Davison, & Gatchel, 1970; Glass et al., 1973), because affective events have less emotional impact when people are not attending to them (Pessoa, Kastner, and Ungerleider 2002; Kahneman et al. 2004). In contrast, decreased control can increase people's vigilance, where they become more cautious in searching for all decision-relevant information in order to avoid making poor decisions (e.g. Fischer, Schulz-Hardt, & Frey, 2008). Given that fluency (disfluency) generates positive (negative) feelings (Schwarz 2004) to influence evaluations, we postulate that people perceiving high (vs. low) control would be less prone to fluency effects. We conducted four experiments to find support for our predictions.

In experiment 1, we manipulated incidental perceived control by having participants recall a time when they had high or low control (Whitson and Galinsky 2008) and measured their attitude towards a chocolate product in an advertisement. Fluency was manipulated by using either a clear or blurry font (Labroo and Kim 2009) and demonstrate across three experiments, that this is not the case when people are pursuing a goal. This is because people pursuing a goal (e.g., become kinder. The data revealed a main effect of fluency ($F(1, 200) = 4.3, p < .04$) and a significant interaction effect ($F(1, 200) = 5.14, p < .02$). Simple effects analyses showed that people feeling low control liked the product more in the high (vs. low) fluency condition ($F(1, 200) = 9.52, p < .002$), whereas those feeling high control did not show any difference ($F = 0.02, NS$). The results supported our predictions where that those feeling low control were more likely to incorporate their feelings of fluency into their judgments.

Experiment 2 replicated the effect while employing a different control manipulation and using a non-hedonic stimulus to increase the robustness of our effect. Specifically, we manipulated incidental control by having participants read an article on how effort (high control condition) or genes (low control condition) are responsible for people's life outcomes (Cutright and Samper 2014) what role should products play in helping consumers pursue their goals (e.g., losing weight, maintaining a clean home and had them evaluate how long a new exercise routine would take for an average adult (Song and Schwarz 2008). Fluency was manipulated by using different fonts in

describing the exercise routine. The data again revealed a significant interaction effect ($F(1, 156) = 4.71, p < .03$). Simple effects analyses showed that people feeling low control expected the exercise to take longer when described in a disfluent (vs. fluent) font ($F(1, 156) = 6.61, p < .01$). However, people feeling high control showed no difference ($F = .6, NS$). Furthermore, two post tests were conducted to rule out alternative explanations including construal level, general mood, risk preference, or confidence (all $ps > .11$).

Experiment 3 provided initial process evidence for our effect. Towards this goal, we manipulated perceived control as in Experiment 2 and had people evaluate the chocolate product as in Experiment 1, while also measuring participants' affect after finishing the evaluation. First, there was a significant interaction effect ($F(1, 197) = 4.26, p < .04$), where the effect of fluency was significant only in the low control condition ($F(1, 197) = 5.94, p < .02$) but not in the high control condition ($F = .2, NS$). A moderated mediation analysis using the PROCESS macro (model 8; Preacher & Hayes, 2004) formal significance tests of indirect effects are rarely conducted. After a brief overview of mediation, we argue the importance of directly testing the significance of indirect effects and provide SPSS and SAS macros that facilitate estimation of the indirect effect with a normal theory approach and a bootstrap approach to obtaining confidence intervals, as well as the traditional approach advocated by Baron and Kenny (1986 further showed that affect mediated the effect of control and fluency on people's evaluation (95% CI: [-0.148, -0.0033]).

Finally, in Experiment 4, we explicated the underlying process by manipulating thinking styles directly. The procedure was similar to Experiment 3 except that before seeing the chocolate ad, participants were either asked to rely on their feelings or the information content. We expected that our previous results would be replicated in the information-focus condition, but that there would be a reversal of the effect in the feeling-focus condition (Tsai and Thomas 2011). As expected, there was a significant three-way interaction effect ($F(1, 436) = 9.49, p < .002$). Post-hoc analyses indicated that the interaction effect of control and fluency was significant both within the information focus ($F(1, 436) = 5.22, p < .02$) and the feeling focus ($F(1, 436) = 4.29, p < .04$) condition. Specifically, in the information focus condition, fluency had a significant effect for those feeling low control ($F(1, 436) = 3.9, p < .05$), but not for those feeling high control ($F = 1.64, NS$). However, in the feeling focus condition, fluency had a significant effect for those feeling high control ($F(1, 436) = 8.67, p < .003$) but not for those feeling low control ($F < 0.1, NS$).

In short, we found that higher perceived control leads to decreased fluency effects by weakening positive affect induced by fluent processing. However, lower control led to the predicted fluency effects, because such feelings are unconsciously misattributed to the judgment variable itself. Furthermore, when explicitly instructed to pay attention to feelings, fluency increased liking in the higher control condition, whereas it eliminated the fluency effect in the lower control condition by disrupting the misattribution process.

REFERENCES

- Alter, Adam L. and Daniel M. Oppenheimer (2009), "Uniting the Tribes of Fluency to Form a Metacognitive Nation," *Personality and social psychology review*, 13(3), 219-35.

- Bandura, Albert (1993), "Perceived Self-Efficacy in Cognitive Development and Functioning," *Educational Psychologist*, 28(2), 117–48.
- Biner, Paul M., Bradley C. Johnston, Amanda D. Summers, and Elyse N. Chudzynski (2008), "Illusory Control as a Function of the Motivation to Avoid Randomly Determined Aversive Outcomes," *Motivation and Emotion*, 33(1), 32–41.
- Boswell, Stefanie S. (2012), "'I Deserve Success': Academic Entitlement Attitudes and Their Relationships with Course Self-Efficacy, Social Networking, and Demographic Variables," *Social Psychology of Education*, 15(3), 353–65.
- Botti, Simona and Ann L. McGill (2006), "When Choosing Is Not Deciding: The Effect of Perceived Responsibility on Satisfaction," *Journal of Consumer Research*, 33(2), 211–19.
- Botti, Simona and Ann L. McGill (2011), "The Locus of Choice: Personal Causality and Satisfaction with Hedonic and Utilitarian Decisions," *The Journal of Consumer Research*, 37(6), 1065–78.
- Chaxel, Anne-Sophie (2016), "Why, When, and How Personal Control Impacts Information Processing: A Framework," *Journal of Consumer Research*, 43(1), 179–97.
- Cutright, Keisha M. and Adriana Samper (2014), "Doing It the Hard Way: How Low Control Drives Preferences for High-Effort Products and Services," *Journal of Consumer Research*, 41(3), 730–45.
- Fischer, Peter, Andreas Kastenmüller, Tobias Greitemeyer, Julia Fischer, Dieter Frey, and David Crelley (2011), "Threat and Selective Exposure: The Moderating Role of Threat and Decision Context on Confirmatory Information Search after Decisions.," *Journal of experimental psychology. General*, 140(1), 51–62.
- Fischer, Peter, Stefan Schulz-Hardt, and Dieter Frey (2008), "Selective Exposure and Information Quantity: How Different Information Quantities Moderate Decision Makers' Preference for Consistent and Inconsistent Information.," *Journal of personality and social psychology*, 94(2), 231–44.
- Geer, J H, G C Davison, and R I Gatchel (1970), "Reduction of Stress in Humans through Nonveridical Perceived Control of Aversive Stimulation.," *Journal of personality and social psychology*, 16(4), 731–38.
- Glass, D C, J E Singer, H S Leonard, D Krantz, S Cohen, and H Cummings (1973), "Perceived Control of Aversive Stimulation and the Reduction of Stress Responses.," *Journal of personality*, 41(4), 577–95.
- Hayes, Andrew F (2012), *PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling [White Paper]*. Retrieved from <http://www.afhayes.com/public/process2012.pdf>.
- Johnson, Wendy and Robert F. Krueger (2006), "How Money Buys Happiness: Genetic and Environmental Processes Linking Finances and Life Satisfaction.," *Journal of personality and social psychology*, 90(4), 680–91.
- Kahneman, Daniel, Alan B. Krueger, David A. Schkade, Norbert Schwarz, and Arthur A. Stone (2004), "A Survey Method for Characterizing Daily Life Experience : The Day Reconstruction Method Published by : American Association for the Advancement of Science Stable URL : <http://www.jstor.org/stable/3839780>," *Science*, 306(5702), 1776–80.
- Kay, Aaron C., Jennifer A. Whitson, Danielle Gaucher, and Adam D. Galinsky (2009), "Compensatory Control: Achieving Order through the Mind, Our Institutions, and the Heavens," *Current Directions in Psychological Science*, 18(5), 264–68.
- Khan, Uzma and Daniella M. Kupor (2016), "Risk (Mis) Perception: When Greater Risk Reduces Risk Valuation," *Journal of Consumer Research*, 0(October), ucw058.
- Labroo, Aparna a and Sara Kim (2009), "The "' Instrumentality "' Heuristic Pursuit," *Psychological Science*, 20(1), 127–34.
- Langer, Ellen J. (1975), "Illusion of Control," *Journal of personality and social psychology*, 32(2), 311–28.
- Menon, Geeta and Priya Raghurir (2003), "Ease of Retrieval as an Automatic Input in Judgments: A Mere Accessibility Framework?," *Journal of Consumer Research*, 30(2), 230–43.
- Pessoa, Luiz, Sabine Kastner, and Leslie G Ungerleider (2002), "Attentional Control of the Processing of Neural and Emotional Stimuli.," *Brain research. Cognitive brain research*, 15(1), 31–45.
- Preacher, Kristopher J and Andrew F Hayes (2004), "SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models.," *Behavior research methods, instruments, & computers : a journal of the Psychonomic Society, Inc*, 36(4), 717–31.
- Rodin, Judith and Ellen J. Langer (1977), "Long-Term Effects of a Control-Relevant Intervention with the Institutionalized Aged.," *Journal of personality and social psychology*, 35(12), 897–902.
- Schwarz, Norbert (2004), "Metacognitive Experiences in Consumer Judgment and Decision Making," *Journal of Consumer Psychology*, 14(4), 332–48.
- Schwarz, Norbert, Herbert Bless, Fritz Strack, Gisela Klumpp, Helga Rittenauer-Schatka, and Annette Simons (1991), "Ease of Retrieval as Information: Another Look at the Availability Heuristic.," *Journal of Personality and Social Psychology*, 61(2), 195–202.
- Schwarz, Norbert and Gerald L. Clore (2007), "Feelings and Phenomenal Experiences," *Social Psychology: Handbook of Basic Principles*, 385–407.
- Skinner, Ellen A. (1996), "A Guide to Constructs of Control," *Journal of personality and social psychology*, 71(3), 549–70.
- (1995), *Perceived Control, Motivation, & Coping*, Thousand Oaks, CA, US: Sage Publications, Inc.
- Song, Hyunjin and Norbert Schwarz (2008), "If It's Hard to Read, It's Hard to Do: Processing Fluency Affects Effort Prediction and Motivation.," *Psychological science*, 19(10), 986–88.
- Tsai, C. I. and M. Thomas (2011), "When Does Feeling of Fluency Matter?: How Abstract and Concrete Thinking Influence Fluency Effects," *Psychological Science*, 22(3), 348–54.
- Whitson, Jennifer and Adam D Galinsky (2008), "Lacking Control Increases Illusory Pattern Perception," *Science*, 322(5898), 115–17.
- Wortman, Camille B. (1975), "Some Determinants of Perceived Control.," *Journal of Personality and Social Psychology*, 31(2), 282–94.

A Carbon Price by Another Name May Seem Sweeter: Consumers Prefer Upstream Offsets to Equivalent Downstream Taxes

David Hardisty, University of British Columbia, Canada
Alec Beal, University of British Columbia, Canada
Ruben Lubowski, Environmental Defense Fund, USA
Annie Petsonk, Environmental Defense Fund, USA
Rainer Romero-Canyas, Environmental Defense Fund, USA

EXTENDED ABSTRACT

How do consumers react to regulations on carbon emissions? Increasing the cost of carbon intensive activities such as flying should influence consumer choices, but does it matter how these costs are labeled? Previous literature shows that costs labeled as “taxes” are more odious to consumers than other equivalent financial costs, and this is particularly true for political conservatives (Hardisty & Weber, 2010; Sussman & Olivola, 2011). In this paper, we explore a novel dimension of carbon price labeling: whether the regulation is described as an “upstream” charge on the production and importation of fossil fuels or a “downstream” charge on goods and services, and how this “upstream” vs “downstream” labeling interacts with other frames.

According to conventional economic theory, entities regulated upstream will pass the carbon price through to consumers, assuming there is no way to scrub out or remove the emissions from the fossil fuel. Similarly, if consumers facing a downstream carbon price respond by reducing their demand, producers will then see the same reduction in profits as if they had faced the carbon price upstream and correspondingly passed on the cost to consumers.

Carbon regulation raises the price of carbon producing activities to make them less economically appealing, so as to induce emitters to find better, cheaper, faster ways of cutting emissions. Carbon regulation also sends a message to *consumers* that society thinks these activities are bad (similar to a “sin tax” for cigarettes), inducing consumers to voluntarily reduce their carbon emissions or choose environmentally friendly options. This latter purpose, sometimes called the communication of “injunctive norms,” has been found to be important for decreasing energy usage in residential homes in California (Shultz et al., 2007). Depending on whether and how it is communicated, moving carbon regulation upstream may hide this injunctive norm from consumers, and thus decrease the effectiveness of the regulation for changing consumer behavior.

On the flip side, some countries or states may be looking to make carbon regulation *more* attractive to consumers. For example, one country may implement a carbon price for air travel (in and out of that country), while a neighboring country does not. In this case, consumers would face a choice between paying carbon fee when traveling to one country but not the other. The country that implements the carbon regulation may want to maintain consumer demand for air travel to the country, and therefore look for the frame that is most appealing (or least unappealing).

These issues are especially relevant in the context of policies recently adopted by the International Civil Aviation Organization (ICAO), the UN specialized agency for the sector, one of the largest and fastest growing contributors to global greenhouse gas emissions. The sector produces emissions on par with a top-ten emitting nation and these are expected to increase three to four times over 2010 levels by 2040, based on current trends. In October 2016, ICAO agreed on a package of policies, including a market-based measure, to limit annual emissions for the entire international civil aviation sector over 2021-2035 at 2019-2020 levels. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) is voluntary for

countries over its first phase (2021-2025), through mandatory for associated airlines, and mandatory thereafter. Many countries are still deciding whether or not to opt in and thus impose carbon offsetting requirements on arriving and departing flights. Airlines and their regulators will also have to determine how best to communicate (explicitly or otherwise) the associated carbon costs to their customers.

In a series of three studies, we test upstream vs. downstream carbon regulation labels on consumer choice in the aviation industry, along with three different policy frames: tax, permit, and offset. In combination, these two point of regulation frames and three policy frames result in six unique carbon price labels. We compare these six labels with two control conditions: a “no-fee” control in which there is no carbon price, and a “no-information” control in which there is an additional price but it is not highlighted or explained to consumers in any way. In Study 1, we compared these eight conditions in an exploratory fashion and found that the “upstream offset” combination was more desirable to consumers than any other combination of frames, and that the “downstream tax” combination was the worst. In Study 2, we replicated the key results and also found that the policy description is critical for the observed framing effects. In Study 3, we again replicated these results and further found that they are moderated by political party, such that self-identified Republicans show a strong distaste for the downstream tax frame.

Across three studies, consumers were more likely to choose a flight with a carbon price when the additional price was described as a “carbon offset for aviation fuel production and import” than when it was described using other frames, such as a “carbon tax for aviation travel”. Notably, this *upstream offset* frame was popular enough among consumers that it counteracted the expected preference to avoid the \$14 additional cost of the fee.

REFERENCES

- Hardisty, David J., Eric J. Johnson, and Elke U. Weber (2010). A dirty word or a dirty world? Attribute framing, political affiliation, and query theory. *Psychological Science*, 21, 86-92.
- Schultz, P. Wesley, Jessica M. Nolan, Robert B. Cialdini, Noah J. Goldstein, and Vidas Griskevicius (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18, 429-434.
- Sussman, Abigail B., and Christopher Y. Olivola (2011). Axe the tax: Taxes are disliked more than equivalent costs. *Journal of Marketing Research*, 48(SPL), S91-S101.

Presenting Health Information: The Influence of Attribute and Numerical Framing on Health Risk Perception

Silvia Heideker, University of Erlangen-Nuremberg, Germany
Martina Steul-Fischer, University of Erlangen-Nuremberg, Germany

EXTENDED ABSTRACT

Health information are able to increase positive changes in health behavior among large populations (Fife-Schaw and Abraham 2009; Wakefield et al. 2010) due to the relationship between health risk perceptions and behavior intentions (Atkinson et al. 2015; Brewer et al. 2007; Dillard et al. 2012; Heideker and Steul-Fischer 2015; Rudisill 2013).

Scholars seldom analysed the effects of attribute and numerical framing on health risk perception for services like insurances. The use of framing creates differences in health risk perception among consumers (Menon, Raghuram, and Agrawal 2008, p. 996; Melas et al. 2012; Peters, Hart, and Fraenkel (2011)). Framing is the presentation of objective equivalent information in semantically different ways (Krishnamurthy, Carter, and Blair 2001). Levin, Schneider, and Gaeth (1998) categorize framing effects in the types of risky choice, goal and attribute framing. Numerical framing is an own framing effect beside theses and refers to changes in the interpretation of numerical information when describing it in different but equal frames (Kwong and Wong 2014).

In our two studies, we examine the effects of attribute framing and numerical framing of periodontitis (study 1) and the effects of attribute framing and numerical presentation of private accidents (study 2) on health risk perception. According to Gigerenzer et al. (2007) and Peters, Hart, and Fraenkel (2011), negative attribute frames increase health risk perception more than positive attribute frames (*H1*). Janiszewski, Silk, and Cooke (2003) impute fundamental character of any selling proposition to attribute information. Thus, we suggest an increase of purchase intention for the offered health insurance of dental supplement insurance (study 1) and private accident insurance (study 2): The higher the health risk perception, the higher the purchase intention for health insurance (*H2*). Regarding numerical framing, different studies have examined the advantages of frequencies compared to percentages (Gigerenzer and Edwards 2003; Peters, Hart, and Fraenkel 2011). For technical goods, Koukova and Srivastava (2009) illustrate that attribute and numerical framing of the impact information can influence consumers' perception and behaviors. We assume adequate results for health risk perception: Negative attribute frames with high relative frequency will increase health risk perception more than negative attribute frames with percentages (*H3*). Drawing on Stone et al. (2015) who emphasized graphical display of icons to increase perceived risk, we suggest that negative attribute frames with text and a pictograph increase health risk perception more than negative attribute frames with plain text (*H4*).

A total of 222 participants (61.3% female; mean age = 23.47 years) participated in study 1 with a 2 (attribute frame: negative vs. positive) x 3 (numerical frame: percentage vs. high relative frequency vs. low relative frequency) between-subjects design. In the negative attribute treatments, information was given that 20% (percentage frame), 400 out of 2,000 (high relative frequency frame) or 1 out of 5 (low relative frequency frame) adults have massive periodontitis compared to the positive attribute treatments whereby 80% (percentage frame), 1,600 out of 2,000 (high relative frequency frame) or 4 out of 5 (low relative frequency frame) adults do not have massive periodontitis. An offer for dental supplementary insurance followed

with a monthly price of €11.40. Health risk perception was measured using a 10-point scale (1 = no risk to health, 10 = very high risk to health) and purchase intention with a 7-point scale (1 = totally disagree, 7 = totally agree).

Results of study 1 indicate a significant influence of attribute framing ($F(1,215) = 40.87, \beta = 1.99, p = .000$) (*H1*) on health risk perception. There is no direct significant effect of numerical framing ($F(2,215) = 1.05, \beta = 0.56, p > .05$) on health risk perception. The interaction between attribute framing and numerical framing containing low and high frequencies is not significant ($F(2,215) = 2.38, \beta = -0.95, p = .095, \eta^2 = .022$) as hypothesized in *H3*. Including the high relative frequencies and percentages in the analysis ($n = 160$), there is a significant interaction between attribute framing and numerical framing ($F(1,155) = 5.01, \beta = -1.47, p = .027, \eta^2 = .031$) (*H3*). Health risk perception has highly significant influence on purchase intention for dental supplementary insurance ($\beta = 0.21, t = 5.22, p = .000$) (*H2*).

In study 2, 153 participants (65.40% female, mean age = 23.77 years) participated with a 2 (attribute frame: negative vs. positive) x 2 (numerical presentation: plain text vs. text with pictograph) between-subjects design. In the negative attribute treatment, information was given that 9 out of 100 people are injured through private accidents during leisure time or in the household compared to the positive attribute treatments where 91 out of 100 people are not injured. An offer for private accident insurance followed with a monthly price of €10.89. The same scales were used for participants' perceived level of health risk perception and purchase intention as in study 1.

The results of study 2 underline the significant influence of attribute framing ($F(1,148) = 6.35, \beta = 1.45, p = .013$) (*H1*) on health risk perception. There is no direct significant effect of numerical presentation ($F(1,148) = 0.46, \beta = 0.92, p > .05$) on health risk perception. The interaction between attribute framing and numerical presentation is significant ($F(1,148) = 6.19, \beta = -1.44, p = .014, \eta^2 = .040$) as hypothesized in *H4*. Compared to health information with plain text, information with pictographs increase the effect of negative attribute on health risk perception. Health risk perception has a highly significant influence on purchase intention for private accident insurance ($\beta = 0.15, t = 2.29, p = .024$) (*H2*).

We recommend negative attribute frames for health information to higher health risk perceptions. The use of higher relative frequency in negative attribute frames moderates this effect and increases health risk perception more than percentages (Koukova and Srivastava 2009). We approve the addition of pictographs in health information to higher health risk perception. Further research should replicate these findings for other health risks and should focus on other methods of presenting frequencies to raise health risk perception. These investigations could temper the difficulties of understanding health information because of their presentation and could back the largely theoretical research area of the influence of graphs on risk perception, as mentioned by Lipkus (2007).

REFERENCES

- Atkinson, Thomas M., Talya Salz, Kaitlin K. Touza, Yuelin Li, and Jennifer L. Hay (2015), "Does colorectal cancer risk perception predict screening behavior? A systematic review and meta-analysis," *Journal of behavioral medicine*, 38 (6), 837-850.

- Brewer, Noel T., Gretchen B. Chapman, Frederick X. Gibbons, Meg Gerrard, Kevin D. McCaul, and Neil D. Weinstein, "Meta-Analysis of the Relationship Between Risk Perception and Health Behavior: The Example of Vaccination," *Health Psychology*, 26 (2), 136-145.
- Dillard, Amanda J., Rebecca A. Ferrer, Peter A. Ubel, and Angela Fagerlin (2012), "Risk Perception Measures' Associations With Behavior Intentions, Affect, and Cognition Following Colon Cancer Screening Messages," *Health Psychology*, 31 (1), 106-113.
- Fife-Schaw, Chris and Charles Abraham (2009), "How Much Behavior Change Should We Expect From Health Promotion Campaigns Targeting Cognitions? An approach to pre-intervention assessment," *Psychology & Health*, 24 (7), 763-776.
- Gigerenzer, Gerd and Adrian Edwards (2003), "Simple tools for understanding risks: from innumeracy to insight," *British Medical Journal*, 327 (7417), 741-744.
- Gigerenzer, Gerd, Wolfgang Gaissmaier, Elke Milcke-Kurz, Lisa M. Schwartz, and Steven Woloshin (2007), "Helping Doctors and Patients Make Sense of Health Statistics," *Psychological Science in the Public Interest*, 8 (2), 53-96.
- Heideker, Silvia and Martina Steul-Fischer (2015), "The Effect of Familiarity and Dread on Health Risk Perception," *Asia-Pacific Advances in Consumer Research 2015*, 11, 32-37.
- Janiszewski, Chris, Tim Silk, and Alan D. J. Cooke (2003), "Different Scales for Different Frames: The Role of Subjective Scales and Experience in Explaining Attribute-Framing Effects," *Journal of Consumer Research*, 30 (3), 311-325.
- Koukova, Nevena and Joydeep Srivastava (2009), "When Numbers Are Frightening: Effects of Message Framing on Judgments of Risk and Behavioral Intentions," *Advances in Consumer Research - Asia-Pacific Conference Proceedings 2009*, 42-43.
- Krishnamurthy, Parthasarathy, Patrick Carter, and Edward Blair (2001), "Attribute Framing and Goal Framing Effects in Health Decisions", *Organizational Behavior and Human Decision Processes*, 85 (2), 382-399.
- Levin, Irvin P., Sandra L. Schneider, and Gary J. Gaeth (1998), "All Frames Are Not Equal: A Typology and Critical Analysis of Framing Effects," *Organizational Behavior and Human Decision Processes*, 76 (2), 149-188.
- Lipkus, Isaac M. (2007), "Numeric, Verbal, and Visual Formats of Conveying Health Risks: Suggested Best Practices and Future Recommendations," *Medical decision making*, 27 (5), 696-713.
- Melas, Philippe A., Susanne Georgsson Öhman, Niclas Juth, and The-Hung Bui (2012), "Information Related to Prenatal Genetic Counseling: Interpretation by Adolescents, Effects on Risk Perception and Ethical Implications," *Journal of Genetic Counseling*, 21 (4), 536-546.
- Menon, Geeta, Priya Raghur, and Nidhi Agrawal (2008). "Health Risk Perceptions and Consumer Psychology," in *The Handbook of Consumer Psychology*, ed. Curtis P. Haugtvedt, Paul M. Herr, and Frank R. Kardes, New York: Laurence Erlbaum, 981-1010.
- Peters, Ellen, P. Sol Hart, and Liana Fraenkel (2011), "Informing Patients: The Influence of Numeracy, Framing, and Format of Side Effect Information on Risk Perceptions," *Medical Decision Making*, 31 (3), 432-436.
- Rudisill, Caroline (2013), "How do We Handle New Health Risks? Risk Perception, Optimism, and Behaviors Regarding the H1N1 Virus," *Journal of Risk Research*, 16 (8), 959-980.
- Stone, Eric R., Alexis R. Gabard, Aislinn E., and Isaac M. Lipkus (2015), "Effects of Numerical versus Foreground-Only Icons Displays on Understanding of Risk Magnitudes," *Journal of Health Communication*, 20 (10), 1230-1241.
- Wakefield, Melanie A., Barbara Loken, and Robert C. Hornik (2010), "Use of Mass Media Campaigns to Change Health Behavior," *Lancet*, 376 (9748), 1261-1271.

Experiences and Material Purchases Differently Evoke Envious Reactions

Katarina Hellén, University of Vaasa, Finland

Maria Sääksjärvi, Delft University of Technology, The Netherlands

EXTENDED ABSTRACT

Envy can comprise two forms: a benign form, serving a positive societal force, and a malicious form, serving a negative societal force and the two can exist simultaneously (Van de Ven, Zeelenberg and Pieters 2009; Van de Ven, Zeelenberg, and Pieters 2010; 2011). However, the conditions predicting the two are relatively unexplored. Drawing upon literature documenting different psychological processing of 1) material versus experiential purchases (Carter and Gilovich 2010; 2012), 2) self-focus versus other-focus (Mussweiler 2001) and 3) theories of envy as a reaction to status threat (Salovey 1991), three effects are expected. First, experiential purchases tend to evoke more benign envy in comparison to material purchases. Second, when consumers engage in self-focused comparisons experiences become associated with higher levels of malicious envy. Third, perceived desirability of the purchase to other people is likely to enhance malicious envy for material purchases.

Study 1. The aim of Study 1 was to test whether consumers felt more benign envy for experiences. Sixty-two students participants were randomly asked to either recall an experiential ($n = 32$) or a material purchase ($n = 30$) that another person made that caused them to react with envy. Next, benign and malicious envy was measured following instructions by Van de Ven et al. (2011). A t-test showed that people felt more benign envy related to experiences than material purchases ($M_{\text{material purchase}} = 3.60$ vs. $M_{\text{experiential purchase}} = 4.44$, $t = 1.99$, $p < .05$).

Study 2. The purpose of Study 2 was to examine the variables type of purchase (experiential versus material purchases) as well as with how type of comparison (self- versus other-focus) would affect benign and malicious envy. One hundred and ninety-six students participated in the study. We used a 2 (experiential vs. material purchase) X 2 (self vs. other-focus) between subjects design. Participants' attentional focus on the self- versus others was primed using a method presented by Johnson, Nolde and Leonardis (1996). Replicating the procedure outlined by Van de Ven et al. (2011), participants' envy was evoked by a story of a peer acquiring a phone (iPhone) but we also added a condition of an experience (a two week long vacation to Brazil). Benign and malicious envy was measured in the same manner as in Study 1. A two-way ANOVA using type of product (experiential, material) and type of comparison (other-focused, self-focused) as between-subjects variables and benign envy as a dependent variable, yielded a significant main effect for type of product, $F(1, 190) = 57.30$, $p = .000$, with experiences eliciting more benign envy ($M = 4.27$) than material purchases ($M = 2.51$). All other effects were non-significant. A two-way ANOVA using type of product (experiential, material) and type of comparison (other-focused, self-focused) as between-subjects variables and malicious envy as a dependent variable, yielded a significant interaction effect between type of product and type of comparison, $F(1, 190) = 16.14$, $p = .000$, a main effect for type of product, $F(1, 190) = 6.35$, $p = .013$, and a main effect for type of comparison, $F(1, 190) = 8.96$, $p = .003$. The results showed that self-focused comparison resulted in significantly greater levels of malicious envy for experiential purchases ($M = 3.49$) than other-focused comparisons ($M = 1.91$), or self-focused comparisons related to material purchases ($M = 2.02$), or other-focused comparisons related to material purchases ($M = 2.25$).

Study 3. The purpose of Study 3 was to investigate further and validate the role of other- vs. self-focused as well as investigate

the role of perceived desirability of the purchase. One hundred and twenty-five students participated in the study. The experience and material purchases as well as the envy eliciting story and measures of envy were the same as in Study 2 (Van de Ven et al. 2011). Participants were also asked questions related how much they desired the purchase and estimate how much they thought other people desire it. We measured self vs. other focus using a scale by Gibbons and Buunk (1999). Using Hayes (2013) PROCESS model (Model 3) we estimated the impact of type of product (experiential, material), type of comparison (other-focused, self-focused), and perceived desirability (to self vs. others) on benign envy. As we had separate scales self-focused and other-focused comparisons, as well as for the perceived desirability of the purchase for the self vs. for others, we ran a total of four different models; self-self, self-other, other-self and other-other. The results revealed only a significant main effect for type of purchase (as earlier). We found a significant interaction effect between type of purchase and desirability of purchase to others so that material purchases that are attractive to others are associated with lower levels of benign envy, $B = -.45$, $t = -1.95$, $p = .05$, as well as a marginally significant interaction effect between type of purchase and other-focused comparisons, $B = .65$, $t = 1.88$, $p = .06$, so that experiential purchases that were other-focused were associated with greater levels of benign envy.

Malicious envy. Using Hayes (2013) PROCESS model (Model 3) we estimated the same models using malicious envy as a dependent variable. The results revealed only a significant main effect for self-focused comparisons, so that self-focused comparisons were associated with greater levels of malicious envy ($B = .35$, $t = 2.09$, $p = .04$); all other effects were non-significant. Thus, we found that material purchases that are attractive to others is associated with lower levels of benign envy.

This research yields two main contributions to literature on envious reactions. First, attentional focus on the self, seem to be associated with maliciously envious feelings while attentional focus on others reduce levels of malicious envy. Second, experiences seem to inherently evoke more benign envy but at the same time these are subject to more malicious envy when combined with a self-focus. Also, the literature has assumed that the envier should desire the envied benefit (Smith and Kim 2007) but the findings obtained here, highlight that importance of perceived desirability for others for eliciting malicious envy and not the self. Limitations: The paper would benefit from replications across material and experiential purchases as well as exploration of marketing implications.

REFERENCES

- Carter, Travis J. and Thomas Gilovich (2010), "The relative relativity of material and experiential purchases", *Journal of personality and social psychology*, 98(1), 146-159.
- _____ (2012), "I am what I do, not what I have: the differential centrality of experiential and material purchases to the self", *Journal of personality and social psychology*, 102(6), 1304-1317.
- Gibbons, Frederick X. and Bram P. Buunk (1999), "Individual differences in social comparison: development of a scale of social comparison orientation", *Journal of personality and social psychology*, 76(1), 129-142.

- Hayes (2013) Hayes, Andrew F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Johnson, Marcia K., Nolde, Scott F. and Doreen M De Leonardis (1996), "Emotional focus and source monitoring", *Journal of Memory and Language*, 35(2), 135-156.
- Mussweiler, Thomas (2001), "Focus of comparison as a determinant of assimilation versus contrast in social comparison", *Personality and Social Psychology Bulletin*, 27(1), 38-47.
- Salovey, Peter (Ed.). (1991). *The psychology of jealousy and envy*. Guilford Press, New York.
- Smith, Richard and Sung Hee Kim (2007), "Comprehending envy", *Psychological bulletin*, 133(1), 46-64.
- Van de Ven, Niels, Zeelenberg, Marcel and Rik Pieters (2009), "Leveling up and down: the experiences of benign and malicious envy", *Emotion*, 9(3), 419-429.
- _____ (2010), "Warding off the evil eye when the fear of being envied increases prosocial behavior", *Psychological Science*, 21(11), 1671-1677.
- _____ (2011), "The envy premium in product evaluation", *Journal of Consumer Research*, 37(6), 984-998.

Why Consumers Don't See the Benefits of GMOs, and What Marketers Can Do About It

Sean T. Hingston, York University, Canada
Theodore J. Noseworthy, York University, Canada

EXTENDED ABSTRACT

In this work, we set out to demonstrate when consumers will respond positively to genetic modification and, consequently, when they will perceive the benefits that a GMO offers. A growing body of research has demonstrated that people prefer natural things to less natural alternatives (Rozin 2005, 2006; Rozin et al. 2004). In fact, merely labelling a food product as natural can elicit a positive response from consumers (Rozin et al. 2004). Furthermore, research suggests the preference for natural things appears to be ultimately rooted in people's moral values regarding the natural environment (Rozin et al. 2004; Sjöberg 2000). Like the moral motivation underlying the preference for natural, evidence suggests that there is a strong moral motivation underlying the opposition to genetic modification (Bredahl 2001; Frewer et al. 2013; Scott et al. 2016). For example, the moral response to genetic modification tends to stem from the notion that those who create GMOs are tampering with, or violating, nature (Sjöberg 2000). Where this poses a challenge for firms is that the moral obligation to nature is unconditional and thus people believe it should be upheld regardless of potential benefits (Baron and Spranca 1997; Scott et al. 2016). This finding is particularly important because it suggests that consumers may even unresponsive to explicit benefits in GMOs, and thus overriding the moral response to genetic modification may facilitate consumers' ability to perceive a GMO's benefits. The question is, when would this occur? It is our contention that the answer to this question begins with what it means for something to be natural, and in particular, how people differentially reason about manmade and naturally occurring objects.

Drawing on research that distinguishes how people reason about manmade objects (e.g., cars, smartphones) and naturally occurring objects (e.g., apples, trees), we are the first to isolate the moral barrier to perceiving the benefits of GMOs, and in doing so, identify simple cues that marketers can adopt to overcome this barrier. Specifically, we propose that the distinction between natural and manmade objects becomes particularly relevant to GMOs in how evaluations are differentially impacted by human intervention. Human intervention through genetic modification violates a natural entity's essence, rendering it unnatural. Given that people prefer natural and possess moral values about the preservation of nature (Rozin et al. 2004; Sjöberg 2000), they tend to weigh these values over any functional benefits that result from human intervention (Scholderer and Frewer 2003; Scott et al. 2016). However, for manmade objects, human intervention is both normative and purposeful. Given the emphasis on a manmade object's intended function, human intervention tends to promote inferences about the purpose and functional implications of the intervention (Bloom 1996; 1998; Dennett 1987). If the object is perceived to be able to achieve its intended function, then arguably, this object is "good." Hence, it stands to reason that if viewed as a manmade object, a GMO may be evaluated in terms of its functional benefits more so than its moral status.

The core objective of Study 1 was to demonstrate that consumers will respond more positively towards a GMO when they are cued to view it as manmade as opposed to natural. Participants (N = 175) were randomly assigned to one of four conditions in a 2 (Label: GMO vs. Naturally Grown) × 2 (Promotional Cue: Natural Cue vs. Manmade Cue) between-subjects factorial design. Participants viewed an ad that either stated that the product was naturally grown

or genetically modified. Also, the ad in the natural (manmade) cue condition depicted the product as fruit hanging from a tree (packaged). As predicted, purchase intentions were higher for the GMO that was presented as a manmade product (i.e., packaged) compared to the GMO that was presented as a natural product (i.e., fruit hanging from a tree).

Study 2 was designed to test whether cueing consumers to view the GMO as manmade also reduced moral opposition. Participants (N = 160) were recruited at a farmer's market and randomly assigned to one of four conditions in a 2 (Label: GMO vs. Naturally Grown) × 2 (Product Cue: Natural Cue vs. Manmade Cue) between-subjects factorial design. Participants viewed an apple that was either noted as being naturally grown or genetically modified. Also, the apple in the natural (manmade) cue condition was red (blue). Consistent with Study 1, purchase intentions were higher for the GMO that looked like a manmade product (i.e., blue) compared to the GMO that looked like a natural product (i.e., red). Furthermore, consumers reported less moral opposition towards the GMO that looked like a manmade product compared to the GMO that looked like a natural product.

Study 3 was designed to test whether cueing consumers to view the GMO as manmade overrides the moral response and subsequently allows consumers to perceive the benefits it offers. Participants (N = 200) were randomly assigned to one of four conditions in a 2 (Label: GMO vs. Naturally Grown) × 2 (Promotional Cue: Natural Cue vs. Manmade Cue) between-subjects factorial design. Participants were randomly assigned to evaluate either four manmade or natural products. Then, participants evaluated another product (Corn Flakes) that was either noted as containing corn that was naturally grown or genetically modified. As predicted, purchase intentions were higher for the GMO cereal that was positioned amongst manmade products compared to the GMO that was positioned amongst natural products. Furthermore, consumers reported greater perceived utilitarian benefits and less moral opposition towards the GMO that looked like a manmade product compared to the GMO that looked like a natural product. Finally, a conditional serial mediation analysis revealed that moral judgments and perceived utilitarian benefits serially mediated the effect of Promotional Cue on purchase intentions for the GMO but not the natural product.

REFERENCES

- Baron, Jonathan, and Mark Spranca (1997), "Protected values," *Organizational behavior and human decision processes* 70(1), 1–16.
- Bloom, Paul (1996), "Intention, History, and Artifact Concepts," *Cognition*, 60(1), 1–29.
- (1998), "Theories of Artifact Categorization," *Cognition*, 66(1), 87–93.
- Bredahl, Lone (2001), "Determinants of Consumer Attitudes and Purchase Intentions With Regard to Genetically Modified Food – Results of a Cross-National Survey," *Journal of Consumer Policy*, 24(1), 23–61.
- Dennett, Daniel Clement (1987), *The Intentional Stance*, Cambridge, Mass.: MIT Press.

- Frewer, Lynn J., Ivo A. van der Lans, Arnout R.H. Fischer, Machiel J. Reinders, Davide Menozzi, Xiaoyong Zhang, Isabelle van den Berg, and Karin L. Zimmermann (2013), "Public Perceptions of Agri-Food Applications of Genetic Modification – A Systematic Review and Meta-Analysis," *Trends in Food Science & Technology*, 30(2), 142–52.
- Rozin, Paul (2006), "Naturalness Judgments by Lay Americans: Process Dominates Content in Judgments of Food or Water Acceptability and Naturalness," *Judgment and Decision Making*, 1(2), 91–97.
- (2005), "The Meaning of Natural Process More Important than Content," *Psychological Science*, 16(8), 652–58.
- Rozin, Paul, Mark Spranca, Zeev Krieger, Ruth Neuhaus, Darlene Surillo, Amy Swerdlin, and Katherine Wood (2004), "Preference for Natural: Instrumental and Ideational/Moral Motivations, and the Contrast between Foods and Medicines.," *Appetite*, 43(2), 147–54.
- Scholderer, Joachim and Lynn J. Frewer (2003), "The Biotechnology Communication Paradox: Experimental Evidence and the Need for a New Strategy," *Journal of Consumer Policy*, 26(2), 125–57.
- Scott, Sidney E., Yoel Inbar, and Paul Rozin (2016), "Evidence for Absolute Moral Opposition to Genetically Modified Food in the United States," *Perspectives on Psychological Science*, 11(3), 315–324.
- Sjöberg, Lennart (2000), "Perceived Risk and Tampering with Nature," *Journal of Risk Research*, 3(4), 353–67.

Does Repeating Prompt Retreating? How the Structure of Initial Charitable Contributions Impacts the Magnitude of Subsequent Support

Jillian Hmurovic, University of Pittsburgh, USA

Cait Lamberton, University of Pittsburgh, USA

EXTENDED ABSTRACT

Charitable organizations routinely struggle with gift and donor attrition, and retention rates have averaged below 50% for the past decade (Levis et al. 2016). Thus, although the majority of charitable giving research has focused on antecedents of initial contributions, such as charitable appeals (e.g., Macdonnell and White 2015; Smith et al. 2013), prosocial identity (e.g., Gneezy et al. 2012), and default amounts (e.g., Goswami and Urminsky 2017), it is critical to understand not only what motivates consumers' donation behavior, but also what sustains it.

How can marketers shape consumers' initial donation experience to increase the magnitude of future charitable gifts? We explore how a simple modification in donation structure (while holding the total donation amount constant) can impact charitable giving: whether the contribution is made as a single one-time, lump-sum gift or as a series of smaller gifts divided over time in recurring payments.

Past literature offers competing predictions about the effects of these two donation structures. On one hand, prospect theory (Kahneman and Tversky 1979) and hedonic editing (Thaler 1985) predict that consumers will derive greater happiness from segregating (versus integrating) positive events. This suggests that recurring, separate donations would heighten consumers' donation happiness relative to lump-sum donations. Additional research shows that charitable giving serves as a positive self-signal of one's prosocial character (e.g., Savary et al. 2015), which may be amplified by the greater frequency of making recurring gifts. Under either theory, recurring donors should experience more happiness or commitment to the charity, both of which would place upward pressure on their subsequent gift.

On the other hand, the anchoring literature suggests that recurring donations may *decrease* future donor support. Under this theory, the numerical value of one's most recent donation amount would function as an anchor (Epley and Gilovich 2010). The most recent donation for recurring donors, however, is smaller than the most recent amount salient to lump-sum donors. Because consumers' future decisions are often consistent with past behavior (e.g., Bentler and Speckart 1981; Ouellette and Wood 1998; Taylor 1975), recurring donors' smaller anchor would result in smaller subsequent donations relative to lump-sum donors.

We conducted three studies to test these conflicting predictions. In Study 1, MTurk participants ($n=159$) imagined making an online charitable gift, totaling the same amount (i.e., \$30): a one-time donation of \$30; a recurring monthly donation of \$5 for six months; or the same recurring donation, with notifications after each donation is made. Participants were asked if and how much they would donate after these initial gifts. Although the structure of the initial donation did not impact participants' reported likelihood to make an additional donation ($F(2,156)=.569, p=.567$), it did impact the estimated size of their predicted future donation ($F(2,156)=35.85, p<.001$). Lump-sum donors predicted that they would give significantly more ($M=\$18.73; SD=\14.01) than both types of recurring donors (with notifications: $M=\$4.24, SD=\$4.39; p<.001$; without notifications: $M=\$5.92, SD=\$8.05; p<.001$), which did not significantly differ from one another. Thus, consistent with the anchoring account, recurring donations resulted in lower subsequent charitable support.

Study 2 replicates our prior effects and directly compares the competing processes. After completing an unrelated study, MTurk

participants ($n=149$) learned that real donations would be made on their behalf and were randomly assigned to one of three donation conditions: a single \$.50 donation made on the day of the survey; a recurring \$.10 donation every other day for ten days; or the same recurring donation, with email notifications following each of the five \$.10 donations. All donations were actually made, in accordance with participants' charity selections. Ten days later, participants completed a follow-up survey and were given the opportunity to donate a portion of their participation payment (\$.50) to the same charity.

Though all participants correctly recalled the objective amount of their total initial donation (\$.50), lump-sum donors perceived their initial charitable contributions as subjectively larger ($M=25.71; 0\text{--}Very\ Little, 100\text{--}Very\ Much$) than those making recurring donations (with notifications: $M=13.33, p=.010$; without notifications: $M=17.98, p=.091$), which did not differ from one another. Moreover, differences in perceived contribution size mediated the size of additional donations ten days later, with recurring donors appearing to anchor on the perceived smaller magnitude of their initial donation when determining their subsequent giving, resulting in reduced charitable contributions relative to one-time donors (PROCESS model 4; 10,000 bootstrap samples; with notifications: $b=-.027, CI_{95\%}=[-.060, -.006]$; without notifications: $b=-.016, CI_{90\%}=[-.042, -.001]$). However, neither happiness about the donation nor commitment to the charity had any mediating effect on the subsequent donation amount.

Adapting Study 2's paradigm, Study 3 modifies the initial donation to be both consequential and voluntary, with participants opting to spend time completing an unpaid task in order to make a donation to charity. Additionally, Study 3 manipulates the salience of donors' total cumulative contribution prior to the charitable request (i.e., displaying their total amount given to date before their second donation decision was made). If recurring donors are anchoring on a smaller amount, then shifting attention to their total amount given (i.e., a larger anchor relative to the recurring amount) should increase subsequent charitable support. Replicating prior findings, one-time lump-sum donors again made marginally larger additional donations ($M=\$.17, SD=\$.16$) than recurring donors ($M=\$.11, SD=\$.14$) when the cumulative anchor was not presented ($p=.082$), but reminding recurrent donors of their cumulative charitable contribution mitigates this effect (one-time: $M=\$.13, SD=\$.18$; recurring: $M=\$.16, SD=\$.18; p=.500$).

This research suggests that a very simple and costless adjustment to donation structure may help charities boost giving of existing donors. Specifically, because donors anchor on the cognitively-accessible magnitude of their initial donation, it appears that lump-sum donations feel larger and, consequently, encourage larger subsequent contributions, in contrast to predictions derived from prospect theory and work on self-signaling. Whereas the current research shows that making separate, recurring donations reduces future charitable support, other work suggests that displaying disaggregated costs (e.g., "pennies-a-day") increases compliance with charitable requests (Gourville 1998). Therefore, to understand the net-effect of lump-sum versus recurring donations, future research should consider how donation structure influences both the initiation *and* continuation of charitable contributions.

REFERENCES

- Bentler, Peter M. and George Speckart (1981), "Attitudes "Cause" Behaviors: A Structural Equation Analysis," *Journal of Personality and Social Psychology*, 40 (2), 226–38.
- Bodner, Ronit and Drazen Prelec (2003), "Self-Signaling and Diagnostic Utility in Everyday Decision Making," *Psychology of Economic Decisions*, 1, 105–26.
- Dhar, Ravi and Klaus Wertenbroch (2012), "Self-Signaling and the Costs and Benefits of Temptation in Consumer Choice," *Journal of Marketing Research*, 49 (February), 15–25.
- Epley, Nicholas and Thomas Gilovich (2010), "Anchoring Unbound," *Journal of Consumer Psychology*, 20 (January), 20–24.
- Gneezy, Ayelet, Uri Gneezy, Gerhard Riener, and Leif D. Nelson (2012), "Pay-What-You-Want, Identity, and Self-Signaling," *Proceedings of the National Academy of Sciences*, 109 (19), 7236–40.
- Goswami, Indranil, and Oleg Urminsky (2017) "When Should the Ask Be a Nudge? The Effect of Default Amounts on Charitable Donations." *Journal of Marketing Research*, 53 (October), 829–46.
- Gourville, John T. (1998), "Pennies-a-Day: The Effect of Temporal Reframing on Transaction Evaluation," *Journal of Consumer Research*, 24 (March), 395–403.
- Kahneman, Daniel and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision under Risk," *Econometrica*, 47, 263–91.
- Levis, Bill, Ben Miller, and Cathy Williams (2016), "Fundraising Effectiveness Survey Report," *Fundraising Effectiveness Project (FEP)*, [available at <http://www.afpnet.org/files/ContentDocuments/FEP2016FinalReport.pdf>].
- Macdonnell, Rhiannon and Katherine White (2015), "How Construals of Money versus Time Impact Consumer Charitable Giving," *Journal of Consumer Research*, 42 (December), 551–63.
- Oppenheimer, Daniel M., Robyn A. LeBoeuf, and Noel T. Brewer (2007), "Anchors Aweigh: A Demonstration of Cross-Modality Anchoring and Magnitude Priming," *Cognition*, 106 (1), 13–26.
- Ouellette, Judith A. and Wendy Wood (1998), "Habit and Intention in Everyday Life: The Multiple Processes by Which Past Behavior Predicts Future Behavior," *Psychological Bulletin*, 124 (1), 54–74.
- Savary, Jennifer, Kelly Goldsmith, and Ravi Dhar (2015), "Giving Against the Odds: When Tempting Alternatives Increase Willingness to Donate," *Journal of Marketing Research*, 52 (February), 27–38.
- Smith, Robert, David Faro, and Katherine Burson (2013), "More for the Many: The Influence of Entitativity on Charitable Giving," *Journal of Consumer Research*, 39 (February), 961–76.
- Taylor, Shelley E. (1975), "On Inferring One's Attitudes from One's Behavior: Some Delimiting Conditions," *Journal of Personality and Social Psychology*, 31 (1), 126–31.
- Thaler, Richard H. (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4 (3), 199–214.
- Tversky, Amos and Daniel Kahneman (1974), "Judgment Under Uncertainty: Heuristics and Biases," *Science*, 185 (4157), 1124–31.

Untangling the Effects of Self-Regulation Impairment and the Bright Side of Self-regulation Exertion: The Role of Construal Level

Cony M. Ho, University of Cincinnati, USA
Szu-Han (Joanna) Lin, University of Massachusetts, USA
Russell E. Johnson, Michigan State University, USA

EXTENDED ABSTRACT

Exerting self-regulation is a ubiquitous part of individuals' daily life. Recently, the debate among the mechanism of the effect is popular. For example, Baumeister, Bratslavsky, Muraven, & Tice (1998) contended that when individual exert self-regulation, the insufficient resource impairs their self-regulation. However, Molden et al. (2012) suggested that the primary reason for detrimental outcomes following high self-regulation exertion is a decline in motivation (as opposed to reduced resources).

Thus, in order to further untangle the process behind self-regulation impairment, we propose a cognitive model of self-regulation by introducing construal level as an alternative mechanism. Interestingly, self-regulation exertion and construal level often have parallel effects. For example, when individuals are in a high construal level, they lack the ability to focus on contextual detail and potential errors (Kardes et al., 2006), and this effect could also occur when individuals exert self-regulation (Baumeister et al., 1998). Although construal level has been shown to positively influence self-control (a specific format of self-regulation), it is not a necessary condition for self-regulation. When there is no proximal temptation to overcome, high construal level may not have a positive impact on performance (Fujita & Carnevale, 2012). The purpose of the present research is to propose a cognitive mechanism behind self-regulation impairment on vigilance task and also explore a beneficial outcome of self-regulation exertion. If self-regulation exertion indeed increases individuals' construal level, such construal level may foster creativity. (Jia, Hirt, & Karpen, 2009)

Pilot study is to examine the assumption that construal level increases self-regulation only when the goal conflict occurs (self-control). We recruit dieters and non-dieters as participants. Participants did a task that required them to give examples of words as the manipulation of self-regulation exertion (Fujita et al., 2006). Afterwards, participants were asked to choose between goal-congruent and goal-incongruent choice. A binary logistic regression with diet conditions and construal level as predictors. The interaction term of logistic regression model was significant, $\chi^2(1) = 3.86, p < .05$. More specifically, among non-dieters, there is no significant difference between conditions. However, among dieters, under high construal level condition, they chose more low calories steak (83%) than high calories (17%), $\chi^2(1) = 6.00, p < .05$. The results of pilot study first replicated the findings from Fujita and Han (2009). In addition, we showed that this effect only occurs when there is a goal conflict (self-control).

Experiment 1 is to examine how self-regulation exertion influences construal level. Participants completed a Stroop task (Stroop, 1935) as the manipulation of self-regulation exertion (Hedgcock, Vohs, & Rao, 2012). In the Stroop task, participants were shown a series of words presented in a font color that was different from the meaning of the word. Afterwards, participants completed the behavioral identification form (Vallacher & Wegner, 1989) to assess their construal level. An ANOVA revealed a significant effect of self-regulation exertion condition on construal level $F(2, 180) = 6.81, p < .01$. We find that self-regulation exertion prompted individuals to have high construal level.

Experiment 2 examined whether construal level has an effect on vigilance task performance. We manipulated construal level using a two-pronged approach based on established manipulations (e.g., Fujita et al., 2006). Participants first finished the same construal level manipulation as the pilot study. After this initial manipulation, participants read five statements (e.g., "Ron is proofreading a paper"). Participants reported how or why of the statements based on their assigned conditions. Participants then completed a timed arithmetic task to assess vigilance. An independent-samples *t*-test revealed that participants in the high construal condition ($M = .82, SD = .19$) were less vigilant on the task than those in the low construal condition ($M = .88, SD = .13$), $t(148) = -2.17, p < .05$.

Experiment 3 aims to replicate the effect from study 1 and 2 and to test it as a whole model, and to show that the changes of construal level could elevate individuals' creativity. After finished Stroop task and filled BIF scale, participants completed vigilance and creativity tasks. Participants did a grammar correction task as vigilance task and draw an alien as creativity task. A series of independent samples *t*-tests revealed the effect of self-regulation exertion on the vigilance task and the creativity task. Individuals in the high self-regulation exertion condition ($M = 17.43, SD = 6.70$) had higher construal level than those in the low self-regulation exertion condition ($M = 14.97, SD = 6.52$) ($t(133) = 2.16, p < .05$). In terms of the vigilance task, participants in the high self-regulation exertion condition ($M = 6.59, SD = 3.31$) corrected less grammar issues than participants in the low self-regulation exertion condition ($M = 8.02, SD = 3.13$), $t(133) = 2.57, p < .05$. In terms of the creativity task, participants in the high self-regulation exertion condition ($M = 5.13, SD = 2.67$) had higher overall scores in the creativity task than participants in the low self-regulation exertion condition ($M = 3.87, SD = 2.24$), $t(133) = -2.98, p < .01$. The pathway from self-regulation exertion to vigilance task via construal level was significant (indirect effect = $-.23$; 95% CI: $-.67, -.01$), and the indirect effect on creativity task through construal level was also significant (indirect effect = $.20$; 95% CI: $.02, .52$).

Experiment 4 is to replicate the effect of self-regulation exertion on creativity by using a different measure of creativity. We applied an emotion suppression task as the manipulation of self-regulation exertion (Gross & Levenson, 1997). Participants were asked to help a local restaurant to come up with a new pizza after manipulation of self-regulation exertion. Creativity was coded by the number of possible ingredients the participants came up with. The indirect pathway from self-regulation exertion to amount of ingredients via construal level was significant (indirect effect = $.28$; 95% CI: $.01, .81$).

These findings offer a new cognitive mechanism to the effect from self-regulation exertion. Specifically, we show that self-regulation exertion leads individuals to a more abstract cognition, and this abstract cognition could not only impair individuals' vigilance but also enhance individuals' creativity.

REFERENCES

- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252-1265.

- Fujita, K., & Carnevale, J. J. (2012). Transcending temptation through abstraction the role of construal level in self-control. *Current Directions in Psychological Science, 21*(4), 248-252.
- Fujita, K., & Han, H. A. (2009). Moving beyond deliberative control of impulses the effect of construal level on evaluative associations in self-control conflict. *Psychological Science, 20*(7), 799-804.
- Gross, J. J., & Levenson, R. W. (1997). Hiding feelings: The acute effects of inhibiting negative and positive emotion. *Journal of Abnormal Psychology, 106*, 95.
- Hedgcock, W. M., Vohs, K. D., & Rao, A. R. (2012). Reducing self-control depletion effects through enhanced sensitivity to implementation: Evidence from fMRI and behavioral studies. *Journal of Consumer Psychology, 22*(4), 486-495.
- Jia, L., Hirt, E. R., & Karpen, S. C. (2009). Lesson from a faraway land: The effect of spatial distance on creative cognition. *Journal of Experimental Social Psychology, 45*, 1127-1131.
- Molden, D. C., Hui, C. M., Scholer, A. A., Meier, B. P., Noreen, E. E., D'Agostino, P. R., & Martin, V. (2012). Motivational versus metabolic effects of carbohydrates on self-control. *Psychological Science, 23*, 1137-1144.
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology, 57*, 660-671.

A Case for Low Power: Self versus Response Efficacy in Health Persuasion

Meng-Hua Hsieh, Pennsylvania State University-Harrisburg, USA

Chethana Achar, University of Washington, USA

Nidhi Agrawal, University of Washington, USA

EXTENDED ABSTRACT

Power refers to “asymmetric control over valued resources in social relations” (Rucker, Galinsky, and Dubois 2012, p. 353). Past research has shown that power affects how consumers make decisions and acquire products. Power enhances control, optimism, self-esteem, action (Fast et al. 2009; Galinsky, Gruenfeld, and Magee 2003), psychological distance (Magee and Smith 2013), and confidence (Brinol et al. 2007; Fast et al. 2012; Min and Kim 2013).

High- (vs. low-) power individuals are presumably better equipped to deal with decisions in domains such as health that require self-control in order to fulfill long-term goals. This is because—compared to low-power individuals—high-power individuals have a greater amount of control, have higher self-esteem, and are more likely to take action (Fast et al. 2009). In the current research, we focus on enabling low-power individuals to respond appropriately to health persuasion. How can marketers help individuals in the low-power mindset to make healthy decisions?

We approach this problem through the lens of various types of health messages and how they may be differently persuasive to low-power individuals. Consider two types of health messages that advertise the same product, but through different propositions of effectiveness. The first type is advertisement for weight loss program which goes: “You can lose weight.” This ad focuses on the individual’s ability to lose weight—this is a *self-efficacy message*. The second type of weight loss program advertisement goes: “The program is assured to make you lose weight.” This ad focuses on program’s effectiveness in bringing about weight loss—this is a *response efficacy message*.

This research contributes to the literature on health messaging to discover a new perspective with power. We identify message skepticism as underlying mechanism that drives the persuasiveness of response efficacy health appeal for low-power individuals. Keller (2006) demonstrates that promotion-focused consumers are more persuaded by a self-efficacy (vs. response efficacy) appeal while the reverse is true for promotion-focused consumers. We add to this stream by examining the mechanism of persuasiveness of self-efficacy (vs. response efficacy) by power. Furthermore, this research contributes to power literature by exploring how power influences the processing of health message. This research highlights psychological mechanism of message skepticism underlying this effect.

Self-efficacy focuses on the ease of an advocated action, while response efficacy focuses on the effectiveness of an advocated action (Boer and Seydel 1996). There are many moderators that predict the persuasiveness of self-efficacy and response efficacy messages depends on the person’s focus, including whether the person is promotion or prevention focused, extent of fear, elaboration, and perceived control (Block and Keller 1995; Keller 2006; Litt 1988).

How might individuals’ mindset of power inform their perceptions of efficacy in pursuing long-term health goals? As stated before, power is associated with control and confidence (Fast et al. 2009; Fast et al. 2012; Galinsky et al. 2003; Min and Kim 2013). We theorize that feelings of control and confidence will affect individuals’ perceptions of self and response efficacy in the following manner. Driven by high confidence, high-power individuals are likely to believe that they can bring about a health outcome. Therefore, high-power individuals are likely to believe in both self and response efficacy messages. Conversely, low-power individuals are low on confidence; therefore are likely to be skeptical of self-efficacy mes-

sages and rely on assistance from a product to achieve their health goal.

Researchers have found evidence that consumers approach advertisements with a certain degree of skepticism (Obermiller and Spangenberg 1998). We posit the power mindset as the novel antecedent for skepticism. We suggest that low-power individuals are more skeptical of self-efficacy messages because they exhibit low levels of confidence.

In summary, low-power individuals will show high skepticism toward self-efficacy appeal and are more persuaded by response efficacy. Conversely, high-power individuals will show more confidence, and either form of efficacy is effective.

Three studies using different health contexts tested these expectations. In study 1, participants were asked to recall an event in which they felt powerful or powerless (Galinsky et al. 2003). Next, participants read information about a self-efficacy or a response efficacy health appeal that promotes sunscreen (Keller 2006). The results of Study 1 showed that low-power individuals had a greater intention of behaving in compliance with the message when they view response (vs. self-) efficacy messages. Conversely, either form of efficacy was effective for high-power individuals.

The objective of study 2 was to replicate Study 1’s effect and capture evidence of the underlying psychological process. We used an established role-playing task to make participants feel either powerful or powerless (Rucker, Dubois, and Galinsky 2011). Next, participants read either a self-efficacy or a response efficacy health appeal that promotes a diet plan (Keller 2006). Participants indicated their intention of performing the advocated action and message skepticism. The results revealed that low-power participants were less persuaded by the self-efficacy message than the response efficacy message. Conversely, high-power individuals’ persuasion did not vary by message type. Message skepticism mediated the effect for low-power individuals.

In study 3, participants induced in high (vs. low) power mindset were asked to choose between a self (vs. response) efficacy diet plan for themselves (vs. other). Participants in all conditions read the same information about two diet plans: diet plan A, a self-efficacy option and diet plan B, a response efficacy option. Next, participants indicated which diet plan was a better option. The results demonstrated that when choosing a health product for themselves, low-power individuals were more likely to choose a response efficacy product than high-power individuals. When recommending a product for others, individuals were equally likely to choose a response efficacy and a self-efficacy product regardless of the level of power. This boundary condition provides additional process evidence.

This research presents substantive implications to healthcare marketers and policy makers by identifying what types of messages are more effective among low-power consumers. This paper makes welfare contributions to the field of health marketing.

REFERENCES

- Block, Lauren G. and Punam Anand Keller (1995), “When to Accentuate the Negative: The Effects of Perceived Efficacy and Message Framing on Intentions to Perform a Health-Related Behavior,” *Journal of Marketing Research*, 32 (2), 192–203.

- Boer, Henk and Erwin R. Seydel (1996), "Protection Motivation Theory," in *Predicting Health Behaviour: Research and Practice with Social Cognition Models*, ed. Mark Conner and Paul Norman, Buckingham: Open University Press, 95–120
- Brinol, Pablo, Richard E. Petty, Carmen Valle, and Derek D. Rucker (2007), "The Effects of Message Recipients' Power before and after Persuasion: A Self-Validation Analysis," *Journal of Personality and Social Psychology*, 93 (6), 1040–53.
- Fast, Nathanael J., Deborah H. Gruenfeld, Niro Sivanathan, and Adam D. Galinsky (2009), "Illusory Control: A Generative Force Behind Power's Far-Reaching Effects," *Psychological Science*, 20 (4), 502–08.
- Fast, Nathanael J., Niro Sivanathan, Nicole D. Mayer, and Adam D. Galinsky (2012), "Power and Overconfident Decision-Making," *Organizational Behavior and Human Decision Processes*, 117 (2), 249–60.
- Galinsky, Adam D., Deborah H. Gruenfeld, and Joe C. Magee (2003), "From Power to Action," *Journal of Personality and Social Psychology*, 85 (3), 453–66.
- Keller, Punam Anand (2006), "Regulatory Focus and Efficacy of Health Messages," *Journal of Consumer Research*, 33 (1), 1093–114.
- Litt, Mark D. (1988), "Self-Efficacy and Perceived Control: Cognitive Mediators of Pain Tolerance," *Journal of Personality and Social Psychology*, 54 (1), 149–60.
- Magee, Joe C. and Pamela K. Smith (2013), "The Social Distance Theory of Power," *Personality and Social Psychology Review*, 17 (2), 158–86.
- Min, Dongwon and Ji-Hern Kim (2013), "Is Power Powerful? Power, Confidence, and Goal Pursuit," *International Journal of Research in Marketing*, 30 (3), 265–75.
- Obermiller, Carl and Eric R. Spangenberg (1998), "Development of a Scale to Measure Consumer Skepticism toward Advertising," *Journal of Consumer Psychology*, 7 (2), 159–86.
- Rucker, Derek D., David Dubois, and Adam D. Galinsky (2011), "Generous Paupers and Stingy Princes: Power Drives Consumer Spending on Self Versus Others," *Journal of Consumer Research*, 37 (6), 1015–29.
- Rucker, Derek D., Adam D. Galinsky, and David Dubois (2012), "Power and Consumer Behavior: How Power Shapes Who and What Consumers Value," *Journal of Consumer Psychology*, 22 (3), 352–68.

Improving Predictions of Prosocial Behavior Using Models of Person Perception

Ming Hsu, University of California Berkeley, USA
Adrianna Jenkins, University of California Berkeley, USA

EXTENDED ABSTRACT

Humans are remarkably prosocial toward other individuals. People adopt orphaned children, donate blood and organs to strangers, and collectively give billions of dollars to charity each year. Indeed, human prosociality has been shown to occur in ways that go beyond kin selection (Hamilton 1964), reciprocity considerations (Trivers 1971), or direct consequences for oneself. These results have been instrumental in the development of so-called models of “other-regarding preferences”, where, in contrast to standard assumptions of self-interested agents, people are assumed to have preferences over other people’s *outcomes*.

Since their development, these models have been found to have substantial explanatory power across numerous laboratory and field studies. At the same time, however, they struggle to explain some basic features of prosocial behavior, such as the widespread observation that people are not uniformly prosocial across circumstances. In laboratory experiments, for example, individuals donate more money to similar than dissimilar others (Emswiler, Deaux, and Willits 1971) two types (Hippie and Straight and are more willing to rescue close than distant others from painful situations (Kruger 2003; Madsen et al. 2007) considerable indirect evidence suggests that biological kinship plays an important role in altruistic behaviour. All previous reports of the influence of kin selection on human altruism have, however, used correlational (rather than experimental. In field data, individuals from certain groups have been found to be discriminated against in labor markets (Bertrand et al. 2005).

Not surprisingly, owing to the importance of person perception to questions of attribution, impression formation, and stereotyping, social cognition researchers have long sought to characterize the set of cognitive dimensions underlying attributions of traits to other people (Cuddy, Fiske, and Glick 2008; Fiske, Cuddy, and Glick 2007). Although the specific details differ across frameworks, these studies have repeatedly converged on the idea that there exist fundamental dimensions, for example warmth and competence, capturing how people evaluate groups and individuals (Fig. 1A).

Accordingly, we sought to investigate the possibility that these core dimensions can be used to improve explanatory power of existing models of other-regarding preferences. Specifically, instead of a random anonymous counterpart, subjects were told a single trait about their counterpart (Fig. 1A). We selected 20 single-attribute descriptions of people that were expected, based on past research, to elicit perceptions spanning a two-dimensional space of warmth/morality and competence/agency. We confirmed these placements by recruiting an independent set of 340 participants to rate the targets on these dimensions.

We investigated how trait information affects behavior in a set of social dilemma games that capture different aspects of prosocial behavior (Fig. 1B). In a dictator game, 320 participants had the opportunity to split a sum of money with the counterpart however they wished. In the proposer role of an ultimatum game, 300 participants had the opportunity to offer some or all of the starting endowment to the counterpart, who would then choose to accept the offer or reject it. In the recipient role of the ultimatum game, 300 participants viewed offers from the counterparts and decided whether to accept or reject. For all games, on each trial participants viewed a target, identified by one piece of information, (e.g., “Occupation: Nurse”), a starting endowment (always “10.00”), and multipliers on the amounts to be

allocated to self and other. In all cases, each participant made 20 decisions (with targets and exchange rates chosen randomly).

We found that allocations in the dictator game were significantly affected by target identity, $F(19, 5975) = 36.29, p < 10^{-15}$, such that some counterparts consistently received more than others. To model other-regarding preferences, we used an inequity-aversion utility function from the economic literature, in which the subjective value of an outcome is modulated by self-interest, sensitivity to advantageous inequity (the participant getting more than the counterpart), and sensitivity to disadvantageous inequity (the counterpart getting more than the participant).

We next considered two possible ways in which dimensions of person perception can influence other-regarding preferences. The first considered the possibility that person perception information additively affects attitude toward advantageous and disadvantageous inequity. This would correspond to the idea that individuals who are perceived as higher on warmth (or competence) would receive some fixed “bonus” or “penalty” compared to those who are perceived as being lower. In addition, we included the possibility that person perception information interacted multiplicatively with outcome values, for example by modulating the degree of inequity aversion. This captures the idea of a *proportional* “bonus” or “penalty”, such that individuals perceived as higher on warmth (or competence) would receive some fixed proportion more (less) than those perceived as lower.

Across all games including dictator game, ultimatum game sender and receiver roles, we found that the model with social perception information dramatically outperformed the baseline model, explaining nearly twice as much variance in behavior (likelihood ratio test $p < 10^{-6}$ in all cases, Figure 1C-E). Strikingly, we found that almost the entire improvement in fit in all three datasets can be attributed to the multiplicative model in which inequity aversion was directly modulated by person perception dimensions. Specifically, whereas the full model significantly improved fit of a model containing additive parameters (likelihood ratio test $p < 10^{-5}$), it did not significantly improve fit of a model only containing multiplicative parameters (likelihood ratio test $p > 0.5$).

Any realistic account of human social behavior must account for the fact that individuals flexibly adapt their behavior to different social contexts, including different interaction partners, as they navigate the social world. By providing a quantitative measure of social context that reduces a large number of factors into two core dimensions, measures of person perception provide a parsimonious and tractable way to explain such variation.

REFERENCES

- Bertrand, Marianne, Dolly Chugh, Sendhil Mullainathan, Dan Black, David Neumark, Shelly Lundberg, and Kerwin Charles (2005), “Implicit Discrimination,” *American Economic Review*, 95(2), 94–98.
- Cuddy, Amy J C, Susan T Fiske, and Peter Glick (2007), “The BIAS Map: Behaviors from Intergroup Affect and Stereotypes.,” *Journal of personality and social psychology*, 92(4), 631–48.

- Cuddy, Amy J C, Susan T. Fiske, and Peter Glick (2008), "Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map," *Advances in Experimental Social Psychology*, 61–149.
- Emswiller, Tim, Kay Deaux, and Jerry E Willits (1971), "Similarity, Sex, and Requests for Small Favors," *Journal of Applied Social Psychology*, 1, 284–91, <http://dx.doi.org/10.1111/j.1559-1816.1971.tb00367.x>.
- Fiske, S.T. and A.J.C. Cuddy (2006), "Stereotype Content and Relative Group Status across Cultures. In Social Comparison Processes and Levels of Analysis: Understanding Culture," in *Social Comparison Processes and Levels of Analysis: Understanding Culture, Intergroup Relations and Cognition*, ed. S. Guimond, Cambridge University Press, 249–63.
- Fiske, Susan T., A. J C Cuddy, and Peter Glick (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 77–83.
- Hamilton, W D (1964), "The Genetical Evolution of Social Behavior," *Journal of Theoretical Biology*, 1, 1–16.
- Kruger, Daniel J. (2003), "Evolution and Altruism. Combining Psychological Mediators with Naturally Selected Tendencies," *Evolution and Human Behavior*, 118–25.
- Madsen, Elainie A, Richard J Tunney, George Fieldman, Henry C Plotkin, Robin I M Dunbar, Jean-Marie Richardson, and David McFarland (2007), "Kinship and Altruism: A Cross-Cultural Experimental Study.," *British journal of psychology (London, England : 1953)*, 98, 339–59.
- Pope, Devin G and Justin R Sydnor (2011), "What ' S in a Picture ? Evidence of Discrimination from Prosper . Com," *The Journal of Human Resources*, 46(1), 53–92.
- Trivers, Robert L. (1971), "The Evolution of Reciprocal Altruism," *The Quarterly Review of Biology*, 35.

One More Unit to Increase Wanting: The Minimal Sharpness Effect

Yunhui Huang, Nanjing University, China

Han Gong, Nanjing University, China

EXTENDED ABSTRACT

Despite extant work on marketing communication involving numerical information, one category of numbers with minimal sharpness (i.e., numbers that are just above a round number and ending with one) has attained very little investigation. In the present article, we propose and demonstrate that using a minimal sharp number to describe a product characteristic, regardless of whether the number represents quantity, ingredient, or meaningless brand name, enhances consumers' desire and preference toward the target product, which we term as *minimal sharpness effect*.

We contend that numbers with minimal sharpness are unique and tend to induce a sense of arousal, because they represent a salient boundary between round-number categories (Isaac & Schindler, 2014). The heightened arousal could be misattributed to consumers' desire toward the focal product, and thus increase their wanting (Gorn, Pham & Sin, 2001; Schwarz, 2011). Moreover, given the affect-laden nature of this effect, whether the product valuation is feelings-based or reason-based would moderate the effect (Hsee & Rottenstreich, 2004). Similarly, the minimal sharpness effect would also be influenced by product type as well as consumers' dispositional tendency to relying on feelings.

Study 1 provided initial support for our main hypothesis. We presented participants with an advertisement of a limited edition watch. Depending on the condition, the watch was described as limited to 999/1000/1001 pieces. Participants indicated how much they would be willing to pay for the watch (WTP) as a measure of their desire (i.e., *wanting*; Litt, Khan, & Shiv, 2009). A one-way ANOVA revealed a significant effect of number on WTP ($F(2, 143) = 4.884, p = .009$). Participants in the 1001 condition were willing to give a higher price than those in the 999 condition and those in the 1000 condition ($t(143) = 2.683, p = .008$). No significant difference was found between the latter two conditions ($t < 1$).

Study 2 investigated the generalizability of the proposed effect in a charitable donating context. We asked to participants to donate to 501/1000/10001 African children in need. A one-way ANOVA revealed a significant effect of number on donation intention ($F(2, 144) = 4.079, p = .019$). Specifically, participants were willing to donate more to 1001 victims than to 1000 victims ($t(144) = 2.703, p = .008$). They were also willing to donate more to 501 victims than to 1000 victims ($t(144) = 2.151, p = .033$). However, participants did not show difference between the 1001 and the 501 conditions ($t < 1$).

In Study 3 we tested the moderating effect of consumers' initial interest toward the focal product. They were presented with an advertisement of a fragrance named IVES MILLER 99/100/101. Participants indicated their willingness to pay for the fragrance and reported their levels of arousal on two items. They also reported their interest in fragrances. We found that participants with high interest would like to pay more for the target fragrance in the 101 condition (vs. 99/100 conditions) ($\beta = .222, t(141) = 1.778, p = .078$), whereas those with lower interest were not influenced by the number ($\beta = -.122, t(141) = -.935, p = .351$). Further, a bootstrapping analysis (Hayes 2012; Model 7) indicated that the interaction between minimal sharpness and interest on WTP was mediated by the levels of arousal (95% CI: .0646 to 2.1569).

Study 4 aimed to explore the underlying mechanism of the proposed effect. Feeling-as-information theory suggests the observed effect should diminish when consumers are directed to attribute their

feelings to other external sources (Reber, Schwarz, and Winkielman 2004). We recruited only male participants in this study and randomly assigned them to a 2(number: 100 vs. 101)2(sexual cues: without vs. with) between-subjects design. The results yielded a significant interaction ($F(1, 161) = 4.91, p = .028$), suggesting that when no external cues are available, the increased level of arousal induced by minimal sharpness is misattributed to the desire for the focal product.

In Study 5, we examined whether the effect would be influenced by mode of valuation. Participants first completed a task to prime feelings-based versus calculation-based processing, developed by Hsee and Rottenstreich (2004). Afterwards, participants were presented with the advertisement used in Study 1, and indicated how much they would be willing to pay for this watch. A 2 between-subjects ANOVA yielded a significant interaction between number and processing mode ($F(1, 195) = 4.788, p = .03$), confirming that the minimal sharpness effect occur only when valuation mode is feelings-based.

Study 6 explored whether the minimal sharpness effect could extend to consumers' choice. Identical to Study 4, participants were presented with a new brand of chips *Mr. Potato 100/101* and asked to choose between the Lay's and the new brand. We also measured participants' reliance on feelings to make choices (adapted from Hsee et al., 2015). Logistic regression revealed that participants were more likely to choose the new brand when its brand name contained 101 (vs. 100), only for those feeling-based consumers ($z = 2.64, p = .008$), but not for those reason-based consumers ($z = -0.79, p = .431$).

Study 7 aimed to examine the role of product type in moderating the effect. We posit that the minimal sharpness effect should also diminish when the product has greater functional values than incentive values, such as healthy food. We found that when choosing chips, consumers were more likely to choose the focal chips when its brand name contained 101 (vs. 100) for those who tended to rely on feelings, but not for those reason-based decision makers. By contrast, when choosing raisins, the number in brand name did not show an effect.

In sum, we observed that the minimal sharpness effect – numbers that just exceed a round number tend to elicit greater arousal and thus leading consumers to desire more toward products associated with those numbers. Further this effect was diminished (1) when an external source of arousal was provided (2) when the choice was not affect-laden, and (3) when the decision maker tended to rely on reasoning instead of feeling.

REFERENCES

- Gorn, Gerald, Michel Tuan Pham, and Leo Yatming Sin (2001), "When Arousal Influences Ad Evaluation and Valence Does Not (and Vice Versa)," *Journal of Consumer Psychology*, 11 (1), 43-55.
- Hsee, Christopher K., Yang Yang, Xingshan Zheng, and Hanwei Wang (2015), "Lay rationalism: Individual differences in using reason versus feelings to guide decisions." *Journal of Marketing Research* 52 (1), 134-146.
- Hsee, Christopher K and Yuval Rottenstreich (2004), "Music, Pandas, and Muggers: On the Affective Psychology of Value," *Journal of Experimental Psychology: General*, 133 (1), 23-30.

670 / One More Unit to Increase Wanting: The Minimal Sharpness Effect

- Isaac, Mathew S, Aaron R Brough, and Kent Grayson (2016), "Is Top 10 Better Than Top 9? The Role of Expectations in Consumer Response to Imprecise Rank Claims," *Journal of Marketing Research*, 53 (3), 338-53.
- Liberman, Nira and Jens Förster (2006), "Inferences from Decision Difficulty," *Journal of Experimental Social Psychology*, 42 (3), 290-301.
- Litt, Ab, Uzma Khan, and Baba Shiv (2010). "Lusting While Loathing: Parallel Counterdriving of Wanting and Liking." *Psychological Science*: 118-125.
- Reber, Rolf, Norbert Schwarz, and Piotr Winkielman (2004), "Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience?" *Personality and Social Psychology Review*, 8 (4), 364-82.
- Schwarz, Norbert (2011), "Feelings-as-Information Theory," in *Handbook of Theories of Social Psychology*, Vol. 1, ed. P. Van Lange, A. Kruglanski and E. T. Higgins, New York, NY: SAGE, 289-308.

The Effect of Lucky Feeling on Preference for Effort-Related Products and Activities

Feifei Huang, The Chinese University of Hong Kong, Hong Kong

Meng Zhang, The Chinese University of Hong Kong, Hong Kong

Yuwei Jiang, The Hong Kong Polytechnic University, Hong Kong

EXTENDED ABSTRACT

While some products are advertised to make life easier, many other products request consumers to exert more efforts during the consumption process (e.g., IKEA lets customers assemble furniture themselves; Norton, Mochon, and Ariely 2012). However, when and why consumers may prefer high-effort products and activities over low-effort ones are still largely unknown. Taking a novel perspective, the current research proposes that incidental feeling of personal luck may lead to such preferences and investigates the underlying mechanism.

The feeling of luck can substantially bias behaviors (Hamerman and Johar 2013; Jiang, Cho, and Adaval 2009). Luck has been shown to make people overestimate their success (Wohl and Enzle 2002). When people believe that they can successfully achieve the expected outcomes, they will tend to take action for the events (Eccles and Wigfield 2002). Thus, the feeling of luck increases peoples' tendency to take actions in order to get successful outcomes, e.g., gambling to win money.

However, it may be less obvious that the feeling of luck can also exert similar influences on people's action tendency out of the range of outcome-oriented events. We predict that the feeling of luck may increase people's propensity toward action in general (i.e., regardless of whether the activities involve any outcome-relevant components), due to the repeatedly strengthening of the link between luck and action-taking. Such a heightened action tendency, in turn, leads to the enhanced preference for high-effort products, as the relationship between high effort and action-progress is shown to be strong and bi-directional (Dewey 1897; Albarraçin, Hepler, and Tannenbaum 2011). Five experiments tested these possibilities.

Experiment 1 tested the basic effect using a two-condition (lucky vs. control) between-subjects design ($N = 83$). Specifically, participants were first asked to recall a lucky experience (vs. a typical day) as a manipulation of lucky feeling. All participants then received three scenarios and were asked to choose what they would do in each scenario. There were two options in each scenario—one option was high-effort (e.g., leaving positive comments on Facebook) whereas the other was low-effort (e.g., only clicking the "Like" button). We found that for all the three scenarios, participants in the lucky condition were more willing to choose the effortful option than those in the control condition.

Experiment 2 replicated the effect with real behavior ($N = 68$). In the lucky condition, participants were told that they won a lucky draw, and thus had the chance to choose a puzzle toy as a reward. In the control condition, participants were asked to directly choose a puzzle toy as a reward for participation. There were seven similar puzzle options varying only on their level of difficulties. After selecting a puzzle, participants' action tendency was also measured (Jiang, Zhan, and Rucker 2014). As expected, participants in the lucky condition chose more difficult puzzles than those in the control condition. Mediation analyses confirmed that action tendency elicited by lucky feeling was the driving force of the effect.

To rule out the alternative explanation of positive affect and to explore the influence of unlucky feeling, experiment 3 adopted a four-condition (lucky vs. control vs. happy vs. unlucky) between-subjects design ($N = 137$). Participants first imagined a lucky (vs. neutral vs. happy vs. unlucky) situation. They were then shown a scenario about

an IKEA promotion activity in which customers were invited to design products themselves, and were asked about their willingness to participate in such an activity, the number of items they planned to design, and the time they planned to spend on it. Participants' action tendency was also measured. As expected, participants in the lucky condition were more willing to participate, planned to design more items, and planned to spend more time on it, than those in the other three conditions. The effect was again mediated by action tendency.

We hypothesized that consumers' preference for high-effort activities is driven by greater action tendency triggered by lucky feeling. If this is the case, this effect should be mitigated when these high-effort activities are no longer considered as involving concrete actions, e.g., the activities will be held in a relatively distant future. In experiment 4, we tested this possibility using a 2 (lucky feeling: lucky vs. control) \times 2 (activity schedule: close vs. distant) between-subjects design ($N = 134$). Similar to experiment 1, participants first recalled either a lucky day or a typical day. They were then presented with a NIKE running event scenario, which was described to be held either tomorrow (close condition) or the next Friday (distant condition), and were asked to indicate their willingness to participate and their planned running distances. Replicating previous findings, when the activity was scheduled tomorrow, participants in the lucky condition were more likely to participate in the activity and planned to run longer distances than their control condition counterparts. However, when the activity was scheduled the next Friday, the effect disappeared.

The previous experiments confirmed that lucky feeling can lead consumers to prefer high-effort products and activities over low-effort ones. However, it was still unclear whether the observed results were driven by increased evaluation for high-effort options or by decreased evaluation for low-effort ones. Experiment 5 addressed this question using a 2 (lucky feeling: lucky vs. control) \times 2 (product description: high-effort vs. low-effort) between-subjects design ($N = 209$). Similar to previous experiments, participants first recalled either a lucky day or a typical day. Then, participants were presented with a health tracker advertisement which was described as involving high or low effort when using it, and were asked to evaluate the tracker. As expected, for the product that needed high-effort, participants in the lucky condition evaluated the product more favourably than those in the control condition. However, for the low-effort one, the effect became non-significant, showing that the effect of lucky feeling was due to increased evaluation for high-effort options.

This research contributes to the existing luck research by documenting how feeling of personal luck alters individuals' perception and attitude toward actions. It also extends our understanding of the role of consumer effort in the consumption process.

REFERENCES

- Albarraçin, Dolores, Justin Hepler, and Melanie Tannenbaum (2011), "General Action and Inaction Goals: Their Behavioral, Cognitive, and Affective Origins and Influences," *Current Directions in Psychological Science*, 20 (2), 119-23.
- Dewey, John (1897), "The Psychology of Effort," *The Philosophical Review*, 6 (1), 43-56.

- Eccles, Jacquelynne S. and Allan Wigfield (2002), "Motivational Beliefs, Values, and Goals," *Annual Review of Psychology*, 53 (February), 109-32.
- Hamerman, Eric J. and Gita V. Johar (2013), "Conditioned Superstition: Desire for Control and Consumer Brand Preferences," *Journal of Consumer Research*, 40 (October), 428-43.
- Jiang, Yuwei, Angela Cho, and Rashmi Adaval (2009), "The Unique Consequences of Feeling Lucky: Implications for Consumer Behavior," *Journal of Consumer Psychology*, 19 (April), 171-84.
- Jiang, Yuwei, Lingjing Zhan, and Derek D. Rucker (2014), "Power and Action Orientation: Power as a Catalyst for Consumer Switching Behavior," *Journal of Consumer Research*, 41 (June), 183-96.
- Norton, Michael I., Daniel Mochon, and Dan Ariely (2012), "The 'IKEA' Effect: When Labor Leads to Love," *Journal of Consumer Psychology*, 22 (July), 453-60.
- Wohl, Michael J. A. and Michael E. Enzle (2003), "The Effects of Near Wins and Near Losses on Self-Perceived Personal Luck and Subsequent Gambling Behavior," *Journal of Experimental Social Psychology*, 39 (March), 184-91.

Is Technology a Dangerous Dependency? The Effects of Anthropomorphism on Sharing Consumer Memories

Li Huang, Hofstra University, USA
Priyali Rajagopal, University of South Carolina, USA

EXTEND ABSTRACT

Consumers have experienced an explosion of technology-mediated sharing (Protalinski, 2011), with 40% of online conversations about identity-relevant experiences sharing (Tamir and Mitchell, 2012). Despite this proliferation in sharing via technology, research on technology impacts on human perceptions and reactions is sparse (Shen, Zhang and Krishna, 2016). Our research investigates how consumer perceptions of technological sharing platforms can change memories for the shared information.

Sparrow, Liu and Wegner (2014) suggest that sharing with technology can lead to memory attenuation. Extending this literature, we posit that the type of information shared (e.g. identity-relevant) interacts with characteristics of the technology (anthropomorphism, servant/partner role) to impact memory. Specifically, we predict that when identity-relevant (identity-irrelevant) information is shared using technologies that are closer to human (technological) partners – i.e. anthropomorphized (objectified), memory for the shared information is likely to be worse (better). We suggest that these effects are due to differences in perceptions of the technologies as sharing partners, with anthropomorphized technologies perceived as being human and hence functioning as safe, trustworthy repositories for the memories (Huang and Rajagopal 2017).

In Study 1, 293 MTurk workers participated in a 2 (identity relevance: high vs. neutral) x 3 sharing partner (close friend, Facebook, no-sharing) between-subjects study. An American identity was made salient (vs. not) in a travel experience recording a one-day detailed schedule. In the scenario, participants received a visitor guidebook containing coupons for 12 brands (6 American and 6 international brands).

After the scenario, participants shared their experience with their best friend (or on Facebook, or asked to write a description of a movie they watched recently (control)). We measured recognition memory for the travel experience, and identity-linked brand promotions. The experience recognition required respondents to select correct details from a set of 24 statements (12 true and 12 false). Corrected recognition was computed by subtracting false recognition from true recognition (Dalton and Huang 2014). The corrected hits of identity-linked promotion were computed by correctly identifying old as old – falsely identifying new as old.

An ANOVA revealed a main effect of sharing partner ($F(1,287) = 4.24, p < .02$) and an interaction between the sharing partner and identity relevance on the corrected recognition ($F(2, 287) = 15.6, p < .001$). For identity-neutral experience, participants remembered more details when sharing with a best friend as compared to sharing on Facebook and no-sharing ($M_{\text{bestfriend}} = 6.83, M_{\text{Facebook}} = 5.85, M_{\text{no-sharing}} = 4.87; F(2, 287) = 5.99, p < .01$). For identity-relevant experience, participants forgot more details after sharing it with a best friend as compared to Facebook and no-sharing ($p < .01$) ($M_{\text{bestfriend}} = 4.18, M_{\text{Facebook}} = 7.15, M_{\text{no-sharing}} = 6.08; F(2, 287) = 14.5, p < .001$). Interestingly, sharing on Facebook also led to memory enhancement rather than decay as compared to no-sharing ($p < .06$). Same patterns occurred for Corrected Hits of Identity-Liked Promotions.

Study 2 tested the moderating effects of anthropomorphism and consequence on attitude strength. 339 undergraduates participated a 2 (identity-relevance: high vs. neutral) x 2 (sharing partner: best friend vs. anthropomorphized technology vs. objectified technol-

ogy) between-subject design study. The scenario and procedures were similar to study 1. They either shared the experience with a best friend (or wrote a diary entry and shared it through a hypothetical file-hosting platform FlyCloud - a Dropbox-like service). Anthropomorphism was manipulated by reading a paragraph describing Flycloud using first person vs. third person pronouns (adapted from Aggarwal and McGill 2007). We measured recognition memory, attitude confidence (adapted from Krosnick and Smith 1994).

An ANOVA revealed a significant interaction between two independent variables on the corrected recognition ($F(2,333) = 9.00, p < .001$). For identity-relevant experience, participants forgot more details after sharing it with best friend and anthropomorphized technology than objectified technology ($M_{\text{bestfriend}} = 4.04, M_{\text{anthropomorphized}} = 4.63, M_{\text{objectified}} = 6.23; F(2,333) = 8.42, p < .001$). Best friend and anthropomorphized conditions had no differences ($p > .27$). For identity-neutral experience, no differences were found ($M_{\text{bestfriend}} = 5.78, M_{\text{anthropomorphized}} = 5.64, M_{\text{objectified}} = 4.91; F(2, 333) = 1.69, p > .18$). Attitude confidence results showed the same patterns.

Study 3 tested the mediating role of perceived partner quality and another moderator-anthropomorphized technology (servant vs. partner). We reasoned that meaningful identity-relevant memories are more likely to be outsourced to a high quality partner (rather than a servant). Thus, identity memory decay will be attenuated when the interacting technology is perceived as a servant, and this effect is mediated by perceived partner quality.

Study 3 was a 2 identity-relevance (high vs. neutral) x 3 sharing partner (servant vs. partner vs. objectified technology) between subject design with 237 undergraduates. The same travel experience as studies 1 and 2 was used, and the target technology was a hypothetical blogging platform named Travelgger. To manipulate the different roles played, respondents were randomly assigned to either servant or partner condition (procedures adapted from Aggarwal and McGill 2012).

We measured recognition memory, perceived partner quality (7-items from Fournier 1998), perceived memory specialness (“If it was real, please evaluate how special this travel experience would be in your life”).

An ANOVA revealed a marginally significant interaction between two independent variables on corrected recognition ($F(2,231) = 2.94, p < .06$). For identity-relevant experience, participants forgot more details after sharing with a partner-like technology than servant-like technology and objectified technology ($M_{\text{partner}} = 4.94, M_{\text{servant}} = 6.21, M_{\text{objectified}} = 6.66; F(2,231) = 3.32, p < .04$). The servant and objectified technology were indifferent ($p > .49$). For identity-neutral experience, no differences were found ($M_{\text{partner}} = 6.17, M_{\text{servant}} = 5.47, M_{\text{objectified}} = 5.65; F(2, 231) = .49, p > .61$). Mediation analysis (Process model 8) confirmed that perceived partner quality mediated the interaction effects on recognition memory (-0.7163 to -0.0011 ; Effect = -0.2924 ; SE = $.1816$). Furthermore, memory decay had impaired perceived experience specialness.

Three studies show that in a social sharing context, anthropomorphized technologies (objectified technologies) with higher (lower) partner quality are more (less) likely to decay identity-linked memories, dilute attitude confidence, and decrease perceptions of experience specialness.

REFERENCES

- Aggarwal, Pankaj, and Ann L. McGill (2007), "Is That Car Smiling at Me? Schema Congruity as a Basis for the Evaluation of Anthropomorphized Products," *Journal of Consumer Research*, 34(4), 468-79.
- , and Ann L. McGill (2012), "When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism," *Journal of Consumer Research*, 39(2), 307-23.
- Dalton, Amy N. and Li Huang (2014), "Motivated Forgetting in Response to Social Identity Threat," *Journal of Consumer Research*, 40(6), 1017-38.
- Huang, Li, and Priyali Rajagopal (2017), "Forgetting-after-Sharing: How Social Sharing Impacts Our Memories," *Working Paper*, University of South Carolina.
- Protalinski, Emil (2011), "Zuckerberg: 4 Billion 'Things' Are Shared on Facebook Every Day," retrieved on Mar 10, 2017 from <http://www.zdnet.com/article/zuckerberg-4-billion-things-are-shared-on-facebook-every-day/>
- Shen, Hao, Meng Zhang, and Aradhna Krishna (2016), "Computer Interfaces and the Effect of "Direct Touch" on Consumer Choice: Can iPads Make us Unhealthy?" *Journal of Marketing Research*, 53 (5), 745-58.
- Sparrow, Betsy, Jenny Liu, Daniel M. Wegner (2011), "Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips," *Science*, 333, 776-78.
- Talarico, Jennifer M., Kevin S. LaBar, and David C. Rubin (2004), "Emotional Intensity Predicts Autobiographical Memory Experience," *Memory & Cognition*, 32(7), 1118-32.
- Tamir, Diana I., and Jason P. Mitchell (2012), "Disclosing Information About the Self Is Intrinsically Rewarding," *Proceedings of the National Academy of Sciences*, 109(21), 8038-43.

Consumers' Assemblages of Fear and Safety with Firearms: Obstacles to Addressing Gun Violence in an Armed America

Aimee Huff, Oregon State University, USA
Michelle Barnhart, Oregon State University, USA
Brandon McAlexander, University of Arkansas, USA
Jim McAlexander, Oregon State University, USA

EXTENDED ABSTRACT

Firearms are ubiquitous consumer products in America. There are an estimated 300 million civilian-owned firearms, which are readily available for sale at sporting goods stores and mass merchandisers, and the ownership of which is protected by the Constitution (Cook and Goss 2014). Further, an estimated 8-14 million Americans have licences to carry concealed handguns on their person in public, and many more individuals live in states where licensure is not required (Cook and Goss 2014; Lott 2016). These products are dangerous by design and are implicated in a complex social problem defined by injury or death of more than 110,000 Americans each year due to gunshot (U.S. Centers for Disease Control and Prevention). These rates of death and injury have been increasing (U.S. C.D.C.) and eclipse those of other developed nations by a factor of ten (Grinshiteyn & Hemenway, 2016). Consumer interest in this issue has typically been conceptualized as two competing factions: those who support "gun control" and those who support "gun rights" (Winkler 2011).

Regardless of whether consumers adopt one of these positions or neither, they must live in a society that includes millions of firearms and where awareness of gun violence is embedded in the social milieu. In this study, we aim to better understand how consumers experience life in an armed America by investigating the various ways that consumers assemble human, material, and other actors related to guns and gun violence in ways that make them feel fearful of, and safe from, gun violence (Carlson 2015; DeBrabander 2015; Light 2017; Lott 2016).

We use the lens of assemblage theories (DeLanda 2006; Deleuze & Guattari 1987) to organize our thinking about the broad and complex market and to provide insight into consumers' understandings of this "wicked" social problem (Rittel & Webber 1973). We use the concept of assemblages to examine heterogeneous bundles of human and non-human market actors, and their respective capacities, which come together in ways that imbue the whole with a capacity greater than the sum of its parts. Specifically, we are interested in assemblages with the capacity to inspire feelings of fear or safety in the consumers who contemplate them.

The author team consists of two NRA members, one author who has hunting experience and has completed training requirements for a CHL, and one author who has no personal experience with firearms. In the summer and fall of 2016, we conducted semi-structured depth interviews with adult gun owners in Oregon and Texas as part of a larger project on firearms in America. We recruited a sample with diversity in attributes that the literature has identified as relevant to our research questions: gender, political affiliation, and gun ownership. Our data set includes transcripts and fieldnotes from interviews with 18 informants, including: 12 males and 6 females; 5 Republicans, 5 Democrats, 5 Independents, and 3 with no political affiliation; 13 gun owners, 10 of whom have licenses to carry concealed handguns, and 5 non-owners. Interviews lasted 60-120 minutes. Informants were asked about their experiences and opinions about gun ownership and use, beginning with a grand tour question (McCracken 1988) about their first experiences with firearms, and followed by prompts related to personal safety, fear, and policy. Data analysis entailed coding the

textual data to identify themes, and moving iteratively between assemblage literature and our data to develop codes into an interpretation that addressed our research questions (Charmaz 2006; Corbin and Strauss 1990).

In our findings, we identify the bundle of network actors, including human and non-human components, in which each informant is situated. We reveal how each of these assemblages differentially shapes and is shaped by informants' respective feelings of fear and safety, and we highlight the variation in the role of firearms in informants' assemblages. For instance, some informants are fearful of an armed home invasion, and situate themselves within an assemblage of market actors in ways that off-set that fear. Those assemblages may include a handgun(s), ammunition, firearms training, and a gun safe. Other informants are fearful of mass shootings or a child's friend gaining access to a firearm, and situate themselves within assemblages that include police, background check legislation, and conversations with other parents about the importance of storing firearms securely.

Across informants' respective assemblages, the agency to inflict harm on a person is distributed differently. Some attribute agency to kill or injure someone entirely to human actors - for example, one informant declares, "a loaded gun can sit in the corner over there and it won't hurt anybody" - and stress the need for firearms training in situating a firearm safely within an assemblage. Conversely, others distribute the agency to harm people to a combination of actors, including the gun owner, a loaded firearm, and the situation, and firearms tend to inspire more fear than safety. Assemblages such as these include other actors, such as police and policies, to counter the fear of firearms misuse.

Based on our informants' conceptualizations of safe assemblages, we identify two broad orientations of assemblages. The first, which we call *self-protection*, focuses on protecting informants' personal safety in the face of an imminent threat, such as a home intruder, and places much of the responsibility for ensuring safety on the individual. The second orientation, *societal protection*, reflects a broader view which considers public safety as well as informants' personal safety, and distributes the responsibility for keeping all citizens safe across a broad array of actors throughout society. We argue that variations in the composition and orientation of informants' assemblages present challenges to reaching social agreement on how to address gun violence.

This research contributes an understanding of variation in consumers' constructed assemblages to a growing stream of marketing research on human-object interactions (e.g., Bettany & Kerrane 2011; Epp & Velagaleti 2014; Ferreira & Scaraboto 2016), and we highlight the role of public policy in consumer's social worlds. Further, we contribute to an emerging stream of qualitative research investigating the complexities inherent to this unique product market (e.g., Carlson 2015; Crockett 2017; Huff et al. 2017; Witkowski 2014).

REFERENCES

- Bettany, Shona M and Ben Kerrane (2011), "The (Post-Human) Consumer, the (Post-Avian) Chicken and the (Post-Object) Eglu: Towards a Material-Semiotics of Anti-Consumption," *European Journal of Marketing*, 45(11/12), 1746–56.
- Carlson, Jennifer (2015), *Citizen Protectors*, New York: Oxford University Press.
- Charmaz, Kathy (2006), *Constructing Grounded Theory*, Thousand Oaks, CA: Sage.
- Cook, Philip J. and Kristin A Goss (2014), *The Gun Debate*, New York: Oxford University Press.
- Corbin, Juliet M and Anselm Strauss (1990), "Grounded Theory Research: Procedures, Canons, and Evaluative Criteria," *Qualitative Sociology*, 13(1), 3–21.
- Crockett, David (2017), "Building Frames that Resonate: The Movement to Prevent Gun Violence," paper presented at 2017 Consumer Culture Theory Conference, Anaheim, CA.
- Debrabander, Firmin (2015), *Do Guns Make Us Free?*, New Haven: Yale University Press.
- DeLanda, Manuel (2006), *A New Philosophy of Society*, New York: Continuum International.
- Deleuze, Gilles and Felix Guattari (1987), *A Thousand Plateaus*, Minneapolis, MN: University of Minnesota Press.
- Epp, Amber M and Sunaina R Velagaleti (2014), "Outsourcing Parenthood? How Families Manage Care Assemblages Using Paid Commercial Services," *Journal of Consumer Research*, 41(December), 911–35.
- Ferreira, Marcia Christina and Daiane Scaraboto (2016), "'My Plastic Dreams': Towards an Extended Understanding of Materiality and the Shaping of Consumer Identities," *Journal of Business Research*, 69(1), 191–207.
- Grinshteyn, Erin and David Hemenway (2016), "Violent Death Rates: The US Compared with Other High-Income OECD Countries, 2010," *The American Journal of Medicine*, 129(3), 266–73.
- Huff, Aimee Dinnin, Michelle Barnhart, Brandon McAlexander, and James H McAlexander (2017), "Addressing the Wicked Problem of American Gun Violence: Consumer Interest Groups as Macro-Social Marketers," *Journal of Macromarketing*, (forthcoming).
- Light, Caroline E. (2017), *Stand Your Ground*, Boston: Beacon Press.
- Lott, John R. (2016), *The War on Guns*, Washington, DC: Regnery.
- McCracken, Grant (1988), *The Long Interview*, Newbury CA: Sage.
- Rittel, Horst W J and Melvin M Webber (1973), "Dilemmas in a General Theory of Planning*," *Policy Sciences*, 4, 155–69.
- U.S. Centers for Disease Control and Prevention (2017), "National Center for Injury Prevention and Control," Web-Based Inquiry Statistics Query and Reporting System (WISQARS), Fatal and Non-Fatal Injury Reports, 2006-2015, <https://www.cdc.gov/injury/wisqars>.
- Winkler, Adam (2011), *Gun Fight*, New York: Norton & Company.
- Witkowski, Terrence H (2014) "The Visual Politics of US Gun Culture," *Consumer Culture Theory*. Emerald Group Publishing Limited, 3-23.

In Ones and Zeroes We Trust?: Money, Religion & Bitcoin

Mariam Humayun, York University, Canada

Russell Belk, York University, Canada

EXTENDED ABSTRACT

“...what one formerly did for the ‘sake of God’ one now does for the sake of money, that is to say, for the sake of that which now gives the highest feeling of power and good conscience.” (Nietzsche 1997, 123)

Campbell (2003) once argued that to understand any society’s values, one just had to search for its tallest buildings. Where once places of worship reigned supreme, today skyscrapers to capitalism eclipse their dominance. Money has always been intermingled with notions of faith and consumption (Simmel 1978). From a shared belief in the stock market prices, the value of gold as money, or believing in national currencies as a method of payment, money operates on the virtue of keeping faith (Graeber 2014). Concurrently, consumption and religion have also shared an uneasy but intermingled relationship (Weber 2002). While we have a rich understanding of how consumers spend money and the behaviors it evokes (e.g. Sundie et al. 2011, Zhou, Vohs, and Baumeister 2009, Liu and Aaker 2008, Di Muro and Noseworthy 2013), there is a lot more to be explored when it comes to the socio-cultural and historical sociality of money in and of itself (Belk and Wallendorf 1990). There is growing consensus that in a post-2008 financial crisis world, money’s fundamental value is being redefined. The earthquake of the financial crisis has shaken faith in the citadels of banking and monetary authority, paving the way for alternatives to emerge. Modern money as we know it is primarily created by governments and conferred legitimacy by the state banks (Ingham 1996). However, there is speculation that money is likely to become a pluralistic entity in the coming years (Dodd 2014).

Money demands faith and belief which is shared by a diverse community. There has been widespread recognition in consumer research that there is a search for the sacred in the seemingly profane, in both consumers’ pursuit of brands and consumption in general, and in religions’ turn to the marketplace to compete with other faiths and attractions (Belk, Wallendorf, and Sherry 1989, Muñiz and Schau 2005, McAlexander et al. 2014, Belk and Tumbat 2005, Sherry and Kozinets 2007). Zelizer (1997, 18) argues that money is “profoundly influenced by cultural and social structures”. In this paper, we explore this connection between religiosity and money through the context of the cryptocurrency Bitcoin (Zohar 2015, Maurer, Nelms, and Swartz 2013, Bjerg 2016, Humayun and Belk 2016).

Bitcoin takes the notions of belief, trust and faith to an all new extreme. Bitcoin was created by a person or group that still remain anonymous even if multiple false prophets have emerged to stake and patent the blockchain technology. While the notion of digital cash that could flow across geographic borders had been a cryptographers’ dream for many years, “Satoshi Nakamoto” made this a reality when he posted the white paper in 2008 laying out the blueprint for a decentralized peer-to-peer currency that would be enabled by the blockchain (Nakamoto 2008). A copy of the first block ever created “the Genesis Block” now rests in the Coin Room at the British Museum, cementing Bitcoin’s cultural and iconic status in monetary history. From its early days, Bitcoin has been repeatedly projected to soon die. Yet despite all the bad press, it continues to live on. Initially Bitcoin had limited appeal in terms of an exchange of value beyond the tech-geek community. It had been idiosyncratically used for buying pizza and alpaca socks. However, Silk Road, the online illicit market, captured the public imagination as a vivid manifestation of

Bitcoin as a value-generating entity. Today more mainstream businesses accept Bitcoin, from Ernst & Young to Swiss Railways and as of March 3, 2017, Bitcoin had surpassed the value of an ounce of gold, trading at \$1,268.

Bitcoin is not backed by anything of value, such as gold, or state banks like those that underwrite fiat currencies. It represents a rare intersection of technology, ideology and religiosity (Davis 2004, Noble 1997, Kozinets 2008). Based on consumer narratives from in-depth interviews, archival data, ongoing participant observation at Bitcoin/Blockchain events and a netnography, we analyze how discourses that employ dimensions of faith and religiosity emerge in trying to unite a diverse community of believers.

Our findings reveal that many consumers keep faith in Bitcoin’s underlying technology, even though they do lose faith in people. The algorithmic code’s neutrality is often pedestalized in contrast to human error. Our contributions here are threefold. First, we provide an analysis how in our digital world, the notion of money may end up changing and come to mimic the secular and agnostic nature of brands. Second, we contribute to understanding how notions of religiosity emerge in this community’s search for faith and belief, even though some of their discourses critique religion. As in the case of Belk, Wallendorf, and Sherry (1989) the form of myth-making and religiosity displayed connects a dispersed community of believers who are searching for the sacred in the seemingly profane. Furthermore, our analysis shows how the boundaries between religiosity, technology and ideology seem to become ever more porous in our pervasive consumer culture (Firat and Venkatesh 1995). Our analysis highlights the notions of belief and faith that money demands of its community. Although money has been viewed as serving eroding functions in society over the years, *reinvented*, it can still be a source of sacred and profound meanings for its consumers.

REFERENCES

- Belk, Russell W., and Glnur Tumbat. 2005. “The Cult of Macintosh.” *Consumption Markets & Culture* no. 8 (3):205-217. doi: 10.1080/10253860500160403.<http://dx.doi.org/10.1080/10253860500160403>
- Belk, Russell W., Melanie Wallendorf, and John F. Sherry, Jr. 1989. “The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey.” *Journal of Consumer Research* no. 16 (1):1-38. doi: 10.2307/2489299.<http://www.jstor.org/stable/2489299>
- Belk, Russell, and Melanie Wallendorf. 1990. “The Sacred Meanings of Money.” *Journal of Economic Psychology* no. 11 (1):35-67. doi: [http://dx.doi.org/10.1016/0167-4870\(90\)90046-C](http://dx.doi.org/10.1016/0167-4870(90)90046-C).<http://www.sciencedirect.com/science/article/pii/016748709090046C>
- Bjerg, Ole. 2016. “How is Bitcoin Money?” *Theory, Culture & Society* no. 33 (1):53-72. doi: 10.1177/0263276415619015. <http://tcs.sagepub.com/content/33/1/53.abstract>
- Campbell, Joseph. 2003. *The Hero’s Journey: Joseph Campbell on His Life and Work* Edited by Phil Cousineau. Novato, California: New World Library.
- Davis, Erik. 2004. *TechGnosis: Myth, Magic, and Mysticism in the Age of Information*. London: Serpents’ Tail.

- Di Muro, Fabrizio, and Theodore J. Noseworthy. 2013. "Money Isn't Everything, but It Helps If It Doesn't Look Used: How the Physical Appearance of Money Influences Spending." *Journal of Consumer Research* no. 39 (6):1330-1342. doi: 10.1086/668406.<http://dx.doi.org/10.1086/668406>
- Dodd, Nigel. 2014. *The Social Life of Money*. Princeton: Princeton University Press.
- Firat, A. Fuat, and Alladi Venkatesh. 1995. "Liberatory Postmodernism and the Reenchantment of Consumption." *Journal of Consumer Research* no. 22 (3):239-267. doi: 10.2307/2489612.<http://www.jstor.org/stable/2489612>
- Graeber, David. 2014. *Debt: The First 5,000 Years*. Brooklyn, NY: Melville House Publishing.
- Humayun, Mariam, and Russell Belk. 2016. From Nothingness into Being: Creation and Resilience of a Decentralized Brand: Bitcoin. Paper read at Forthcoming Conference Proceedings: Association for Consumer Research Conference Berlin 2016
- Ingham, Geoffrey. 1996. "Money is a Social Relation." *Review of Social Economy* no. 54 (4):507-529.<http://www.jstor.org/stable/29769872>
- Kozinets, Robert V. . 2008. "Technology/Ideology: How Ideological Fields Influence Consumers' Technology Narratives." *Journal of Consumer Research* no. 34 (6):865-881. doi: 10.1086/523289.<http://www.jstor.org/stable/10.1086/523289>
- Liu, Wendy, and Jennifer Aaker. 2008. "The Happiness of Giving: The Time-Ask Effect." *Journal of Consumer Research* no. 35 (3):543-557. doi: 10.1086/588699.<http://dx.doi.org/10.1086/588699>
- Maurer, Bill, Taylor C. Nelms, and Lana Swartz. 2013. "When perhaps the real problem is money itself": the practical materiality of Bitcoin." *Social Semiotics* no. 23 (2):261-277. doi: 10.1080/10350330.2013.777594.<http://dx.doi.org/10.1080/10350330.2013.777594>
- McAlexander, James H., Beth Leavenworth Dufault, Diane M. Martin, and John W. Schouten. 2014. "The Marketization of Religion: Field, Capital, and Consumer Identity." *Journal of Consumer Research* no. 41 (3):858-875. doi: 10.1086/677894. <http://www.jstor.org/stable/10.1086/677894>
- Muñiz, Albert M Jr, and Hope Jensen Schau. 2005. "Religiosity in the Abandoned Apple Newton Brand Community." *Journal of Consumer Research* no. 31 (4):737-747. doi: 10.1086/426607. <http://www.jstor.org/stable/10.1086/426607>
- Nakamoto, Satoshi. 2008. *Re: Bitcoin P2P e-cash paper 2008* [cited November 7, 2008 2008]. Available from <http://www.mail-archive.com/cryptography@metzdowd.com/msg09971.html>.
- Nietzsche, Friedrich. 1997. *Daybreak: Thoughts of the Prejudices of Morality*. Translated by R. J. Hollingdale. Edited by Maudmarie Clark and Brian Leiter. Cambridge: Cambridge University Press.
- Noble, David F. 1997. *The Religion of Technology: The Divinity of Man and the Spirit of Invention*. New York: Knopf.
- Sherry, John F., and Robert V. Kozinets. 2007. "Comedy of the Commons: Nomadic Spirituality and the Burning Man Festival." In *Consumer Culture Theory: Research in Consumer Behaviour*, edited by Russell Belk and John F Sherry Jr, 119-147. Emerald Group Publishing.
- Simmel, Georg. 1978. *The Philosophy of Money*. London: Routledge and Kegan Paul.
- Sundie, Jill M., Douglas T. Kenrick, Vldas Griskevicius, Joshua M. Tybur, Kathleen D. Vohs, and Daniel J. Beal. 2011. "Peacocks, Porsches, and Thorstein Veblen: Conspicuous Consumption as a Sexual Signaling System." *Journal of Personality and Social Psychology* no. 100 (4):664-680. doi: 10.1037/a0021669
- Weber, Max. 2002. *The Protestant Ethic and the Spirit of Capitalism: and Other Writings*. Edited by Peter Baehr and Gordon C. Wells. New York: Penguin Books.
- Zelizer, Viviana A. . 1997. *The Social Meaning of Money*. New Jersey: Princeton University Press.
- Zhou, Xinyue, Kathleen D. Vohs, and Roy F. Baumeister. 2009. "The Symbolic Power of Money: Reminders of Money Alter Social Distress and Physical Pain." *Psychological Science* no. 20 (6):700-706.<http://www.jstor.org/stable/40575086>
- Zohar, Aviv. 2015. "Bitcoin: Under the Hood." *Communications of the ACM* no. 58 (9):104-113. doi: 10.1145/2701411

Satisfaction-Driven Nonresponse Bias in Consumer Feedback Surveys: Venting, Reciprocation and Exiting

Chris Hydock, Georgetown University, USA
Kurt Carlson, College of William & Mary, USA

EXTENDED ABSTRACT

Brands use surveys to better understand satisfaction, an integral metric for predicting numerous downstream consumer behaviors including engagement (Brodie et al. 2011), loyalty, WOM, and purchase behavior (Anderson and Sullivan 1990; Mittal et al. 2005; Mittal and Kamakura 2001; Pallas, Mittal and Groening 2014). Given that consumers opt in to completing surveys, non-response bias related to satisfaction is a great a concern. Existing research on Word of Mouth (WOM) and anecdotal evidence suggests the most and least satisfied customers are most likely to complete surveys, i.e. an extreme satisfaction response bias (Anderson 1998). However, research in consumer behavior also gives reason to predict either a positive or negative satisfaction response bias. In the following, we review the literature on consumers' motives for survey completion with respect to their satisfaction, we put forth a theory of consumer satisfaction survey response bias, and report four studies which test this theory.

The literature provides support for a negative response bias through the fact that greater levels of dissatisfaction lead to an increased likelihood of complaining to the brand (Singh 1988) and increased probability of engaging in negative WOM (Hennig-Thurau 2004; Oliver 1997; Nyer 1999; Sundaram et al., 1998; Sweeney et al. 2005; Wetzer, Zeelenberg and Pieters 2007; Szymanski and Henard 2001). Research on complaining and negative WOM finds that they are expressions of consumers' desire to vent anger and frustrations (Nyer 1999) regarding an underwhelming experience and are driven by a desire for catharsis (Alicke et al., 1992; Berkowitz, 1970). While completing a survey may offer dissatisfied consumers an opportunity to vent normally achieved through complaining or negative WOM, research suggests that the completion of a survey will not offer satisfied consumers the same value that is normally achieved by engaging in positive WOM. Specifically, because survey completion is anonymous, the topic is set by the solicitor (East, Hammond, and Lomax 2008), and the communication is one-directional, survey completion lacks the necessary means for impression management (Berger 2014).

Past work also provides reason to anticipate an extreme response bias. In addition to the fact that dissatisfaction may motivate survey completion as a way of venting, satisfaction may cause customers to feel obligated to reciprocate for past benefits a brand has provided. In fact, consumers engage in positive WOM as a way of helping the brand (Hennig-Thurau 2004; Sundaram, Mitra, and Webster, 1998) or complimenting the brand (Erickson and Eckrich 2001). We take this one step further and suggest that consumers complete a survey about a brand not simply to help the brand, but to also comply with social norms (Homans 1958). In social interactions balance is achieved through a reciprocal relationship (Bagozzi 1995; Gouldner 1960; Oliver and Swann 1989); when a brand exceeds a consumer's expectations, thereby increasing satisfaction (Parasuraman et al. 1985; 1988), the consumer will feel obligated to reciprocate.

Notably, a third mechanism exists which may affect consumer's behavior. Specifically, research on complaining behavior finds that complaining is a function of consumers' ability and motivation; to complain to a brand consumers must believe has a favorable cost-benefit ratio (Oliver 1997). However, the costs and benefits of this option compete with two other options. The consumer can remain

quietly loyal to the company, or they can 'exit' their relationship with the brand (Andreson 1988; Hirschman 1970; Maute and Forrester 1993; Zeithaml, Berry, and Parasuraman 1996). Given that exiting a brand relationship provides a substitute for complaining (Solnick and Hemenway 1992) and helps the consumer find a new solution, one should expect consumers that have the option to exit a brand to do so (a form of venting) as their dissatisfaction increases.

Based on this literature posit that when deciding whether to complete a survey about a brand three forces will influence consumers' completion likelihood. First, increases in satisfaction will increase a consumer's likelihood to respond to a survey about a brand, due to a greater perceived obligation to reciprocate (Homans 1958). Second, decreases in satisfaction will result in a desire to vent (Hennig-Thurau et. al. 2004), which can increase a consumers' likelihood to respond to the survey. However, in most scenarios, consumers will choose to vent not by completing the survey, but instead by existing their relationship with the brand (Szymanski and Henard 2001). Therefore, we anticipate a positive satisfaction response bias in most scenarios as it is almost always possible for a consumer to exit the brand relationship, but we anticipate an extreme satisfaction response bias when consumers cannot exit the brand.

Study 1

In study 1 we demonstrate that willingness to engage in WOM and willingness to complete a survey are differently related to satisfaction. To do so, we measured consumers' willingness to complete a survey for their cable/internet provider or their willingness to engage in WOM about their cable internet provider, and consumer's satisfaction

Methods

Participants in this study were 2018 subjects who were recruited from MTurk (53% female and had a mean age of 32). Consumers identified their wireless company in a drop down menu. Participants were asked "Imagine [] asked you to complete a survey, about their products and services, how likely are you to complete it?" or "How likely are you to at some point tell friends or family about your experiences with []?" (seven point scale anchored by very unlikely and very likely). Participants then indicated their satisfaction with the company on an 11-point scale (anchored by very dissatisfied and very satisfied).

Results and Discussion

A regression analysis revealed an interaction of satisfaction and condition (WOM vs survey completion), $\beta = .07$, $t(2015) = 2.71$, $p < .01$. Further analysis is withheld for brevity, but visual inspection reveals WOM induced an extreme response bias, and survey completion induced a positive response bias.

Study 2

In study 2 an on campus corporation run by students sent a survey to over 3000 students as part of a larger effort to understand their customers. The sample included research pool participants. After a one week delay, all participants from the research pool answered a single question about their satisfaction with the campus corporation, as part of larger research session. Student's likelihood to respond to

the voluntary survey was analyzed according to the satisfaction data they provided in the lab.

Methods

In this study 787 subjects (49 % female, average age 20) that were registered in a student subject pool were emailed a survey from a university campus organization. For the analysis, participants were coded according to whether or not they completed the voluntary emailed survey. After 1 week participants completed a series of surveys, one of which had a set of questions asked about their satisfaction with six university related entities including the campus corporation. The measure was “How satisfied are you with each of the following?” (seven point scale anchored by very dissatisfied and very satisfied).

Results and Discussion

A binary logistic regression revealed a significant positive relationship between the measured independent variable, satisfaction, and the dependent variable survey completion, $\beta = .243$ Wald $\chi^2(1) = 9.71$, $p < .01$.

Study 3

In study 3, participants on MTurk were asked to indicate their satisfaction with MTurk while completing an unrelated survey. Participants were then contacted 6 weeks later and asked to complete a voluntary survey regarding their satisfaction with Amazon Mechanical Turk.

Methods

Participants (1567) were recruited from MTurk, (52% were female, average age 31). All participants were paid \$0.50 for completing an unrelated survey, at the end of which they were asked to indicate their satisfaction with Amazon Mechanical Turk, “How satisfied are you with Amazon Mechanical Turk?” Responses were provided on a 10 point Scale, anchored by dissatisfied and satisfied. Six weeks later participants received an email requesting that they complete a very short unpaid survey regarding their satisfaction with Amazon Mechanical Turk. Participants’ completion of the survey served as the dependent variable.

Results

A binary logistic regression revealed a significant positive relationship between the measured independent variable, satisfaction, and the dependent variable survey completion, $\beta = .07$ Wald $\chi^2(1) = 6.75$, $p < .05$.

Study 4

Study 4 we sought to investigate the process driving survey completion. We measured participants’ willingness to complete a survey for their wireless provider, their satisfaction with the wireless provider, their agreement that completion would allow them to reciprocate, and their desire to vent by completing the survey.

Methods

Participants in this study were 1936 subjects who were recruited from MTurk (50% female and had a mean age of 31). Consumers identified their wireless company in a drop down menu. Participants were asked “Imagine [wireless company] asked you to complete a survey, about their products and services, how likely are you to complete it?” (seven point scale anchored by very unlikely and very likely). Participants then indicated their satisfaction with the company on an 11-point scale (anchored by very dissatisfied and very satisfied). Next, participants responded to the statement “Completing a survey for [company] would allow me to reciprocate for the benefits they have provided me” on a seven point scale (anchored by

strongly disagree and strongly agree). Participants then responded to the statement “Completing a survey for [company] would allow me to vent frustrations” on a seven point scale (anchored by strongly disagree and strongly agree).

Results and Discussion

A regression was run to determine if the measured independent variable, satisfaction, predicted our dependent variable, willingness to complete a survey. The results revealed a significant positive relationship between satisfaction and likelihood of completing a survey, $\beta = .234$, Wald $\chi^2(1) = 58.30$, $p < .001$.

Mediation analysis was conducted following Process Model 74. Satisfaction served as the independent variable which predicted likelihood to complete a survey, obligation to reciprocate and desire to vent as mediators. The model allowed the effect of the mediators on the dependent variable to be moderated by the independent variable. A bias corrected bootstrap confidence interval for the moderated mediation of the obligation to reciprocate and the desire to vent revealed the mediating effects were moderated by the independent variable based on 10,000 boot strap samples (.01 to .02) and (0.00 to 0.01) respectively. The results reveal that obligation to reciprocate (+) and desire to vent (-) mediate the relationship between satisfaction and response likelihood. Further they reveal in line with our theory obligation to reciprocate is a particularly strong mediator for satisfied consumers and the desire to vent is a particularly strong mediator for dissatisfied consumers.

Study 5a

In study 5a and 5b we manipulate consumers’ satisfaction and ability to exit a brand, to test the prediction that the ability to exit a brand moderates the effect of satisfaction on response likelihood. We predict that for consumers who are able to exit, a positive satisfaction response bias will emerge, and for those not able to exit, an extreme satisfaction response bias will emerge.

In study 5a, consumers read a short scenario regarding their experience with a cable company. Satisfaction was manipulated through service quality and included three levels, dissatisfied, neutral, and satisfied. The manipulation of the ability to exit stated that participants had ‘been with the company for a year but were able to exit or that they had ‘been with the company for a year but that the provider was the only provider in the area.’

Methods

For this study, 364 subjects were recruited for MTurk (50% were female, average age was 30). The study manipulated satisfaction and ability to exit in a 3 x 2 orthogonal design. After reading the scenario, participants first indicated how likely they would be to complete a survey sent by the company in the scenario, “How likely would you be to complete the survey?” (9 point scale, anchored by very unlikely and very likely). They then indicated their satisfaction with the company “How would you rate your satisfaction in this scenario” (7 point scale, anchored by very unsatisfied and very satisfied).

Results

The results indicate the manipulation of satisfaction was successful ($M_{\text{dissatisfied}} = 1.6$, $M_{\text{neutral}} = 4.5$, $M_{\text{satisfied}} = 6.2$) $F(1, 363) = 194.44$, $p < .001$. An ANOVA testing the effect of satisfaction and ability to exit on likelihood to complete a survey revealed a significant interaction, $F(2, 363) = 3.02$, $p < .05$. T-tests revealed that for consumers that were not able to exit, those who were dissatisfied were more likely to respond to a survey ($M = 6.1$) than those who were neutral ($M = 5.1$), $t(121) = 2.1$, $p < .05$, and that there was no effect for those who could exit $p > .1$.

Study 5b

In study 5b, consumers read a short scenario regarding their experience purchasing a TV. Satisfaction was manipulated through product quality included and three levels, dissatisfied, neutral, and satisfied. The ability to exit was operationalized through a manipulation of an option to return the TV (present not present).

Methods

For the study, 242 subjects were recruited for MTurk (53% female, average age 31). The methods closely matched those of study 4a, with a couple exceptions; responses to the likelihood to complete a survey were on a seven point scale and responses to satisfaction with the company were on an 11 point scale (same anchors were used).

Results

The results indicate the manipulation of satisfaction was successful ($M_{\text{dissatisfied}} = 2.6$, $M_{\text{neutral}} = 6.7$, $M_{\text{satisfied}} = 10.7$) $F(1, 242) = 1706.07$, $p < .001$. An ANOVA testing the effect of satisfaction and ability to exit on likelihood to complete a survey revealed a significant interaction, $F(2, 241) = 4.09$, $p < .05$. T-tests indicated that for consumers who were not able to exit, those who were dissatisfied were more likely to respond to a survey ($M = 4.1$) than those who were neutral ($M = 2.9$), $t(78) = 3.10$, $p < .01$, and that there was no such effect for those who could exit $p > .1$.

General Discussion

Together the studies reported here indicate that when consumers are able to exit a brand, there is a positive satisfaction response bias for survey completion. In contrast, the results demonstrate that when consumers cannot exit a brand, an extreme satisfaction response bias exists. We additionally demonstrate that survey completion is driven by and obligation to reciprocate and a desire to vent, the latter of which only drives survey completion when a more attractive alternative option (exiting the brand) is not available.

In addition to demonstrating existing assumptions regarding survey response have been mistaken, this research adds to our understanding of reciprocity between brands and consumers as well as consumer venting behavior. The findings suggests consumers will engage with a brand as an act of reciprocity based on their satisfaction, adding to past research which has found consumers reward firms for their overall effort according to reciprocity norms (Morales 2005). The work also identifies exiting behavior as a form of venting for dissatisfied consumers. Importantly, this reality suggests that brands may frequently miss out on feedback from their dissatisfied consumers, impeding the process of improvement.

REFERENCES

- Alicke, Mark D., James C. Braun, Jeffrey E. Glor, Mary L. Klotz, Jon Magee, Heather Sederhoim, and Robin Siegel (1992), "Complaining Behavior in Social Interactions," *Personality and Social Psychology Bulletin*, 18, 286-295.
- Anderson, Eugene W. (1998), "Customer Satisfaction and Word of Mouth," *Journal of Service Research*, 1, 5-17.
- Anderson, Eugene W. and Vikas Mittal (2000), "Strengthening the Satisfaction Profit Chain," *Journal of Service Research*, 3, 107-20.
- Anderson, Eugene W. and Mary W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, 12, 125-143.
- Aksoy, Lerzan (2013), "How Do You Measure What You Can't Define? The Current State of Loyalty Measurement and Management," *Journal of Service Management*, 24, 356 - 81.
- Bagozzi, Richard P. (1995), "Reflections on relationship marketing in consumer markets," *Journal of the Academy of Marketing Science*, 23, 272-277.
- Berger, Jonah (2014), "Word of mouth and interpersonal communication: A review and directions for future research," *Journal of Consumer Psychology*, 24, 586-607.
- Berkowitz, L. (1970), "Experimental Investigations of Hostility Catharsis," *Journal of Consulting and Clinical Psychology*, 35, 1-7.
- Brodie, Roderick J. (2011), "Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research," *Journal of Service Research*, 14, 252.
- East, Robert, Kathy Hammond, and Wendy Lomax (2008), "Measuring the impact of positive and negative word of mouth on brand purchase probability," *International Journal of Research in Marketing*, 25, 215-224.
- Erickson, G. Scott, and Donald W. Eckrich (2001), "Consumer Affairs Responses to Unsolicited Customer Compliments," *Journal of Marketing Management*, 17, 321-340.
- Gouldner, Alvin W. (1960), "The Norm of Reciprocity: A Preliminary Statement," *American Sociological Review*, 161-178.
- Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?" *Journal of Interactive Marketing*, 18, 38-52.
- Hirschman, A. O. (1970) *Exit Voice and Loyalty: Response to Decline in Firms, Organizations, and States*, Cambridge, MA: Harvard University Press.
- Homans, George C. "Social behavior as exchange," *American journal of Sociology*, (1958): 597-606.
- Maute, Manfred and William R. Forrester, Jr. (1993), "The Structure and Determinants of Consumer Complaint Intentions and Behavior," *Journal of Economic Psychology*, 14, 219-47.
- Mazzarol, Tim, Jillian C. Sweeney, and Geoffrey N. Soutar (2007), "Conceptualizing Word-of-Mouth Activity, Triggers and Conditions: An Exploratory Study," *European Journal of Marketing*, 41, 1475-94.
- Mittal, Vikas, Eugene W. Anderson, Akin Sayrak, and Pandu Tadikamalla (2005) "Dual Emphasis and the Long-term Financial Impact of Customer Satisfaction," *Marketing Science*, 24, 544-55.
- Mittal, Vikas and Wagner A. Kamakura (2001), "Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing Research*, 38, 131-42.
- Morales, Andrea C. (2005), "Giving Firms an "E" for Effort: Consumer Responses to High-effort Firms," *Journal of Consumer Research*, 31, 806-12.
- Morgan, Neil A. and Lopo Leotte Rego (2006), "The Value of Different Customer Satisfaction and Loyalty Metrics in Predicting Business Performance," *Marketing Science*, 25, 426-439.
- Oliver, Richard L., and John E. Swan (1989), "Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach," *The Journal of Marketing*, 1, 21-35.
- Parasuraman, Anantharathan, Valarie A. Zeithaml, and Leonard L. Berry (1985), "A conceptual model of service quality and its implications for future research," *Journal of Marketing*, 41-50.

- Parasuraman, A., Valarie A. Zeithaml, and Leonard L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64, 12-40.
- Pallas, Florian, Vikas Mittal, and Christopher Groening (2014), "Allocation of Resources to Customer Satisfaction and Delight Based on Utilitarian and Hedonic Benefits," *Journal of Research in Marketing*, 2, 106-112.
- Rego, Lopo L., Neil A. Morgan, and Claes Fornell (2013), "Reexamining the Market Share-Customer Satisfaction Relationship," *Journal of Marketing*, 77, 1-20.
- Singh, Jagdip (1988), "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues," *Journal of Marketing*, 52, 93-107.
- Sundaram, D.S., Kaushik Mitra, and Cynthia Webster (1998), "Word-Of-Mouth Communications: a Motivational Analysis," *Advances in Consumer Research Volume*, 25, 527-531.
- Sweeney, Jillian C., Geoffrey N. Soutar, and Tim Mazzarol (2012), "Word of Mouth: Measuring the Power of Individual Messages," *European Journal of Marketing*, 46, 237 - 257
- Szymanski, David M., and David H. Henard (2001), "Customer Satisfaction: A Meta-analysis of the Empirical Evidence," *Journal of the Academy of Marketing Science*, 29, 16-35.
- Wetzer, Inge M., Marcel Zeelenberg, and Rik Pieters (2007), "Never Eat in that Restaurant, "I did!" Exploring why People Engage in Negative Word-of-mouth Communication," *Psychology & Marketing*, 24, 661-680.
- Zeithaml, Valarie A., Leonard L. Berry, and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60, 31-46.

How Health Claims Lead to Indulgence

Steffen Jahn, University of Goettingen, Germany
Till Dannewald, Wiesbaden Business School, Germany
Yasemin Boztug, University of Goettingen, Germany

EXTENDED ABSTRACT

Despite prevailing obesity problems, many people seem reluctant to exercise or restrain their food intake (Wansink 2014). Rather, we seem to prefer food that en pass  contributes to our health and well-being. For instance, fat-, sugar- and sodium-reduced food is very popular, as are products that have certain health benefits: some nutrients may affect cardiovascular health (Engler and Engler 2006; Erdmann, Cheung, and Schroder 2008), while others may reduce the risk of dementia (Perez et al. 2012). To make these products' healthiness accessible to consumers, many producers provide health-related information front-of-package or back-of-pack. Health claims advertise a specific health benefit of the entire product or its ingredients, such as vitamins, fiber, or potassium. While nutrition claims (e.g., 'low fat') have been shown to negatively affect our diets (e.g., Belei et al. 2012; Wansink and Chandon 2006), (functional) health claims are thought to contribute to the improvement of public health (Williams 2005). Specifically, it has been argued that health claims assist people in making better informed food choices in that they increase intake of healthy food (Belei et al. 2012; Williams 2005).

A potentially negative outcome of health claims is that consumers perceive the respective products to be less caloric, thereby resulting in overconsumption of that food (Roe, Levy and Derby 1999; Wansink and Chandon 2006). In this paper, we put forth another mechanism that links health claim provision with undesired overeating. This mechanism involves exposure to a health claim-featuring non-hedonic food product and delayed increased consumption of hedonic food (that does not feature a health claim) among some consumers. Specifically, we argue that when exposed to a health claim, high self-control consumers obtain a moral license that allows indulgence later on. Our contention is based on research in the field of moral licensing (e.g., Khan and Dhar 2006; Miller and Effron 2010; Wilcox et al. 2009) indicating that thoughts about moral behavior can license subsequent indulgent consumption. We move beyond existing research and show that the presence of a health claim allows licensing the delayed, increased consumption of hedonic food. Moreover, we argue that this effect is particularly strong when the health claim addresses a consumer-relevant benefit (van Kleef, can Trijp, and Luning 2005; Verbeke 2005) and when consumers have high self-control (Wilcox et al. 2009). We examine another boundary condition to the health claim-induced licensing effect in the form of product type. While health claims on products from healthy or neutral categories (such as yogurt or soup) allow licensing, health claims on hedonic products (such as chocolate custard) may rather induce a goal conflict resulting in decreased indulgence (Belei et al. 2012).

Results from lab experiment 1 where participants first evaluated a non-hedonic product that featured either a relevant or less relevant health claim and subsequently had the opportunity to consume chocolate beans (which unbeknownst to them was measured afterwards) support our predictions: participants who were randomly assigned to the high-relevance condition consumed more chocolate beans than their counterparts in the low-relevance condition. While increasing self-control reduced hedonic food intake in the low-relevance condition, this effect was not observed in the high-relevance condition.

Results from lab experiment 2 where the relevant health claim was placed on a healthy or hedonic product (in the control conditions no health claim was featured on the product packages) are also sup-

portive of our predictions: participants who were randomly assigned to the health claim/healthy product condition consumed more chocolate beans than participants in the no health claim/healthy product condition. At the same time, health claim presence on a hedonic product led to decreased chocolate bean consumption compared to the no health claim/hedonic product condition. While increasing self-control reduced hedonic food intake when there was no health claim featured on the product (both healthy and hedonic), this effect was not observed when a healthy product featured the health claim. In the latter case, consumption remained almost unaffected by self-control. When the hedonic product featured the health claim, high self-control consumers were particularly reluctant to eat the chocolate beans.

Our findings extend existing research in showing that the mere presence of health cues can affect lagged consumption. This is an important addition to Wilcox et al. (2009) who only focused on the health cue's effect on immediate choice. Our results also replicate previous findings that showed that in case of a health claim-induced goal conflict, subsequent consumption of indulging drinks decreased (Belei et al. 2012). However, when the product featuring the health claim was non-hedonic (soup or yogurt), lagged consumption increased. We further qualify existing research in showing that not all health cues produce similar outcomes. Although it has been shown that personal relevance of health claims is important (van Kleef, can Trijp, and Luning 2005; Verbeke 2005), research examining the downstream consequences of health claim provision (e.g., Belei et al. 2012) did not consider personal relevance. Our results indicate that particularly health claims that are personally relevant stimulate moral licensing. This boundary condition can be interpreted as speaking against a mechanism involving the magic bullet effect, where consumers generalize messages in health claims from one benefit to another (Roe et al. 1999).

On a larger scale, this paper adds to the growing body of research pointing to undesired consequences of providing nutrition information (Chandon and Wansink 2007; Elshiewy, Jahn, and Boztug 2016; Pham, Mandel, and Morales 2016; Wansink and Chandon 2006). Research that compared a large number of health claims has shown some claims are better understood than others (Grunert et al. 2009; L htenm ki et al. 2010; Mariotti, Kalonji, Huneau, and Margaritis 2010). Misunderstanding can become problematic when it causes health halos (Chandon and Wansink 2007; Elshiewy, Jahn, and Boztug 2016; Roe et al. 1999) and ultimately results in malnutrition. While most existing research focused on this phenomenon, we identified a mechanism where correctly understood health claims result in overeating.

REFERENCES

- Belei, N., Geyskens, K., Goukens, C., Ramanathan, S., and Lemmink, J. (2012). The Best of Both Worlds? Effects of Attribute-Induced Goal Conflict on Consumption of Healthful Indulgences. *Journal of Marketing Research*, 49 (6), 900–909.
- Chandon, P. and Wansink, B. (2007). The Biasing Health Halos of Fast Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side Dish Consumption Intentions. *Journal of Consumer Research*, 34 (3), 301–314.

- Elshiewy, O., Jahn, S. and Boztug, Y. (2016). Seduced by the Label: How the Recommended Serving Size on Nutrition Labels Affects Food Sales. *Journal of the Association for Consumer Research*, 1 (1), 104–114.
- Engler, M. M., and Engler, M. B. (2006). Omega-3 Fatty Acids—Role in Cardiovascular Health and Disease. *Journal of Cardiovascular Nursing*, 21 (1), 17–24.
- Erdmann, K., Cheung, B. W. Y., and Schroeder, H. (2008). The Possible Roles of Food-derived Bioactive Peptides in Reducing the Risk of Cardiovascular Disease. *Journal of Nutritional Biochemistry*, 19 (10), 643–654.
- Grunert, K., Lähteenmäki, L., Boztug, Y., Martinsdottir, E., Ueland, Ø., Åström, A., and Lampila, P. (2009). Perception of Health Claims among Nordic Consumers. *Journal of Consumer Policy*, 32, 269–287.
- Khan, U. and Dhar, R. (2006). Licensing Effect in Consumer Choice. *Journal of Marketing Research*, 43 (2), 259–266.
- Lähteenmäki, L., Lampila, P., Grunert, K., Boztug, Y., Ueland, Ø., Åström, A., and Martinsdottir, E. (2010). Impact of Health-Related Claims on the Perception of Other Product Attributes. *Food Policy*, 35, 230–239.
- Mariotti, F., Kalonji, E., Huneau, J. F., and Margaritis, I. (2010). Potential Pitfalls of Health Claims from a Public Health Nutrition Perspective. *Nutrition Reviews*, 68, 624–638.
- Miller, D. T. and Effron, D. A. (2010). Psychological License: When it Is Needed and How it Functions. In *Advances in Experimental Social Psychology*, Vol. 43, M. P. Zanna and J. M. Olson, eds. San Diego, CA: Academic Press, 117–158.
- Perez, L., Heim, L., Sherzai, A., Jaceldo-Siegl, K., and Sherzai, A. (2012). Nutrition and Vascular Dementia. *Journal of Nutrition Health and Aging*, 16 (4), 319–324.
- Pham, N., Mandel, N., and Morales, A. C. (2016). Messages from the Food Police: How Food-Related Warnings Backfire among Dieters. *Journal of the Association for Consumer Research*, 1 (1), 175–190.
- Roe, B. E., Levy, A. S., and Derby, B. M. (1999). The Impact of Health Claims on Consumer Search and Product Evaluation Outcomes: Results from FDA Experimental Data. *Journal of Public Policy and Marketing*, 18 (1), 89–115.
- Van Kleef, E., van Trijp, H. C. M., and Luning, P. (2005). Functional Foods: Health Claim–Food Product Compatibility and the Impact of Health Claim Framing on Consumer Evaluation. *Appetite* 44, 299–308.
- Verbeke, W. (2005). Consumer Acceptance of Functional Foods: Socio-Demographic, Cognitive and Attitudinal Determinants. *Food Quality and Preference*, 16, 45–57.
- Wansink, B. (2014). *Slim By Design—Mindless Eating Solutions for Everyday Life*. New York, NY: William-Morrow.
- Wansink, B. and Chandon, P. (2006). Can Low-fat Nutrition Labels Lead to Obesity? *Journal of Marketing Research*, 43 (4), 605–617.
- Wilcox, K., Vallen, B., Block, L., and Fitzsimons, G. J. (2009). Vicarious Goal Fulfillment: When the Mere Presence of a Healthy Option Leads to an Ironically Indulgent Decision. *Journal of Consumer Research*, 36 (3), 380–393.
- Williams, P. (2005). Consumer Understanding and Use of Health Claims for Foods. *Nutrition Reviews*, 63, 256–264.

Value of Weighty Products: The Influence of Haptic Weight on Product Evaluations

Ata Jami, University of Central Florida, USA
Maryam Kouchaki, Northwestern University, USA

EXTENDED ABSTRACT

People often hold or touch products before purchasing them. By holding the product in their hand, consumers gain the ability to evaluate the product's weight and other haptic information (e.g., texture, hardness, temperature). For some products (e.g., laptop or groceries), weight is a critical aspect that provides diagnostic information and it might be positively (e.g., groceries) or negatively (e.g., laptop) correlated with the product value. However, weight is not critical or diagnostic for some other products (e.g., DVDs), though consumers still register weight information when handling these products. From a standard economic or rational perspective, haptic experience of weight should not have any impact on the product's value for products whose weight provides neither positive nor negative diagnostic information. However, in this research, we posit the opposite showing that people perceive a product with a higher relative weight as more valuable and they are willing to pay more for a heavier product even though the weight is not a diagnostic attribute.

Past research has shown that experiencing physical weight unrelated to a target of judgment activates cognitive concepts metaphorically related to weight and subsequently changes people's judged importance of unconnected issues (Jostmann, Lakens, and Schubert 2009; Zhang and Li 2012). This research moves away from cognitive activation and interpretation of weight and looks at the affective interpretation of a target product's weight, albeit non-diagnostic, and how it influences perceived value of that same target product.

Importantly, haptic sensory input can also lead to affective interpretations. Peck and Wiggins (2006) have examined affective interpretations of the texture dimension of touch and shown that marketing messages incorporating a touch element with positive sensory feedback (e.g., having a soft texture) enhance affective response and are more persuasive for people with high autotelic need for touch. However, research has not looked at affective interpretations of weight in a product evaluation context.

Practical insight suggests that weight and heaviness lead to positive interpretations of products. Bang & Olufsen, a Danish electronics manufacturer, often make their products (from remote controls to sound systems) relatively heavy to create a perception of quality in their consumers' mind (Lindstrom 2005). Moreover, companies print brochures and catalogs for luxury or expensive products on heavy papers to express their distinct identity and create a stronger touch experience for their customers (Hultén, Broweus, and Dijk 2009). Therefore, we expect that in a product evaluation context where people hold the product with their hand, holding a heavy product lead to a positive affective reaction. Furthermore, the word "heavy" often describes an excessive amount, a more potent, or a more powerful object, such as in heavy clouds, heavy machinery, heavy traffic, heavy taxes, a heavy schedule, and heavy rain. Since people show a preference toward excessive sizes of objects (Silvera, Josephs, and Giesler 2002), we expect that semantic interpretations of heaviness (i.e., an excessive amount, a more potent, or a more powerful product) also lead to positive affective reactions toward the product. Thus, we hypothesize that holding a heavy product triggers positive affective reaction toward the product.

In a product evaluation context, consumers often make judgments by asking themselves how they feel about a given product and they use the experienced feeling to form their overall evaluation of the product (Pham 1998; Pham et al. 2001). Relying on predictions

of the affect-as-information account and affective interpretations of product heaviness, we hypothesize that consumers evaluate heavier products more positively and would be willing to pay more for the product, even when weight of that product provides irrelevant or non-diagnostic information.

We examined the effect of nondiagnostic weight on product evaluation and our proposed underlying mechanism across four experiments using different products. In Study 1a, we show that people are willing to pay more for a heavier package of earbuds. In Study 1b, we used point-of-purchase cardboard displays as the product. Point-of-purchase displays are frequently used to sell services, gift cards, tickets, season passes, or other products through retailers such as Costco. The point-of-purchase display we used showed a deal for playing bowling at a local bowling alley. Customers often hold the cardboard in their hand to read the details. Therefore, they receive haptic information of the cardboard display. Results show that people are willing more for the same bowling deal if they hold the heavier cardboard display.

In Study 2, we again used earbuds as the product and measured both people's affective reaction toward the product and their willingness to pay for it. Results show people have more positive affective reactions toward the heavier earbuds package and are willing to pay more for it. A mediation analysis also shows that people's positive affective reaction toward the product mediates the effect of weight on willingness to pay.

Past research has shown that whether people use their general positive or negative feelings induced by unrelated factors in their judgment depends on how much they feel they are entitled to judge (Croizet and Fiske, 2000). Thus, we expect variations in entitlement to judge a product moderates the effect of weight on product evaluation. In Study 3, we tested this prediction by manipulating people's sense of entitlement to evaluate the target product. In this study we used the same product as Study 1b: cardboard displays showing a bowling deal. To manipulate a sense of entitlement to evaluate the product, we first asked participants to complete a test about their expertise in bowling game. Then, we randomly provided them with feedback that they either had or did not have expertise in bowling game. Next, they were provided with a heavy or light board to evaluate. Results show that the effect of weight on perceived value was attenuated when participants received the feedback of not having expertise. In other words, people rely on the positive feelings induced by the heavy board to evaluate the bowling deal only when they thought they were expert in bowling game, thus, they were entitled to evaluate it.

REFERENCES

- Croizet, Jean-Claude and Susan T. Fiske (2000), "Moderation of Priming by Goals: Feeling Entitled to Judge Increases Judged Usability of Evaluative Primes," *Journal of Experimental Social Psychology*, 36 (2), 155-81.
- Hultén, Bertil, Niklas Broweus, and Marcus Dijk (2009), "The Touch Sense," in *Sensory Marketing*, London: Palgrave Macmillan UK, 134-54.
- Jostmann, Nils B., Daniël Lakens, and Thomas W. Schubert (2009), "Weight as an Embodiment of Importance," *Psychological Science*, 20 (9), 1169-74.

- Lindstrom, Martin (2005), *Brand Sense: How to Build Powerful Brands through Touch, Taste, Smell, Sight and Sound*, London, UK: Kogan Page Ltd.
- Peck, Joann and Jennifer Wiggins (2006), "It Just Feels Good: Customers' Affective Response to Touch and Its Influence on Persuasion," *Journal of Marketing*, 70 (4), 56-69.
- Pham, Michel Tuan (1998), "Representativeness, Relevance, and the Use of Feelings in Decision Making," *Journal of Consumer Research*, 25 (2), 144-59.
- Pham, Michel Tuan, Joel B. Cohen, John W. Pracejus, and G. David Hughes (2001), "Affect Monitoring and the Primacy of Feelings in Judgment," *Journal of Consumer Research*, 28 (2), 167-88.
- Silvera, David H., Robert A. Josephs, and R. Brian Giesler (2002), "Bigger Is Better: The Influence of Physical Size on Aesthetic Preference Judgments," *Journal of Behavioral Decision Making*, 15 (3), 189-202.
- Zhang, Meng and Xiuping Li (2012), "From Physical Weight to Psychological Significance: The Contribution of Semantic Activations," *Journal of Consumer Research*, 38 (6), 1063-75.

The Divergent Effects of Social Power on Consumers' Reactions to Waiting

Yanli Jia, Xiamen University, China

Robert S. Wyer, Jr., The Chinese University of Hong Kong, China

Hao Shen, The Chinese University of Hong Kong, China

EXTENDED ABSTRACT

Waiting is unavoidable in consumption situations. Many situational factors can influence it, including visceral states (Van den Bergh, Dewitte, & Warlop, 2008), background colors (Gorn, Chattopadhyay, Sengupta, & Tripathi, 2004), and culture (Chen, Ng, & Rao, 2005). However, relatively little is known about how one particular emotional state affects it (except a notable investigation by Huang, Huang, & Wyer, 2016). The present research examined the implications of power.

Prior findings offer seemingly conflicting perspectives on the influence of powerful feelings on waiting patience. Certainty prior findings suggest that powerful people tend to be less patient on the "dull" waiting than powerless ones (O'Brien, Anastasio, & Bushman, 2011). However, other findings suggest that feelings of power may increase patience (Joshi & Fast, 2013).

In this research, we suggest that experience of power can either increase or decrease patience, depending on different interpretations of waiting time. If waiting is interpreted as a restriction on personal freedom, feeling powerful leads people to perceive greater personal freedom and subsequently to act more at their free will (Galinsky, Gruenfeld, & Magee, 2003; Galinsky, et al., 2008; Guinote, 2007). Consequently, it should have an adverse effect on freedom-restricted wait. However, waiting also suggests one's self-control ability (Mischel & Ebbesen, 1970). In this situation, feelings of power increase people's perceived ability to exercise control over their own behavior (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009; Joshi & Fast, 2013), and consequently result in greater willingness to wait. Four studies evaluated the preceding hypotheses.

The first study examined whether experience of power made people less patient as a result of the increased feelings of restriction while waiting. Feelings of power were manipulated using the procedure employed by Galinsky, et al. (2003). Then, participants were exposed to a waiting scenario, in which they need wait to get an extra bonus. After imagining themselves in the situation described, participants were asked to report how long they would be willing to wait. Afterwards, their perceived restrictions on freedom while waiting, as well as their anticipated aversiveness to waiting were assessed.

The data showed that participants reported the shorter time they would like to wait when they imagined feeling powerful than when they did not, and this effect was mediated by the effect of feeling powerful on participants' perceptions that having to wait restricted their freedom.

Study 2 aimed to show the divergent effects of power on consumers' decisions to wait. A 3 (powerful, powerless, vs. control) \times 2 ("can" vs. "will" framing) between-subjects design was employed. Participants' powerful or powerless feelings were elicited as previously. In control condition, participants were asked to write about the last time they went to a grocery store (see Galinsky, et al., 2003). Participants then proceeded to an ostensibly unrelated task. They were asked to imagine that they went to a nice restaurant and found they had to wait for a while before being seated. Next, participants were asked either "how long can you wait?" or "how long will you wait?" Relying on prior research on linguistic framing (Fraser & Nolen, 1981; Patrick & Hagtvedt, 2012), "will you wait" emphasizes the personal will that drives waiting, whereas "can you wait" connotes people's personal ability.

Results showed that feeling powerful increased the length of waiting if the "can" question was asked, whereas decreased the length of waiting if the "will" question was asked. Furthermore, the results involving control condition suggested that feelings of power, rather than feelings of powerlessness, drove the observed effects.

Study 3 measured participants' feelings while waiting (feel their freedom to be restricted vs. feel their ability to tolerate the restriction to increase) to examine the proposed process of the effects. Participants were randomly assigned to cells of a 2 (powerful vs. powerless) \times 2 ("can" vs. "will" framing) between-subjects design. After the power induction task, participants proceeded to an ostensibly unrelated second task. Following the procedure employed by May and Monga (2014), participants were asked to imagine that they were given a gift of imported Swiss cheese. While they would want to eat it right now, they were aware that waiting could improve the taste of it. Given this information, participants were asked either "how long can you wait?" or "how long will you wait?" In addition, they reported their feelings while waiting from 1 (feel that my desire and behavior is restricted) to 9 (I'm capable of tolerating the restriction).

Results of study 3 replicated those of study 2 and more importantly, conformed the proposed mechanisms related to the perceptions while waiting.

The effects we identified in prior experiments are largely constrained to waiting scenarios. If our logic is correct, however, feeling powerful should have similar reactions to other experiences. In study 4, we asked participants to listen to the aversive music. Participants were randomly assigned to cells of a 2 (feelings of power: high vs. low) \times 2 (framing of the experience: control vs. ability-related) between-subjects design. After the power induction task, participants in control conditions were further instructed to listen to a piece of annoying music for about 1 minute. In ability-relevant conditions, however, the instructions included: "Different people have different abilities to deal with aversive experiences. We are interested in your ability to tolerate such experiences." Participants then listened to the music. Results confirmed the divergent effects of power on people's reactions to other waiting-like experiences.

Four studies provide converging evidence for the divergent effects of power on waiting patience, as well as to other waiting-like experiences. In doing so the current research provides several theoretical contributions. First, it offers a novel theoretical account that may help reconcile prior conflicting findings. Second, the current research is among the first to examine whether and how feelings of power activated in one domain can affect consumer patience in the second unrelated domains. Finally, the current research makes related contributions to the growing literature on linguistic framing, in which two words used interchangeably can have profoundly different influences.

REFERENCES

- Chen, H. A., Ng, S., & Rao, A. R. (2005). Cultural Differences in Consumer Impatience. *Journal of Marketing Research*, 42, 291-301.
- Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science*, 20, 502-508.

- Fraser, B., & Nolen, W. (1981). The association of deference with linguistic form. *International journal of the Sociology of Language, 1981*, 93-110.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*, 453.
- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology, 95*, 1450-1466.
- Gorn, G. J., Chattopadhyay, A., Sengupta, J., & Tripathi, S. (2004). Waiting for the Web: How Screen Color Affects Time Perception. *Journal of Marketing Research, 41*, 215-225.
- Guinote, A. (2007). Power and Goal Pursuit. *Personality and Social Psychology Bulletin, 33*, 1076-1087.
- Huang, X. I., Huang, Z. T., & Wyer, R. S. (2016). Slowing Down in the Good Old Days: The Effect of Nostalgia on Consumer Patience. *Journal of Consumer Research, 43*, 372-387.
- Joshi, P. D., & Fast, N. J. (2013). Power and reduced temporal discounting. *Psychological Science, 24*, 432-438.
- May, F., & Monga, A. (2014). When time has a will of its own, the powerless don't have the will to wait: Anthropomorphism of time can decrease patience. *Journal of Consumer Research, 40*, 924-942.
- Mischel, W., & Ebbesen, E. B. (1970). Attention in Delay of Gratification. *Journal of Personality and Social Psychology, 16*, 329-337.
- O'Brien, E. H., Anastasio, P. A., & Bushman, B. J. (2011). Time crawls when you're not having fun: Feeling entitled makes dull tasks drag on. *Personality and Social Psychology Bulletin, 37*, 1287-1296.
- Patrick, V. M., & Hagtvedt, H. (2012). "I Don't" versus "I Can't": When Empowered Refusal Motivates Goal-Directed Behavior. *Journal of Consumer Research, 39*, 371-381.
- Van den Bergh, B., Dewitte, S., & Warlop, L. (2008). Bikinis Instigate Generalized Impatience in Intertemporal Choice. *Journal of Consumer Research, 35*, 85-97.

Prepayment as a Self-Commitment Device to Improve Eating Habits

Joseph Yun Jie, Woosung University, South Korea

EXTENDED ABSTRACT

Incentives play a central role in marketing and economics. A great deal of recent field research suggests that financial incentives can motivate people to do healthy behaviors, such as consumption of healthy foods (Dolan, Galizzi, & Navarro-Martinez, 2015), gym attendance (Milkman, Minson, & Volpp, 2013), weight loss (Volpp et al., 2008), smoking cessation (Giné, Karlan, & Zinman, 2010), and other preventive behaviors (Kane, Johnson, Town, & Butler, 2004).

Many incentive programs studied people among who-by nature of their agreeing to participate in the study before the real study starts-are already willing to take on the tasks (Goldsmith & Dhar, 2013; Hossain & List, 2012; Levitt, List, & Sadoff, 2016). There are a few notable exceptions that studied participation and attendance itself. For instance, Charness and Gneezy (2009) studied gym attendance and found that financial incentives can help habit formation.

For many tasks, willingness to participate is a critical first step toward success. In fact, participation rate is arguably the biggest challenge in corporate wellness initiatives (Haisley, Volpp, Pellathy, & Loewenstein, 2012). This essay proposes a solution that increases participation rates without increasing per capita incentive rate. Although this essay focuses on a health-related behavioral task, the proposed solution can apply to other tasks.

Prepayment as a Proposed Solution

Our proposed solution is *prepayment*: moving the reward timing in traditional incentive programs to the start of the program or even before the program starts. People are told that acceptance of the prepayment is equivalent to acceptance of the task, which will be carried out later. If they are not able to complete the pre-specified task, the prepayment will be clawed back in the future.

Clawing back in extant literature refers to paying people their expected bonus in advance and taking it back if they underperform (Fryer Jr, Levitt, List, & Sadoff, 2012). Previous research has demonstrated the effectiveness of loss aversion and claw-back incentives on people's performance (Fryer Jr et al., 2012; Hossain & List, 2012; Levitt, List, Neckermann, & Sadoff, 2012). In these studies, people were incentivized to do things that they had already committed to (e.g., teaching students, preparing for exams, manufacturing consumer electronics, resulting in program participation rates of close to 100%. Instead of using claw-back to motivate people who already committed to certain tasks, we extended the use of incentive claw-back to initial participation.

In our proposed solution, both participation and subsequent effort to fulfill the task are voluntary; people still have the option of not fulfilling the task even after they have accepted the prepayment. This arrangement of prepayment and claw back can be seen as an informal contract. We have come up with this solution based on two major findings in economics and psychology.

Hyperbolic discounting (Laibson, 1997) states that valuation fall rapidly during initial delays but more slowly as time goes by (Thaler, 1981). One consequence of the hyperbolic discounting is that people are present biased (Frederick, Loewenstein, & O'donoghue, 2002; O'Donoghue & Rabin, 1999, 2001; O'Donoghue & Rabin, 2002). That is, they excessively favor gratification now at the expense of future gratification. Therefore, we proposed the following hypothesis:

Hypothesis 1: People are more likely to accept a payment to perform a task if the payment is made earlier (prepayment) than later (post-payment)

Loss aversion refers to the notion that losses have greater impact on preferences than gains, or losses loom large than gains (Tversky & Kahneman, 1991). An immediate consequence of loss aversion is that the anticipated loss of utility associated with giving up a valued good is greater than the anticipated utility gain associated with receiving it (Tversky & Kahneman, 1991). This discrepancy was termed the "endowment effect" by Thaler and colleagues (Kahneman, Knetsch, & Thaler, 1991; Thaler, 1980). In our proposed solution, once participants accept the prepayment, it becomes their endowment. Accepted prepayment, in the form of endowment, will therefore be valued higher than post-payment (Thaler, 1980). The endowment effect, in turn, will motivate people to keep participating in any pre-committed task in order to avoid the loss of the prepayment. Based on the above analysis we proposed our second hypothesis:

Hypothesis 2: Loss aversion after accepting prepayment can motivate people's subsequent task participation and completion.

Study Design

Program Invitation

We posted flyers, announcing our study, on the campus of a large public university in the Southwest of the United States. We did not use any stopping rule and aimed to recruit as many participants as possible within our two-week recruitment period. One hundred and sixty-six students (72 women, aged 18-50 years, MD=21) signed up to participate in the study. We introduced our study as the "Free Fruit Program" with the goal of promoting healthy eating among the student population. Participants were asked to complete a 3-minute online survey about their eating habits and exercise regime in return for \$2.00. At the end of the survey, participants were told to expect an email notification informing them about the start of the program.

Overall, 133 participants completed our online survey. We randomly assigned them to one of three treatment groups: We randomly assigned 133 students to one of three treatment groups: (1) Prepayment ($N = 44$), (2) Post- Payment ($N = 44$), and Control ($N = 45$). We sent an email invitation to each student two days before the start of the program phase 1:

Prepayment: You have been selected into our rewards group to get fresh fruit. That means not only can you get free fruit, you will be paid \$10 upfront for your 10-day participation. You only need to collect the money on the first day of our program (Monday, Nov. 3). If you miss your first chance to get fruit and come in on the 2nd day (Tuesday, Nov. 4), you will get \$9. By the same logic, if you come in on the 3rd day (which means you missed fruit twice), you will get \$8, and so on. Each time you missed your portion of your fruit, you will get 1 dollar less. Once you have collected your payment, you commit to collecting your fruit each business day until the program ends on Friday, Nov. 14. If you miss a day of fresh fruit, you will need to repay us \$1. If you miss your fruit on two days, you will need to repay us \$2, etc."

Post-payment: Participants in this group received the following email: "You have been selected into our rewards group to get fresh

fruit. That means not only can you get free fruit, you will also be paid \$1 whenever you collect your fruit. The program starts on Monday (Nov. 3). For the next 10 business days, you can get one portion of free fruit plus 1\$ each day.”

Control: Participants in this group received the following email: “We will provide free fresh fruit from tomorrow (Monday, Nov 3). For the next 10 business days, you can get one portion of free fruit each day.”

In addition, participants in all treatment conditions were informed about the location and collection time (10-11am and 2-3pm every business day) to get their fruit (and payment).

Program Implementation

A research assistant prepared the fruit every day (consisting of 3-5 different kinds of fruit, including apples, oranges, pears, plums, watermelon, mangos, strawberries, grapes, and bananas) and recorded the participants’ choices. The fruit was displayed in cups on a stand for participants to choose from.

Program Extension

On the last day of Phase 1, we informed participants about the extension of our program for another 10 business days (i.e., 2 more weeks). They were told that “Some participants liked our program so much that they were asking for an extension. We are therefore happy to announce that we will, indeed, by extending our program for another TWO WEEKS, beginning tomorrow.” Unlike for Phase 1, participants were informed in Phase 2 that they would receive fresh fruit *only*, and that no monetary compensation would be provided.

Results

We examined our data in two ways. First, we analyzed aggregated daily show-up frequencies (i.e., the total number of people showing up each day) over the 20-day program period. Second, we used survival analysis to analyze individual level data.

Overall, 27 participants out of 44 (61.4%) showed up at least once in the Prepayment condition, 18 out of 44 (40.9%) in the Post-Payment condition, and 16 out of 45 (35.6%) in the Control condition (Test for Equality of Proportions, $\chi^2(2) = 6.62, p < 0.05$). Ten participants showed up every day in Phase 1, out of whom seven were from the Prepayment condition, two were from the Post-Payment condition, and one was from the Control condition ($\chi^2(2) = 6.82, p < 0.05$). None of the participants showed up every day in Phase 2.

ANOVA

We analyzed the variance of the show up data over the 10-day period of Phase 1 (see Figure 1). We treated each group of subjects as one unit of analysis ($N = 3$). Daily show ups of each group had been repeatedly observed for 10 days. A repeated measure ANOVA of the daily show up data with treatment (Prepayment, Post-Payment, Control) as between-unit factor and days as within-unit factor yielded significant main effects ($F(2, 18) = 104.6, p < 0.001$). Post-hoc tests with Bonferroni adjustment (Rosenthal & Rosnow, 1991) indicated that the average number of students showing up during Phase 1 was significantly higher in Prepayment condition than Post-Payment condition ($M_{\text{Prepayment}} = 17.1$ vs. $M_{\text{Post-Payment}} = 9.6, p < 0.001$) or Control condition ($M_{\text{Control}} = 6.1, p < 0.001$). Show-up was also significantly higher in Post-Payment condition than in Control condition ($p < 0.01$).

An analogous ANOVA for Phase 2 (see Figure 1) yields similarly significant treatment effects ($F(2, 18) = 35.8, p < 0.001$), although for considerably lower show-up rates. Post-hoc tests with a Bonferroni adjustment indicated that show-up was significantly higher in the Prepayment condition than in the Post-Payment condition ($M_{\text{Prepayment}} = 4.1$ vs. $M_{\text{Post-Payment}} = 0.8, p < 0.001$) or Control condition (M_{Control}

$= 1.1, p < 0.001$). Show-up in the Post-Payment condition was not significantly different from the Control condition.

ANOVA results showed that the between-unit factor is mainly driving the show up variance. Post-hoc test confirmed the superiority of Prepayment in motivating show ups. Due to random assignments of individual members, the between-group difference can be caused by no other reasons than experimental treatments. Therefore, causal inference in traditional RCTs are still valid; prepayment makes more people show up.

Survival Analysis

Next, we explore the dynamic process by using survival analysis. Behaviorally, task participation is measured by initial showing up to get the prepayment, while task fulfillment is measured by the number of days participants persisted before they stopped coming. In order to do survival analysis, we define a failure event first. We have selected day 18 as a cut-off date. That is, if one participant could not persist to day 18 or later, she was considered “dead” on her last day to pick up the fruit. Otherwise the participant survives our observation window. All our results remained significant and qualitatively unchanged if we define the cut-off day as any day between 15 and 20.

Each participant’s days “survived” was calculated as the number of days before their last collection of fruit (last day included). For instance, if a participant’s last day to pick up fruit is on day 15, then she survived 15 days and was dead on day 15. Most of the participants were “dead” by the end of Phase 2, with only 6 participants surviving. Among them, 5 were from Prepayment condition; 1 was from Post-Payment condition. Survival analysis showed that there was an initial loss of participants on day 1 across all three treatments. Prepayment program had a significantly higher survival probability than the other two programs, suggesting that the Prepayment program was more successful than the other two programs ($P_{\text{Prepayment}} = 61.4\%$, $P_{\text{Post-Payment}} = 40.9\%$, $P_{\text{Control}} = 35.6\%$, $\chi^2(2) = 6.62, p < 0.05$). Although there was a sudden drop after day 10, reflecting the removal of the financial incentives in Phase 2, Prepayment still did significantly better than the other programs.

Our survival analysis provided convergent evidence that there were significant differences among the three treatments in motivating task participation and task fulfillment, both for the entire four weeks (Phase 1 and Phase 2, Log-Rank Test, $\chi^2(2) = 13.4, p < 0.01$), as well as for the last two weeks (Phase 2, $\chi^2(2) = 9.2, p < 0.01$). Pairwise comparisons showed that Prepayment with Bonferroni adjustment had a significantly higher survival rate than Post-Payment condition ($\chi^2(1) = 7.2, p < 0.01$, entire four weeks; $\chi^2(1) = 4.9, p < 0.05$, last two weeks) and Control condition ($\chi^2(1) = 12.2, p < 0.001$, entire four weeks; $\chi^2(1) = 7.2, p < 0.01$, last two weeks). There were no significant differences between Post-Payment condition and Control condition (neither for entire four weeks nor last two weeks).

Discussion

One major issue of prepaying people is how to enforce money collection if they have not fulfilled the pre-specified task. In our study, most of the students who accepted the prepayment participated in the subsequent tasks. For those whose money needs to be collected, we were able to recover prepayments from all participants (by contacting them via email and/or text) except one. This fact indicated that students treated the prepayment program as an informal contract: once they accepted the prepayment, they knew they should either fulfil the task or return the money in the end.

Our results show that loss aversion, operationalized as daily goals, led to increased participation rates and significantly higher show-up rates and persistence with the program, even when financial incentives were removed (although at considerably lower levels).

Unlike previous studies that compared loss aversion to programs with one shot ex-post payments, we introduced a tougher-to-beat control condition, post-payment on a daily basis, that offered participants financial incentives and the flexibility to receive those without the potential of repayments. We believe that this post-payment condition is a more stringent test of our prepayment program, as the evidence from a pilot study with 150 online survey participants, who were shown all three programs side by side, indicates that most people (73%) preferred the flexibility of post-payment to the prepayment program (15%) and to the program without financial incentives (12%). This preference suggests that key to success would be to roll out the program without alternative options rather than rely on self-selection.

In summary, field evidence for the program demonstrates that people were more likely to show up and persist with the prepayment program at a higher rate. This effect continued post-intervention.

REFERENCES

- Charness, G., & Gneezy, U. (2009). Incentives to exercise. *Econometrica*, 77(3), 909-931.
- Dolan, P., Galizzi, M. M., & Navarro-Martinez, D. (2015). Paying people to eat or not to eat? Carryover effects of monetary incentives on eating behaviour. *Social Science & Medicine*, 133, 153-158.
- Frederick, S., Loewenstein, G., & O'donoghue, T. (2002). Time discounting and time preference: A critical review. *Journal of economic literature*, 40(2), 351-401.
- Fryer Jr, R. G., Levitt, S. D., List, J., & Sadoff, S. (2012). Enhancing the efficacy of teacher incentives through loss aversion: A field experiment. *National Bureau of Economic Research*.
- Giné, X., Karlan, D., & Zinman, J. (2010). Put Your Money Where Your Butt Is: A Commitment Contract for Smoking Cessation. *American Economic Journal: Applied Economics*, 2(4), 213-235. doi:10.2307/25760239
- Goldsmith, K., & Dhar, R. (2013). Negativity bias and task motivation: Testing the effectiveness of positively versus negatively framed incentives. *Journal of experimental psychology: applied*, 19(4), 358.
- Haisley, E., Volpp, K. G., Pellathy, T., & Loewenstein, G. (2012). The impact of alternative incentive schemes on completion of health risk assessments. *American Journal of Health Promotion*, 26(3), 184-188.
- Hossain, T., & List, J. A. (2012). The behavioralist visits the factory: Increasing productivity using simple framing manipulations. *Management Science*, 58(12), 2151-2167.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *The Journal of Economic Perspectives*, 5(1), 193-206.
- Kane, R. L., Johnson, P. E., Town, R. J., & Butler, M. (2004). A structured review of the effect of economic incentives on consumers' preventive behavior. *American journal of preventive medicine*, 27(4), 327-352.
- Laibson, D. (1997). Golden eggs and hyperbolic discounting. *The Quarterly Journal of Economics*, 443-477.
- Levitt, S. D., List, J. A., Neckermann, S., & Sadoff, S. (2012). The behavioralist goes to school: Leveraging behavioral economics to improve educational performance. *National Bureau of Economic Research*.
- Levitt, S. D., List, J. A., & Sadoff, S. (2016). The effect of performance-based incentives on educational achievement: Evidence from a randomized experiment. *National Bureau of Economic Research*.
- Milkman, K. L., Minson, J. A., & Volpp, K. G. (2013). Holding the Hunger Games hostage at the gym: An evaluation of temptation bundling. *Management Science*, 60(2), 283-299.
- O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. *American Economic Review*, 103-124.
- O'Donoghue, T., & Rabin, M. (2001). Choice and Procrastination. *The Quarterly Journal of Economics*, 116(1), 121-160.
- O'Donoghue, T., & Rabin, M. (2002). Addiction and present-biased preferences. *Department of Economics, UCB*.
- Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of behavioral research: Methods and data analysis* (Vol. 2): McGraw-Hill New York.
- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior & Organization*, 1(1), 39-60. doi:http://dx.doi.org/10.1016/0167-2681(80)90051-7
- Thaler, R. (1981). Some empirical evidence on dynamic inconsistency. *Economics Letters*.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics*, 1039-1061.
- Volpp, K. G., John, L. K., Troxel, A. B., Norton, L., Fassbender, J., & Loewenstein, G. (2008). Financial incentive-based approaches for weight loss: a randomized trial. *Jama*, 300(22), 2631-2637.

How Power States Influence the Persuasiveness of Top-dog versus Underdog Appeal

Liyin Jin, Fudan University, China
Yunhui Huang, HKUST, China

EXTENDED ABSTRACT

Both top-dog and underdog positioning have been widely used in marketplace. However, prior research provides no clear answer regarding which strategy is more persuasive, nor does it identify conditions under which one method of positioning may be superior to the other (Kim et al., 2008; McGinnis and Gentry 2009; Paharia, et al., 2011; Vandello, Goldschmied, and Richards 2007). Attempting to fill this gap, we examine the effectiveness of underdog and top-dog appeals from the perspective of consumers' psychological state of power, because definitions of both constructs are based on hierarchical differences between different parties (French and Raven 1959; Magee and Galinsky 2008). Specifically, we propose that consumers in a low-power (high-power) state would respond to top-dog (underdog) appeals more positively because their desire to restore (express) power would be satisfied by showing support for a top-dog (underdog) brand.

Further, the proposed effect between positioning and power are moderated by the sales strategy (DeBono 2006; Rucker and Galinsky 2009). Particularly, when a hard-sell strategy that focuses on the utilitarian aspect of a branded product is adopted, lower-power consumers may no longer prefer top-dog appeals because endorsing top-dogs that are only functionally superior does not effectively restore their power. When a soft-sell strategy that focuses on the symbolic aspect of a branded product is adopted, high-power consumers will not respond more positively to underdog appeals because in this case, endorsing an underdog brand that is symbolic inferior will endanger their high-power status.

Study 1 tested our basic hypothesis that high (low) -power consumers are more likely to endorse underdogs (top dogs) in the context of business competition. Participant were first asked to write about a particular incident in which they had power over others or in which someone else had power over them. Afterward, participants were presented with two companies, one described as the top dog, and the other underdog, that were bidding for the same job. As the main dependent variable, participants indicated their support toward each company to win the bid (1 = *not at all*, 11 = *a great deal*). A repeated-measure ANOVA yielded a significant interaction of power and appeal ($F(1, 57) = 7.42, p < .01$): high-power participants were more likely to support the underdog company ($M = 8.38$) than the top-dog company ($M = 7.03; t(57) = 2.48, p < .05$), whereas participants in low-power states were more likely to support the top-dog company ($M = 7.77$) than the underdog company ($M = 6.59; t(57) = 2.02, p < .05$).

Study 2 aimed to conceptually replicate the basic finding using a between-subject design as well as a different power manipulation. Moreover, we explored the power restoration/expression mechanism in this study. To manipulate power, we adopted the role play procedures from Galinsky, Gruenfeld, and Magee (2003), in which participants were randomly assigned to play the role of either a manager (high-power) or a subordinate (low-power). Afterward, participants were presented with an ad copy, which featured a car rental company either described as a top-dog or an underdog. Participants then indicated their liking for the target brand (1 = *not at all*, 7 = *very much*). To capture the underlying mechanisms, participants also indicated the perceived instrumentality of the advertised brand in terms of power expression and power restoration. Again, a significant interaction between power state and appeal type ($F(1,117) = 8.82, p < .01$) was obtained. As expected, high-power participants responded to under-

dog appeals more positively than to top-dog appeals ($M_{\text{underdog}} = 3.42, M_{\text{top-dog}} = 2.60; t(59) = 2.18, p < .05$), whereas the pattern reversed for low-power participants ($M_{\text{underdog}} = 2.77, M_{\text{top-dog}} = 3.47; t(58) = 2.02, p < .05$).

The same analysis on the perceived instrumentality in power expression yielded the predicted power state x appeal type interaction ($F(1,117) = 9.11, p < .01$) such that underdog (vs. top-dog) brands were perceived as more instrumental for power expression only for high-power participants ($p < .01$). The same analysis on the perceived instrumentality in power restoration yielded again a power state x appeal type interaction ($F(1,117) = 5.73, p < .05$) such that top-dog (vs. underdog) brands were perceived as more instrumental for power restoration only for low-power participants ($p < .01$). Two moderated mediation analyses further confirmed that power expression/restoration mediated the effect of positioning appeal on brand attitude for high/ low-power participants (Preacher and Hayes 2011).

Our final study tested the moderating role of sales strategy. Thus, we adopted a 2 (power) x 2 (positioning appeal) x 2 (sales strategy) between-subject design. Power and positioning appeals were manipulated using the same methods as in experiment 2. We adopted Rucker and Galinsky's (2009) method to manipulate sales strategies, with the hard-sell message focusing on functionality, whereas the soft-sell message focusing on status. As the dependent variable, participants indicated their preference for the advertised brand (1 = *not at all*, 7 = *very much*). The analyses revealed that when a hard-sell strategy was employed, the interaction between power state and appeal type was significant ($F(1, 177) = 4.15, p < .05$): high-power participants evaluated the advertised brand more positively when an underdog (vs. top-dog) appeal ($p < .05$) was utilized. However, low-power participants reported similar evaluations regardless of the appeal used. In contrast, when a soft-sell strategy was employed, there was only a main effect of appeal type ($F(1, 171) = 11.90, p = .001$): low-power participants still evaluated the advertised brand more positively when the top-dog (vs. underdog) appeal ($p < .01$) was used. Reversing our previous pattern however, high-power participants also evaluated the advertised brand more positively when a top-dog (vs. underdog) appeal was used ($p < .05$).

Three studies collectively demonstrated that consumer preferences toward underdogs and top-dogs depend on their psychological power states. In addition, we identified potential motives underlying individuals' differential attitudes toward underdogs and top-dogs: expressing and restoring power. Importantly, consumers' responses toward underdog and top-dog brands may shift depending on individuals' power states and whether appeals are communicated using a hard- or soft-sell strategy. This research contributes to both power literature and research on underdog and top dog appeals.

REFERENCES

- DeBono, K. (2006). Self-monitoring and consumer psychology. *Journal of Personality, 74*(3), 715–738.
- French, J. R. P., Jr., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). Oxford England: Univer. Michigan.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*(3), 453–466.

- Kim, J., Allison, S. T., Eylon, D., Goethals, G., Markus, M., McGuire, H., & Hindle, S. (2008). Rooting for (and then abandoning) the underdog. *Journal of Applied Social Psychology, 38*, 2550–2573.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals, 2*(1), 351–398.
- McGinnis, L. P., & Gentry, J.W. (2009). Underdog consumption: An exploration into meanings and motives. *Journal of Business Research, 62*, 191–199.
- Paharia, N., Keinan, A., Avery, J., & Schor, J.B. (2011). The underdog effect: The marketing of disadvantage and determination through brand biography. *Journal of Consumer Research, 37* (5), 775–790.
- Rucker, D. D., & Galinsky, A. D. (2008). Desire to acquire: Powerlessness and compensatory consumption. *Journal of Consumer Research, 35*(2), 257–267.
- Vandello, J.A., Goldschmied, N.P., & Richards, D. A. R. (2007). The appeal of the underdog. *Personality and Social Psychology Bulletin, 33*(12), 1603–1616.

Buyers Are More Impatient Than Sellers: Why Preferences for the Timing of Peaks Diverge in Experiential Purchases

Zhenyu Jin, University of Wisconsin - Milwaukee, USA

Wei Lu, Shanghai Jiao Tong University, China

Xiaojing Yang, University of Wisconsin - Milwaukee, USA

Meng Duan, Shanghai Jiao Tong University, China

Jin Luo, Shanghai Jiao Tong University, China

EXTENDED ABSTRACT

Suppose that the world-famous portrait, *Mona Lisa*, the most precious and valuable piece (“peak item”), will be exhibited at your local art museum together with some other great works of art. At what moment during their visiting duration will visitors (experience buyers) expect to see the *Mona Lisa*? Moreover, do expectations occur at the beginning, middle, or end? From an alternate perspective, when would the exhibition organizer (experience seller) prefer for the portrait to appear?

In consumer research, a growing body of literature has noticed and begun to explore the consumption of experiences (e.g., Boven and Gilovich 2003; Carter and Gilovich 2010, 2012, 2014; Ratner and Hamilton 2015; Li and Lee 2016). In the museum visiting context, the *peak* item, *Mona Lisa*, constitutes a *peak* moment (the most enjoyable or exciting moment when experiencing it (Privette 1983). In reality, regarding experience sellers (e.g., managers of a park, curators of a museum, organizers of a show, etc.), they are willing to locate the peak item at the end of the experience, because the ending part of an event is generally well remembered (Burt, Kemp, and Conway 2003), and experience sellers want consumers to remember the activity and retain a good memory of it.

However, we proposed that experience buyers would prefer an earlier *peak* rather than the delayed *peak* that is desired by experience buyers. Three studies consistently provided support for our hypotheses that experience buyers (vs. sellers) construe an experience at a relatively low (vs. high) level. Thus, they tend to form a local (vs. global) and shortsighted (vs. farsighted) perspective, so that buyers (vs. sellers) expect the peak to appear earlier (vs. later) in an experiential purchase. These findings indicate theoretical implications for the literature on experiential purchases and buyer-seller discrepancy, and empirical implications for aiding in the optimal design of activities, events, and a broad range of experiential consumption in order to increase consumers’ anticipated satisfaction.

Theoretical Background

Experiential Purchase and Peak Experience

In contrast to material purchases, which are made with the intention of ownership and possession (Carter and Gilovich 2012), experiential purchases are made with the primary purpose of consuming some experiences, which are intangible (Boven 2005; Keinan and Kivetz 2011) and impermanent (Carter and Gilovich 2012). An influential stream of literature has identified distinctions between experiential purchases and material purchases (see e.g., Chan and Mogilner 2013; Nicolao, Irwin, and Goodman 2009; Gilovich, Kumar and Jampol 2015). However, only a limited amount of research has explored the characteristics of one certain experience, which tends to have a typical narrative structure with a beginning, middle, and end (Boven 2005).

In general, experiential purchases provide consumers with fun, pleasure, and feelings of excitement (Dhar and Wertenbroch 2000), all of which constitute enjoyment-related benefits (Nicolao, Raghunathan and Mahajan 2007). In an experiential purchase, the maxi-

mum hedonic benefits are usually brought by a *peak experience*. A *peak experience* derives from Maslow (1962), which proposes that it is a period with the highest level of happiness. In the 1990s, researchers argued that consumers prefer a delayed peak, which means that the later the peak appears, the more enjoyment they feel, because consumers rely more on the *peak* and *end* when forming their overall evaluations of an experience (Fredrickson and Kahneman 1993; Bhargava, 2009).

Construal Level Theory

Construal level theory asserts that objects can be mentally represented either abstractly or concretely, depending on perceived psychological distance (Trope and Liberman 2003, 2010). Specifically, a high (vs. low) level of construal makes an individual has an abstract (vs. concrete) and holistic (vs. analytics) mindset, which focuses on the global (vs. local), “larger (vs. smaller) picture”, central (vs. secondary) features, and the final goal of (vs. the process and methods toward) the event or object (Trope and Liberman, 2010).

Buyer-Seller Discrepancy and Level of Construal

The presence of sellers and buyers, and the interactions between the two, are fundamental to the field of marketing (Meehan and Wright, 2012). A large body of extant literature has explored the buyer-seller discrepancy regarding price (Irmak, Wakslak, and Trope 2013), perceptions of price unfairness (Xia, Monroe, and Cox, 2004), reasons for product or service failure (Bolton and Mattila 2015), various aspects of the product (Johnson, Haubl and Keinan 2007), and level of construal (Irmak, Wakslak, and Trope 2013). However, little is currently known about buyer-seller discrepancy in the context of experiential purchases.

In experiential purchases, experience buyers, who tend to consider themselves as immersed in an event (Zhang and Yang 2015), would like to construe behaviors more concretely (Hamilton 2014), because they are likely to perceive that events happened to the “self” (Spassova and Lee 2013), which invokes relatively local and shortsighted perspectives, and a lower level of construal. On the other hand, experience sellers, who provide experiences for others, are more likely to think of “they” or “others” more frequently, which invokes relatively global and far-sighted perspectives. Thus, experience sellers tend to construe behaviors more abstractly and form a higher level of construal (Yan and Sengupta 2011).

According to the impatience studies, the degree of impatience reflects a trade-off between the preferences for immediate rewards over delayed rewards (Kim and Zauberman, 2013). In our current study, the degree of impatience reflects a preference for the timing of peaks in experiential purchases. The extant literatures (e.g., Goodman and Malkoc 2012; Malkoc, Zauberman and Bettman 2010) have also demonstrated that level of construal affects impatience.

In summary, we proposed that the role in experiential purchases leads to different preferences for the timing of peaks. Specifically, experience buyers form a self-centered and local perspective, and develop a shortsighted view and a relatively lower level of construal. Thus, experience buyers are likely to exhibit more impatience regarding experience the peak of the event. In contrast, experience

sellers have an others-related and global perspective, and develop a farsighted view and a relative higher level of construal. Thus, experience sellers would like to show less impatience to make consumers experience the peak.

Study 1: Consumer Choice

The purpose of Study 1 was to provide initial evidence for our prediction that experiencers (buyers) would like the peak to appear earlier than do experience providers (sellers).

Design and Procedure

148 individuals (69 females, mean age=35,) were recruited from Amazon Mechanical Turk (MTurk), a subject pool, that has been shown to be reliable for experimental research (Goodman, Cryder, and Cheema 2013). Participants were randomly assigned to either the *buyer* condition or the *seller* condition. Each participant was asked to imagine himself/herself to be a tourist (vs. organizer) to visit (vs. organize) a film festival celebration which will last three days. Next, participants in the buyer (vs. seller) condition were asked to write down *one of their favorite film genres (vs. the most popular film genre in their opinions)*. They were then asked to schedule the favorite genre (vs. most popular genre) on Day 1, Day 2, or Day 3.

Results and Discussion

A chi-square test indicated that the proportions of the day choices differed by condition ($\chi^2(1, N=148) = 8.803, p = 0.012$). More importantly, we examined the choices of Day 1 and Day 3 cross conditions using a two-tailed z-test for difference in proportions. We found that, in the experience-buyer condition, the proportion (represented as “P”) of the choice of Day 1 was significantly higher than that of the choice of Day 3 ($P_{\text{Day 1}} = 23.6\%, P_{\text{Day 3}} = 13.5\%; N = 148; z = 2.242, p < 0.05$). On the other hand, in the experience-seller condition, the proportion of the choice of Day 3 was significantly higher than that of the choice of Day 1 ($P_{\text{Day 1}} = 12.2\%, P_{\text{Day 3}} = 21.6\%; N = 148; z = 2.172, p < 0.05$).

The results provided basic support for our prediction that buyers prefer scheduling the peak on the first day of the entire celebration duration, while sellers prefer scheduling the peak on the last day of the entire celebration duration.

Study 2: Anticipated Satisfaction

Since buyers (vs. sellers) want the peak to appear earlier (vs. later) than sellers (vs. buyers) do, buyers (vs. sellers) should have better anticipated satisfaction with the visiting plan that begins (vs. ends) with the peak moment. To confirm this prediction, we conducted study 2.

Design and Procedure

220 students (99 females, mean age=21) recruited from a U.S. Midwest university completed this study. We conducted a 2 (role: buyer vs. seller) \times 2 (timing of peak: beginning vs. end) between-subjects design. Participants were randomly assigned to one of the four conditions. Participants were instructed to imagine themselves to be tourists (vs. curators) *visiting the museum (vs. deciding how these collections should be displayed)*. Then, participants were presented with one of the two plans:

Plan 1: See the Mona Lisa first, and then the other collections successively;

Plan 2: See the other collections successively, and then see the Mona Lisa last.

Then, participants were asked to rate their anticipated satisfaction on a 9-point scale (1=not at all satisfied, 9=very satisfied).

Results and Discussion

We utilized ANOVA with *role* and *timing of peak* as the independent variables and *anticipated satisfaction* as the dependent variable. A significant two-way interaction effect was found between role and timing of peak ($F(1, 216) = 23.491, p < .001, \eta^2 = .098$), indicating that, for experience buyers, anticipated satisfaction was higher when the peak is at the beginning than when the peak is at the end ($M_{\text{begin with peak}} = 6.89, M_{\text{end with peak}} = 6.00; F(1, 110) = 5.274, p = .024$). On the other hand, for experience sellers, anticipated satisfaction was higher when the peak is at the end than when the peak is at the beginning ($M_{\text{begin with peak}} = 4.60, M_{\text{end with peak}} = 6.70; F(1, 106) = 18.957, p < .001$).

Study 2 provided stronger support for our hypothesis that experience buyers would prefer the peak to occur earlier and have higher anticipated satisfaction with a visiting plan that begins with a peak moment; whereas, experience sellers would like to arrange the peak to be later and have higher anticipated satisfaction with a plan that concludes with a peak moment.

Study 3: Mechanism Exploration

The first step of Study 3 was to determine whether buyers and sellers construe a certain experience at different construal levels. Given that individuals with a low (vs. high) level of construal are more (vs. less) impatient than those with a high (vs. low) level of construal (Malkoc, Zauberan, and Bettman 2010), we predicted that low (vs. high) construal-level individuals would like to see the peak occur earlier (vs. later). The second step of Study 3 was to manipulate participants' level of construal to test out logic that if buyers (vs. sellers) are manipulated into a high (vs. lower) construal level, buyers (vs. sellers) should be anticipated to prefer a later (vs. earlier) peak than buyers (vs. sellers) who are not manipulated.

Study 3a

Design and Procedure

148 U.S. residents (69 females, mean age=35) recruited from MTurk participated in this study. They were randomly assigned to either the event-experiencing (i.e., buyer) or event-offering (i.e., seller) condition, and then answered a questionnaire that we adapted from the behavior identification form (BIF; Vallacher and Wegner, 1989). We modified the original BIF slightly because of our special research context. (see, e.g., Irmak, Wakslak, and Trope, 2013; Study 1).

Results and Discussion

As predicted, participants in the experience-buying condition had a stronger preference for low-construal-level identifications ($M = 4.51$); whereas, participants in the experience-selling condition had a stronger preference for high-construal-level identification ($M = 5.82; F(1, 146) = 11.702, p = .001$).

Study 3b

In Study 3b, we manipulated participants' construal level and checked their preferences for the timing of the appearance of the peak.

Design and Procedure

Previous research has demonstrated that considering questions of “why (how)” are effective in procedurally priming high (low)-level construal (Fujita et al. 2006). We conducted a pretest to evaluate the effect of our manipulation. 121 individuals (45 females, mean age=36) from MTurk participated in the pretest. Results show that manipulations were found to be effective and reliable ($M_{\text{“why” condition}} = 5.21, M_{\text{“how” condition}} = 4.36; F(1, 119) = 5.596, p = .02$)

Then, we manipulated experience buyers into a high level of construal and manipulated experience sellers into a low level of construal.

246 participants (110 females, mean age=32) were recruited from MTurk were randomly assigned to the four conditions. In the buyer (vs. seller)-condition, participants firstly wrote down one of *their favorite* (vs. *the most popular*). Then, participants in the buyer (vs. seller)-condition were randomly assigned to one of two sub-conditions: the high (vs. low)-construal-level condition and the control condition. Manipulations were consistent with those in those in the pretest. Next, participants in the buyer (vs. seller) condition were asked “At what moment do you *expect to see your idol* (vs. *plan to schedule the performance*) in the 90-minute show?” Finally, each participant’s mood was test using the PANAS ($\alpha=.955$; Townsend and Sood 2012).

Results and Discussion

A one-way ANOVA revealed that, in the experience-buyer condition, participants who were manipulated to have a high construal level wanted to see their idol later than those in the control condition do ($M_{\text{high-level manipulated}} = 50.19$, $M_{\text{control}} = 40.37$; $F(1,123) = 4.337$, $p=.039$). On the other hand, in the experience-seller condition, participants who were manipulated to have a low construal level wanted to schedule the idol earlier than those in the control condition do ($M_{\text{low-level manipulated}} = 48.82$, $M_{\text{control}} = 63.86$; $F(1,119) = 16.777$, $p<.001$). In addition, manipulation did not affect participants’ mood ($F(1, 123) = 1.571$, $p=.213$; $F(1, 119) = 1.136$, $p=.289$), ruling out mood as an alternative explanation. Study 3 support out prediction that buy/seller’s construal level drives different preference for the timing of peak.

Discussion and Conclusion

Three studies demonstrated that, in experiential purchases: 1) buyers are more impatient than sellers regarding waiting for the peak moment, and prefer the peak moment to occur earlier than sellers do; 2) buyers achieve more satisfaction when the experience begins with the peak, while sellers achieve better satisfaction when the experience ends with the peak; and 3) the phenomenon of this preference divergence was driven by the fact that buyers have a relatively lower psychological construal level, while sellers have a relatively higher psychological construal level.

Theoretically, the present research lies in the domain of experiential purchases. Although the extant research focuses on either the difference between experiential purchases and material purchases, or the different types of experiential purchases, the present study focuses on the course of one certain experience, i.e., why buyers prefer the peak to appear earlier and sellers prefer the peak to appear later. In addition, the present article found that it is psychological construal level that drives the different preference for the timing of peak moment between buyer and seller.

In practice, many marketers and managers apply the lay theory that the peak moment should be scheduled at the end of an event or activity based on the recency effect. However, our findings indicate that consumers seldom consider the event from a global perspective, and prefer the peak to appear earlier than sellers do in an event. Thus, our research provides a novel perspective for optimally designing an event or activity.

REFERENCES

- Bhargave, R. (2009). “Aspects of experiences: The role of novelty in retrospective summary assessments”, publicly accessible Penn Dissertations. Wharton School of Business, University of Pennsylvania.
- Bolton, L. E., & Mattila, A. S. (2015). How does corporate social responsibility affect consumer response to service failure in buyer–seller relationships? *Journal of Retailing*, 91(1), 140-153.
- Burt, C. D., Kemp, S., & Conway, M. A. (2003). Themes, events, and episodes in autobiographical memory. *Memory & Cognition*, 31(2), 317-325.
- Carter, T. J., & Gilovich, T. (2010). The relative relativity of material and experiential purchases. *Journal of personality and social psychology*, 98(1), 146-159.
- Carter, T. J., & Gilovich, T. (2012). I am what I do, not what I have: the differential centrality of experiential and material purchases to the self. *Journal of personality and social psychology*, 102(6), 1304-1317.
- Carter, T. J., & Gilovich, T. (2014). Getting the most for the money: The hedonic return on experiential and material purchases. In *Consumption and well-being in the material world* (pp. 49-62). Springer Netherlands.
- Chitturi, Nicolao, R., Raghunathan, R., & Mahajan, V. (2007). Form versus function: How the intensities of specific emotions evoked in functional versus hedonic trade-offs mediate product preferences. *Journal of marketing research*, 44(4), 702-714.
- Dhar, R., & Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of marketing research*, 37(1), 60-71.
- Fredrickson, B. L., & Kahneman, D. (1993). Duration neglect in retrospective evaluations of affective episodes. *Journal of personality and social psychology*, 65(1), 45-55.
- Gilovich, T., Kumar, A., & Jampol, L. (2015). A wonderful life: Experiential consumption and the pursuit of happiness. *Journal of Consumer Psychology*, 25(1), 152-165.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213-224.
- Goodman, J. K., & Malkoc, S. A. (2012). Choosing here and now versus there and later: The moderating role of psychological distance on assortment size preferences. *Journal of Consumer Research*, 39(4), 751-768.
- Hamilton, R. (2014). Decisions at a Distance: Effects of Psychological Distance on Consumer Decision Making. *Journal of Consumer Research*, 41(2), 4-6
- Irmak, C., Wakslak, C. J., & Trope, Y. (2013). Selling the forest, buying the trees: the effect of construal level on seller-buyer price discrepancy. *Journal of Consumer Research*, 40(2), 284-297.
- Johnson, E. J., Häubl, G., & Keinan, A. (2007). Aspects of endowment: a query theory of value construction. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 33(3), 461-474.
- Keinan, A., & Kivetz, R. (2011). Productivity orientation and the consumption of collectable experiences. *Journal of Consumer Research*, 37(6), 935-950.
- Kim, B. Kyu, and Gal Zauberman (2013), “Can Victoria’s Secret Change the Future? A Subjective Time Perception Account of Sexual-Cue Effects on Impatience,” *Journal of Experimental Psychology: General*, 142 (May), 328–35.
- Li, L. Y., & Lee, L. Y. (2016). Experiential Consumption and Customer Satisfaction: Moderating Effects of Perceived Values. *International Journal of Marketing Studies*, 8(5), 32.

- Malkoc, S. A., Zauberan, G., & Bettman, J. R. (2010). Unstuck from the concrete: Carryover effects of abstract mindsets in intertemporal preferences. *Organizational Behavior and Human Decision Processes*, 113(2), 112-126.
- Meehan, J., & Wright, G. H. (2012). The origins of power in buyer-seller relationships. *Industrial Marketing Management*, 41(4), 669-679.
- Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research*, 36(2), 188-198.
- Privette, G. (1983). Peak experience, peak performance, and flow: A comparative analysis of positive human experiences. *Journal of personality and social psychology*, 45(6), 1361-1368.
- Ratner, R. K., & Hamilton, R. W. (2015). Inhibited from Bowling Alone. *Journal of Consumer Research*, 42(12), 266-283.
- Spasova, G., & Lee, A. Y. (2013). Looking into the future: A match between self-view and temporal distance. *Journal of Consumer Research*, 40(1), 159-171.
- Townsend, C., & Sood, S. (2012). Self-affirmation through the choice of highly aesthetic products. *Journal of Consumer Research*, 39(2), 415-428.
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological review*, 110(3), 403-421.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological review*, 117(2), 440-463.
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology*, 57(4), 660-671.
- Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of personality and social psychology*, 85(6), 1193-1202.
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of marketing*, 68(4), 1-15.
- Yan, D., & Sengupta, J. (2011). Effects of construal level on the price-quality relationship. *Journal of Consumer Research*, 38(2), 376-389.
- Zhang, J., & Yang, X. (2015). Stylistic properties and regulatory fit: Examining the role of self-regulatory focus in the effectiveness of an actor's vs. observer's visual perspective. *Journal of Consumer Psychology*, 25(3), 449-458.

R U Close? Txt me: Psychological Distance, Urgency, and Message Format

Alex Kaju, University of Toronto, Canada
Sam J. Maglio, University of Toronto, Canada

EXTENDED ABSTRACT

Modern technology allows us to send messages across new and diverse distances, but little research has evaluated how different formats affect how we perceive these distances. This research suggests that when it comes to interpreting information, not all forms of communication are created equal. Communication using different formats is shown to alter recipients' perception of temporal (Study 1), spatial (Study 2), social (Study 3), and hypothetical distance (Study 4). We also find that the relationship between messaging format and psychological distance is partially mediated by perceived sender urgency (Study 4) and that the format-distance effects can be reversed by altering the perceived sender urgency within a format (Study 5).

In our first study, participants were asked to imagine that they had ordered food from their favorite restaurant and had just received a text message or email from the delivery service saying "Hey, sorry for the delay! Unexpected traffic. Will be there soon" and asked how long it would be before the food arrived (in minutes). We found that participants believed that the food would be delivered sooner when the message was received via text message than via email. This result indicates that the reception of a text message leads to lower estimates of temporal distance (decreased psychological distance) than the reception of an identically worded email.

In our second study, participants were told they had just received a text message (email) from their favorite food truck saying "Hey, our Food Truck will be near you at lunch today! Check out the exact location on our app to receive a 10% discount!" and asked how far away they believed the food truck would be from their location (in miles) at lunch that day. We found that participants believed that the food truck would be spatially closer to their location when the message was received via text message than via email. This result indicates that the reception of a text message leads to perception of decreased spatial distance (decreased psychological distance) between the sender and recipient compared to an identically worded email.

In our third study, we found that participants felt closer to the communicator who sent the message via text message than via email. These findings indicate that the reception of a text message leads to greater levels of felt social closeness (decreased psychological distance) with the sender than the reception of an identical email.

In our fourth study, we propose that text messages (relative to email messages) will decrease the perception of hypothetical distance (increased event-likelihood) of events related to the sender's actions. We also examine the process through which message format affects psychological distance. Particularly, we wanted to see whether the perceived urgency of the sender would act as a temporal distance reference point (greater urgency approximating for shorter/closer time) from which to make assimilative judgments about an unknown distance (closer in time leading to closer judgments of other distances) (Maglio, Trope, Liberman, 2013).

To examine this, participants were asked to imagine that they had decided to attend a new exercise or personal training session at their local gym or club. After their first session, the trainer told them that sometimes they are able to get discounts for new members who train with them. The trainer tells them that they will check whether they are eligible for the discount and let the participant know. Participants were asked to imagine that a few days later they looked down at their phones to see that they had received either a text message or

email from the trainer. We then asked participants how likely they believed they were to get the discount as well as how urgently they believed the trainer wanted to convey his message.

We found that participants believed that they were more likely to receive the discount when the message was received via text message than via email. We also found that participants perceived higher levels of sender urgency when the trainer sent his message via text message than via email. Perceived sender urgency was found to partially mediate the relationship between message format and hypothetical distance judgments using a bootstrap analysis (Preacher and Hayes, 2008) with five thousand resamples. This result provides evidence that the reception of a text message leads to higher estimation of event-likelihood or probability (decreased psychological distance) for sender-related events than the reception of an identically worded email and that this relationship is partially mediated by perceived sender urgency.

In our fifth study, we propose that by altering sender urgency we can alter perceptions of psychological distance regardless of the messaging format in which those messages are received. To examine this, participants were told they had just received an ostensibly non-urgent text message (or ostensibly urgent email) from their favorite food truck saying "Hey, our Food Truck will be near you this afternoon but we're here all week (for one day only)! Check out the exact location on our app to receive a 15% discount, redeemable anytime (immediately)! See you there (soon)!" Participants were then asked how far away they believed the food truck would be from their location (in miles) at lunch that day. We found that participants believed that the food truck would be spatially closer to their location when the message was received via urgent email than via non-urgent text. This result indicates that the perception of greater sender urgency, regardless of messaging format, leads to perceptions of decreased spatial distance (decreased psychological distance) between the sender and recipient.

Our investigation provides evidence that communication format can alter the perception of psychological distance through its effect on perceived sender urgency. When we perceive a message to have been sent more urgently we perceive the sender and message content to be closer in space, sooner in time, more socially connect and more likely. These findings are important for marketers and consumer psychologists as they provide a foundation from which to begin to understand how changing technology can impact our judgment, decision-making, and behaviour.

The Lure of a Product's Origin: How Upcycling attracts Consumers

Bernadette Kamleitner, Wirtschafts University, Austria

Carina Thürridl, Wirtschafts University, Austria

Brett A.S. Martin, Queensland University of Technology, Australia

EXTENDED ABSTRACT

Two billion tons of waste go to landfills every year, threatening the environment, economy and society (Brosius, Fernandez, and Cherrier 2013; Trudel and Argo 2013; White, MacDonnell, and Dahl 2011). Upcycling, the process of transforming old into new products, is a promising way to help counter-act this alarming trend (Braungart 2013; Emgin 2012). Despite its growing popularity, the market for upcycled products is still small and research is scarce (Sung 2015; Wilson 2016).

Across four experiments, we show how consumer demand for upcycled products may be fueled through origin appeals (telling consumers what the product used to be), which we compare to outcome appeals (telling consumers what the product is now). We provide a consumer-status-explanation (McFerran and Argo 2014) for why this is the case. Specifically, we show how upcycled products make consumers feel unique, special, and recognized because of their historical value. We consider three competing explanations: authenticity, nostalgia, and sustainability. We also show that origin appeals are effective primarily, if they highlight what consumers cannot discern themselves, i.e., if the origin is only subtly (e.g., vases made out of insulators) vs. obviously (e.g., vases made out of light bulbs) visible. We show that these propositions are robust across products and original materials.

Study 1 establishes the effectiveness of origin appeals in the field. Two Facebook campaigns for an upcycling store were created (to increase page likes and online promotion clicks), targeting 1.34 million potential customers between 18 and 65. The ads featured an upcycled cake stand made from pot lids, a vase made from a light bulb and a pen holder made from forks. We manipulated appeal type, as in all subsequent studies, by communicating what the products used to be ("I used to be a...pot lid, light bulb, fork"; origin) vs. what they are now ("Now I am...a cake stand, a vase, a pen holder"; outcome). *Unique* and *total like rate* (likes relative to unique and total reach) and *unique* and *total click rate* (clicks relative to unique and total reach) were our DVs. Two-sample proportions z-tests revealed that origin appeals yielded higher unique ($Z=6.72, p<.001$) and total like ($Z=4.65, p<.001$) as well as click rates ($Z=1.91, p=.06; Z=4.97, p<.001$).

Study 2 investigates individual products, tests for moderation, establishes the process and addresses authenticity as a competing explanation (Beverland and Farrelly 2010; DeLong, Heinemann, and Reiley 2005). Ninety students (50.5% female, $M_{age}=22$ years) participated in a 2(appeal type: origin vs. outcome; between-subjects) x 2(origin visibility: subtle cake stand vs. visible light bulb vase; within-subjects) factorial mixed experiment. They were instructed to evaluate ads for a vase and a cake stand. Items for status (McFerran and Argo 2014), authenticity (Kadirov 2015; Newman and Dhar 2014), and demand (operationalized as purchase intention; Karmarkar and Bollinger 2015) were adapted from the literature.

A repeated-measures ANOVA revealed a significant interaction between appeal type and origin visibility on purchase intention ($F(1,88)=7.21, p<.05, \eta_p^2=.08$). Origin appeals increased purchase intentions for the cake stand ($t(88)=2.47, p<.05$), but not for the vase ($t(88)=-1.06, p=.29$). Likewise, we found the expected interaction on status ($F(1,88)=12.21, p<.001, \eta_p^2=.12$). Moderated mediation

analysis (Hayes 2013) established an indirect effect of origin appeals on purchase intention for the cake stand ($CI_{95}:[.172, 1.194]$) but not for the vase ($CI_{95}:[-.814, .235]$). Authenticity mediated neither; it did not differ across groups.

Study 3 focuses on a single product and rules out nostalgia, which is known to generate preferences for products with references to the past (Schindler and Holbrook 2003) as another explanation. Seventy-five female students ($M_{age}=24$ years) participated in a 2 (appeal type: origin vs. outcome) x 2 (origin visibility: subtle vs. visible) between-subjects experiment and evaluated an upcycled cake stand. One group saw a cake stand made from pot lids (subtle origin). Another group saw a stand made from old vinyl records (visible origin). Demand and status were assessed as previously, nostalgia based on Wildschut et al. (2006).

The expected two-way interaction on purchase intention was also significant ($F(1,69)=7.69, p<.01, \eta_p^2=.10$). Further, origin appeals increased status for the subtle ($M_{origin}=3.86, M_{outcome}=2.66, t(30)=2.26, p<.05$), but not for the visible stand ($M_{origin}=3.97, M_{outcome}=4.30, t(39)=-.73, p=.47$; two-way interaction: $F(1,69)=4.86, p<.05, \eta_p^2=.07$). A moderated mediation analysis produced an indirect effect of origin appeals on purchase intention for the subtle ($CI_{95}:[.037, 1.154]$) but not for the visible stand ($CI_{95}:[-.621, .116]$). Nostalgia failed to mediate the effect for both; it did not differ across groups.

Study 4 generalizes our effects to different products and original materials, shows that status increases demand because origin disclosure imbues products with history and eliminates sustainability as another explanation (Sörqvist, Langeborg, and Marsh 2016). 482 female mTurkers ($M_{age}=35$ years) participated in a 2 (appeal type: origin vs. outcome) x 2 (product type: subtle vs. visible) x 3 (product category: bags, vases, bowls) between-subjects experiment.

We find the hypothesized interactions on purchase intention ($F(1, 470)=14.52, p<.001, \eta_p^2=.03$), status ($F(1, 470)=22.48, p<.001, \eta_p^2=.05$) and history ($F(1, 470)=17.20, p<.001, \eta_p^2=.04$) for all categories. We also find an interaction between appeal type and origin visibility on sustainability ($F(1, 470)=7.61, p<.01, \eta_p^2=.02$), making it a viable alternative account. Indirect effects of origin appeal via status on purchase intention turned significant for all products with subtle (CIs excluded 0), but not with visible origins (CIs included 0). Sustainability showed no consistent results. Sequential mediation analyses per product produced significant indirect effects from appeal type to purchase intention via history and status for all products with subtle origins (CIs excluded 0), corroborating our assumptions.

This research is the first to present a status-based explanation for why consumers demand upcycled products after viewing origin appeals. Specifically, it suggests that upcycled products may be used as alternative signals of status (Bellezza, Gino, and Keinan 2014) because they contain history. We show that particularly under conditions of low origin visibility, marketers need not waste resources on promoting upcycled products as environmentally-friendly. Instead, they should promote their status-affording potential by showing how they can help consumers stand out from the crowd.

REFERENCES

- Bellezza, Silvia, Francesca Gino, and Anat Keinan (2014), "The Red Sneakers Effect: Inferring Status and Competence from Signals of Nonconformity," *Journal of Consumer Research*, 41 (1), 35-54.
- Beverland, Michael and Francis Farrelly (2010), "The Quest for Authenticity in Consumption: Consumers' Purposive Choice of Authentic Cues to Shape Experienced Outcomes," *Journal of Consumer Research*, 36 (5), 838-56.
- Braungart, Michael (2013), "Upcycle to Eliminate Waste: The Chemist Recasts Materials in an Endless Loop," *Nature*, 494 (7436), 174-75.
- Brosius, Nina, Karen V Fernandez, and H el ene Cherrier (2013), "Reacquiring Consumer Waste: Treasure in Our Trash?," *Journal of Public Policy & Marketing*, 32 (2), 286-301.
- DeLong, Marilyn, Barbara Heinemann, and Kathryn Reiley (2005), "Hooked on Vintage!," *Fashion Theory*, 9 (1), 23-42.
- Emgin, Bahar (2012), "Trashion: The Return of the Disposed," *Design Issues*, 28 (1), 63-71.
- Hayes, Andrew F (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*: Guilford Press.
- Kadirov, Djavlonbek (2015), "Private Labels Ain't Bona Fide! Perceived Authenticity and Willingness to Pay a Price Premium for National Brands over Private Labels," *Journal of Marketing Management*, 31 (17-18), 1773-98.
- Karmarkar, Uma R. and Bryan Bollinger (2015), "Byob: How Bringing Your Own Shopping Bags Leads to Treating Yourself and the Environment," *Journal of Marketing*, 79 (4), 1-15.
- McFerran, Brent and Jennifer J. Argo (2014), "The Entourage Effect," *Journal of Consumer Research*, 40 (5), 871.
- Newman, George E. and Ravi Dhar (2014), "Authenticity Is Contagious: Brand Essence and the Original Source of Production," *Journal of Marketing Research*, 51 (3), 371-86.
- Schindler, Robert M and Morris B Holbrook (2003), "Nostalgia for Early Experience as a Determinant of Consumer Preferences," *Psychology & Marketing*, 20 (4), 275-302.
- S orqvist, Patrik, Linda Langeborg, and John E Marsh (2016), "Social Desirability Does Not Underpin the Eco-Label Effect on Product Judgments," *Food Quality and Preference*, 50, 82-87.
- Sung, Kyungeun (2015), "A Review on Upcycling: Current Body of Literature, Knowledge Gaps and a Way Forward," *International Journal of Environmental and Ecological Engineering*, 2 (4), 28-40.
- Trudel, Remi and Jennifer J Argo (2013), "The Effect of Product Size and Form Distortion on Consumer Recycling Behavior," *Journal of Consumer Research*, 40 (4), 632-43.
- White, Katherine, Rhiannon MacDonnell, and Darren W. Dahl (2011), "It's the Mind-Set That Matters: The Role of Construal Level and Message Framing in Influencing Consumer Efficacy and Conservation Behaviors," *Journal of Marketing Research*, 48 (3), 472-85.
- Wildschut, Tim, Constantine Sedikides, Jamie Arndt, and Clay Routledge (2006), "Nostalgia: Content, Triggers, Functions," *Journal of personality and social psychology*, 91 (5), 975.
- Wilson, Matthew (2016), "When Creative Consumers Go Green: Understanding Consumer Upcycling," *Journal of Product & Brand Management*, 25 (4), 394-99.

Please Do Interrupt, But Nicely! The Effect of Positive and Negative Interruptions on Product Evaluation and Choice

Ankur Kapoor, Indian Institute of Management, Ahmedabad, India

Arvind Sahay, Indian Institute of Management, Ahmedabad, India

EXTENDED ABSTRACT

Interruptions have become pervasive in our lives (Carrier et al. 2009). Extant research has only looked at the cognitive dimensions (timing, duration and cognitive demand), but not at the affective dimensions of interruptions, which is a lacuna because no interruption is devoid of affective undertones (An interruption from a tele-marketer selling offers induces a different affective response than a call from an old friend). Thus, understanding the impact of interruptions with positive and negative affective consequences on focal tasks can provide rich theoretical and practical insights. This research explores the impact of valenced interruptions on product evaluation and choice. It is found that valenced interruptions lead to stronger contrast in evaluation of otherwise similar products. Five studies demonstrate that positive (negative) interruptions lead to unfavourable (favourable) evaluation and lower (higher) choice of pre-interruption products; but favourable (unfavourable) evaluation and higher (lower) choice of post-interruption products.

We argue that interruptions carry some content, which is subject to meaning-making by the receiver (Weick 1995). Such meanings are mostly affect laden and can induce spontaneous positive and negative emotional responses (Berkowitz 1993; Han, Lerner, and Keltner 2007). Moreover, it is known that positive (negative) affect leads to abstract (concrete) construal (Isbell, Burns, and Haar 2005; Labroo and Patrick 2009). Finally, research shows that concrete (abstract) construal leads to focus on costs and 'cons' (rewards and 'pros') of a product (Vallacher and Wegner 1989; Eyal et al. 2004). Therefore, we hypothesize that positive (negative) interruption leads to favourable (unfavourable) evaluation of post-interruption product, through mediation of construal. Given that choice happens in a finite consideration-set (Nedungadi 1987), interruption may occur such that some products are evaluated before (pre-interruption) while some are evaluated after the interruption (post-interruption). Since the product evaluation is relative, favourable (unfavourable) evaluation of post-interruption product should relatively skew evaluation of other product, leading to unfavourable (favourable) evaluation of pre-interruption product. Lastly, we also consider the moderation of brand strength on the above proposed effect.

In Study 1, participants (N=132) were randomly allocated to one of the four conditions (positive/negative/neutral/no interruption). Two product profiles (pretested for equivalence on evaluation) were shown sequentially and an interruption (a buffering circle) was placed after the first product profile. Experimenter apologized for this interruption, and showed a video (positive/negative: pretested for valence; no video: neutral-interruption; no buffering: no-interruption condition). Product video resumed after the interruption, followed by choice/evaluation responses. Significantly larger (smaller) proportion of participants chose post-interruption product after positive (negative) interruption ($\chi^2(1)=6.143, p=.013$). A 4(interruption conditions)x2(pre/post-interruption evaluation) repeated measures ANOVA on product evaluation revealed a significant interaction effect ($F(3,127)=7.901, p<.001$). Planned contrasts revealed that for positive(negative) interruption, post(pre-) interruption product was evaluated favourably than pre(post-) interruption product ($M_{\text{pre-interruption|positive interruption}}=3.97, M_{\text{post-interruption|positive interruption}}=6.70, t(127)=5.06, p<.001; M_{\text{pre-interruption|negative interruption}}=5.26, M_{\text{post-interruption|negative interruption}}=4.51, t(127)=1.30, p=.096$). There was no

significant difference in evaluation and choice in neutral/no interruption conditions. However, the means in negative and neutral interruption condition were not statistically different, indicating that similar negative meaning is attached to neutral interruption. These results provide initial support to our hypotheses.

If the effects are only due to the valence of interruption, similar results should be expected for valenced breaks (equivalent in affective content but are planned and consciously taken while interruptions are random and sudden). This is theoretically important as no previous research has contrasted interruptions with breaks. In Study 2, participants (N=136) were randomly allocated to: 2(interruption:break/interruption) x 2(valence:positive/negative) conditions. The design was similar to study 1, but participants in break conditions were told in advance about the video and two different product profiles (pretested for equivalence) were used for evaluation. Results consistent with Study 1 were found for valenced interruptions ($M_{\text{pre-interruption|positive interruption}}=4.77, M_{\text{post-interruption|positive interruption}}=5.66, t(132)=1.65, p=.049; M_{\text{pre-interruption|negative interruption}}=6.08, M_{\text{post-interruption|negative interruption}}=4.25, t(132)=3.30, p<.001$), but no significant effects were found for valenced breaks. Thus, the effects of interruptions are due to both the valenced content and the unexpected, random nature.

Study 3 explored the underlying process. Participants (N=208) were allocated randomly to: 2(intervention:break/interruption) x 2(valence:positive/negative) conditions. The design was similar to study 2, except that products were combined from study 1 and 2 (counterbalanced) for evaluation exercise. Affect and construal were measured by PANAS and BIF scale (Watson, Clark, and Tellegen 1988; Vallacher, and Wegner 1989). Results for evaluation were consistent with first two studies. A mediation analysis (Hayes, 2013; Model 4) supported the mediation of construal between interruption and evaluation (95% CI for indirect effect:0.0110 to 0.4287). No such mediation was found for valenced breaks. Affect scores were significantly different in interruption, but not in break conditions.

So far, responses were provided in the end of product sequence, and we argued that better (worse) evaluation of post-interruption product influenced evaluation of pre-interruption product. Study 4 provides additional support for this relative evaluation argument. Participants (N=143) were allocated to: 2(interruption:positive/negative) x 2(responses:after-each-product/in-the-end) conditions. The design was similar to study 3, except that interruption was presented as sharing of missed information (positive/negative; pre-tested) about the study; and participants provided ratings after each product in simultaneous evaluation. Results consistent with prior studies (study 1-3) were replicated for 'in-the-end' evaluation, but only post-interruption evaluation results were replicated for simultaneous evaluation. As expected under relative evaluation argument, ratings of pre-interruption products in negative interruption were higher (lower) in case of in-the-end (simultaneous) evaluation ($p<.001$). Such statistically significant difference was not found in positive interruption condition.

The products in previous studies were unbranded. Study 5 explored the moderating effect of brand strength. Participants (N=118) were allocated randomly to: 2(interruption:positive/negative) x 2(brands evaluated:strong/weak; pre-tested) conditions. The design was similar to study 4, except that strong/weak brands were shown in evaluation exercise. Results were consistent with prior studies for

weak brands, but not for strong brands. This is consistent with prior research that strong brands are less affected by momentary stimuli and rely on prior memory structures (Hoeffler and Keller 2003), while weak brands are vulnerable to influence of momentary stimuli (like interruptions).

This research is among the first to study the affective consequences of interruptions, and to contrast interruptions with breaks. We hope that this work provides direction for more nuanced research and richer understanding of interruptions.

REFERENCES

- Berkowitz, Leonard (1993), "Towards a General Theory of Anger and Emotional Aggression: Implications of the Cognitive Neoassociationistic Perspective for the Analysis of Anger and Other Emotions," in *Advances in Social Cognition*, Vol. 6, ed. Robert S. Wyer and Thomas K. Srull, Hillsdale, NJ: Erlbaum, 1-46.
- Carrier, L. Mark, Nancy A. Cheever, Larry D. Rosen, Sandra Benitez, and Jennifer Chang (2009), "Multitasking across generations: Multitasking choices and difficulty ratings in three generations of Americans," *Computers in Human Behavior*, 25 (2), 483-489.
- Eyal, Tal, Nira Liberman, Yaacov Trope, and Eva Walther (2004), "The pros and cons of temporally near and distant action," *Journal of Personality and Social Psychology*, 86 (6), 781-95.
- Han, Seunghye, Jennifer S. Lerner, and Dacher Keltner (2007), "Feelings and consumer decision making: The appraisal-tendency framework," *Journal of Consumer Psychology*, 17 (3), 158-168.
- Hayes, Andrew F (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hoeffler, Steve, and Kevin Lane Keller (2003), "The marketing advantages of strong brands," *The Journal of Brand Management*, 10 (6), 421-445.
- Isbell, Linda M., Kathleen C. Burns, and Thomas Haar (2005), "The role of affect on the search for global and specific target information," *Social Cognition*, 23 (6), 529-552.
- Labroo, Aparna A., and Vanessa M. Patrick (2009), "Psychological distancing: Why happiness helps you see the big picture," *Journal of Consumer Research*, 35 (5), 800-809.
- Nedungadi, Prakash. (1987). Formation and Use of a Consideration Set: Implications for Marketing and Research on Consumer Choice. Gainesville, FL: University of Florida (Unpublished Ph.D. Dissertation)
- Vallacher, Robin R., and Daniel M. Wegner (1989), "Levels of personal agency: Individual variation in action identification." *Journal of Personality and Social psychology*, 57(4), 660-671.
- Watson, David, Lee A. Clark, and Auke Tellegen (1988), "Development and validation of brief measures of positive and negative affect: the PANAS scales," *Journal of Personality and Social Psychology*, 54 (6), 1063-1070.
- Weick, Karl E. (1995), *Sensemaking in Organizations*. Vol. 3. California: Sage.

Differential Impacts of God and Religion on Prosocial Intentions

Mustafa Karatas, Koc University, Turkey
Zeynep Gürhan-Canli, Koc University, Turkey

EXTENDED ABSTRACT

Religious organizations get the lion's share of charitable giving. In US, faith-based organizations collected almost one-third of all monetary donations and volunteer services in 2014. Considering the monetary and timely value of faith-based charitable giving, it is of significant theoretical and practical importance to determine the most effective ways for fundraising when appeals involve religious reminders. However, past empirical research is inconclusive regarding the role of religious reminders on prosocial behavior and yields mixed results.

Early studies which were largely correlational suggested a positive link by evincing that higher frequency of religious practices leads to higher self-reported prosocial intentions (Brooks 2006). Later studies investigated the causal link between religion and prosociality through experimental methodology. This stream of research reported contradictory findings. While some studies found prosocial effects of religious primes (Pichon, Boccato and Saroglou 2007), others reported antisocial effects like increased prejudice (Johnson, Rowatt and LaBouff 2010).

We argue that one reason of these mixed results is that "religion" has been used as an umbrella term in past research and priming procedures involved various concepts, which might have divergent cognitive corollaries. More specifically, we predict that the concept of God, which is a multi-faceted abstract concept across all religions and cultures, is likely to induce an abstraction in thinking, whereas religion, which is construed in terms of more concrete practices, is likely to result in a concrete mind-set. Based on fit effect (Lee, Keller and Sternthal 2010), which posits that compliance with messages increases when level of abstraction of different factors in the decision context fit, we further predict that reminding God (vs. religion) increases prosocial tendencies when the message is construed abstractly (vs. concretely). We tested, and found support for, these predictions in one field and four experiments.

In study 1, we analyzed donation data obtained from a mosque in a small town in a predominantly Muslim country. The data involved the donation amount collected after the Friday prayer during 60 weeks and the target of donation. Three coders coded each week's sermon on a 5-point scale (1: "induces predominantly religion-specific thoughts"; 5: "induces predominantly God-related thoughts"). We coded the abstraction of each week's donation target based on (1) how far the target is, and (2) whether the target is a specific target (e.g., a specific mosque in some neighborhood) or a general target (e.g., people in need of help in some neighborhood) on a 7-point scale. Regression analysis yielded a significant interaction ($p < .01$). At 1 s.d. below the mean of the sermon reminder scale (i.e., when the sermon gave mainly religion-specific messages), people donated more money (converted to USD) to concrete targets ($M_{\text{religion-concrete}} = \139 , $M_{\text{religion-abstract}} = \102 ; $p < .02$). At 1 s.d. above the mean (i.e., when the sermon gave mainly God-related messages), donations to distant mosques were marginally significantly higher ($M_{\text{God-concrete}} = \82 , $M_{\text{God-abstract}} = \121 ; $p < .02$).

In study 2A, 60 US participants (34 female; $M_{\text{age}} = 34$) were asked to write the thoughts that come to their mind when they see the word "God" or "Christianity." A one-way ANOVA yielded that participants use a more abstract language while describing their thoughts about God ($M_{\text{God}} = 3.02$, $M_{\text{religion}} = 2.69$; $p < .01$), an indica-

tion that God (vs. religion) induces a more abstract (vs. concrete) thinking.

In study 2B, we randomly assigned participants ($N = 100$; 68 female; $M_{\text{age}} = 21$) from a predominantly Muslim population to either religion or God reminder condition, as in study 2A. Next, they filled the Behavioral Identification Form which is a 25-item dichotomous questionnaire that measures whether people identify actions at higher or lower level (and, a higher score indicates higher abstraction). Participants in the God prime condition used a more abstract language ($M_{\text{God}} = 2.79$, $M_{\text{religion}} = 2.49$; $p < .01$). Moreover, God prime led to more abstract description of actions ($M_{\text{God}} = 17.16$, $M_{\text{religion}} = 14.40$; $p < .01$).

Study 3 tested our fit prediction that activating God (vs. religion) thoughts increases compliance with an abstractly (vs. concretely) framed message. 111 participants (77 female; $M_{\text{age}} = 21.5$) participated in a 2 (concept: God vs. religion) x 2 (message: abstract vs. concrete) between-subjects design, and were given the same manipulation as in study 2B. Next, they saw an either abstract or concrete description of a student club. They were asked to state their intentions (in minutes) to volunteer for the student club during weekend. We log-transformed their responses in order to meet the linearity assumption, and founded a significant interaction ($p < .05$). Those who thought about God reported a significantly higher intention to volunteer when the message was abstract ($M_{\text{abstract}} = 3.94$, $M_{\text{concrete}} = 3.28$; $p = .04$). This effect directionally reversed when participants were reminded of religion ($M_{\text{concrete}} = 4.05$, $M_{\text{abstract}} = 3.71$; $p < .15$).

Finally, in study 4, we tested the mediating mechanism. The fit effect—intensified evaluations against a target when multiple factors in the decision context fit each other—is suggested to occur since fit increases engagement, and engagement makes people "feel right" about the decision. 98 US participants ($M_{\text{age}} = 36.4$; 51 female) participated in a similar study design as in study 3. Religious concept was manipulated through a sentence unscrambling task. Next, participants indicated their likelihood of compliance with one of two UNICEF (concrete or abstract) messages. They also indicated how right they felt about their response. A significant interaction was found ($p < .001$). In God-prime, intentions to comply with an abstract request was significantly higher ($M_{\text{abstract}} = 4.88$, $M_{\text{concrete}} = 3.25$; $p = .002$). The reverse was true under religion prime ($M_{\text{concrete}} = 4.58$, $M_{\text{abstract}} = 3.58$; $p = .05$). We further found that "feeling right" mediates the effect at both religion-concept ($CI_{95\%} = [-.7956, -.0362]$) and God-concept ($CI_{95\%} = [1.1962, 1.4447]$) conditions.

Taken together, this research suggests that different religious concepts have different cognitive corollaries, which influence people's compliance with donation appeals depending on the level of abstraction implied by other factors in the decision context. From a theoretical perspective, this research helps reconcile some mixed findings in past research on the link between religious thoughts and prosocial behavior by separating impacts of two most frequently exposed religious concepts: God and religion. From a practical perspective, it provides insights for charity organizations for effective use of different religious reminders in fundraising and influencing consumers' expenditure decisions on prosocial causes.

REFERENCES

Brooks, Arthur C. (2006), *Who Really Cares*, New York: Basic Books.

Johnson, Megan K., Wade C. Rowatt and Jordan LaBouff (2010), "Priming Christian Religious Concepts Increases Racial Prejudice," *Social Psychological and Personality Science*, 1(2), 119-126.

Lee, Angela Y., Punam Anand Keller and Brian Sternthal (2010), "Value from Regulatory Construal Fit: The Persuasive Impact of Fit between Consumer Goals and Message Concreteness," *Journal of Consumer Research*, 36(5), 735-747.

Pichon, Isabella, Giulio Boccato and Vassilis Saroglou (2007), "Nonconscious Influences of Religion on Prosociality: A Priming Study," *European Journal of Social Psychology*, 37(5), 1032-1045.

Navigating Symbolic Pollution Through Symbolic Boundary Work – Shaping a Sense of Home and Family in Family Assemblages

Carol Kelleher, University College Cork, Ireland
Deirdre M. O’ Loughlin, University of Limerick, Ireland

EXTENDED ABSTRACT

Families can be characterized as “an assemblage of heterogeneous components (e.g. bodies, practices, objects, stories and everyday interactions) that form contingent relations across time to produce an emergent whole with a collective identity” (Price and Epp 2016, 60). The relations and capacities of the human and non-human component parts are contingent on each other and continuously unfolding. Hence, rather than having fixed boundaries, family assemblages occupy blurred and dynamic territories, where displacement amongst the component parts or disruption of family practices precipitates change (Price and Epp 2016). While recent consumer research has begun to employ assemblage theory to examine family consumption (e.g. Price and Epp 2016, Dinnin Huff and Cotte 2016), there is a paucity of studies which investigate how a sense of home and family emerge in family assemblages. The purpose of this paper is to explore how caring for family members suffering from illness characterized by gradual cognitive impairment and physical deterioration, specifically dementia and alzheimers, shapes experiences of home and family within family assemblages.

Drawing on Douglas (1967), we conceive symbolic pollution as “whatever [...] eludes or threatens order” throughout the caregiving life course. It emerges when things become ‘out of place’, temporarily violating prior systems of classification (Dion, Sabri and Guillard, 2015, 565). As symbolic pollution implies a previous set of ordered relations juxtaposed with contraventions of the order (Douglas 1967, 48), illness requiring care within family assemblages, temporarily destabilizes boundaries, necessitating symbolic boundary work. That is prior family relations and capacities are temporarily displaced, rearranged and reconfigured through symbolic boundary work. We define symbolic boundaries as the “conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space” (Lamont and Molnar 2002, 168).

Our qualitative study comprised long interviews (McCracken 1988), averaging two hours, with fourteen family carers, comprising nine females and five males, who had either voluntarily or involuntarily found themselves caring for another family member, without formal compensation or payment. A grounded theory constant comparison approach to data collection and analysis was adopted (Charmaz 2006). All interviews were audio-recorded and transcribed. Emergent themes as to how illness requiring care within families framed experiences of home and family were induced (Spiggle 1994).

Our findings revealed how caring for family members within family assemblages temporarily resulted in symbolic pollution necessitating symbolic boundary work throughout the care giving trajectory. Contingent notions of home and family were constantly in the balance as family assemblages adapted to the consumption and provision of care precipitated by illness. As a result, family assemblages were in a constant state of becoming or morphogenesis (Price and Epp 2016). In this way, a reconfigured liminal sense of home and of family emerged, both during the caregiving trajectory and once it ended (e.g. when the family member in need of care moves to a residential home/hospital or dies) (Barnhart, Dinnin Huff and Cotte 2014).

Specifically, we induced two forms of symbolic pollution - Familial Strangers and Home Unfixtures - which dynamically modulat-

ed meanings of home and family. These were managed through two forms of ongoing symbolic boundary work: Labors of Homing and Familying On. Familial Strangers refers to previous family relations and identities being disrupted and sometimes unrecognizable. Family carers learnt to accommodate switched family identities. They performed symbolic boundary work to reacquaint their “estranged” family member using material representations, such as constantly changing and captioning photo albums. Home Unfixtures refers to the displacement, introduction and reappropriation of objects within the home. While experiences of domesticity or “homeyness” (McCracken 2005, 36) are typically created through physical, symbolic and pragmatic properties, relations and capacities within families, illness resulted of the colonization of the home by medical equipment and apparatus to make it safe and secure. For example, family carers installed baby monitors, stair gates and hoists. Both forms of symbolic pollution were accepted as “tolerated transgressions” (Dion, Sabri and Guillard 2014, 578) and reflected the deep and both temporary and irreversible disruption of prior relations and capacities within family assemblages.

Building on prior research which explored tensions and their resolution in family assemblages of care (Epp and Vegaletti 2014), family carers performed symbolic boundary work in response to both forms of symbolic pollution. Labors of Homing refers to the conjoining, disjoining and commingling of family relations and capacities (spatially, geographically, and symbolically) to maintain a sense of home. In line with Figueiredo (2016, 77), a sense of home emerged as “multiple, fragmented and distributed across different spaces”. Familying On refers to altered family practices or labors of holding family together (Price and Epp 2016). Family members stepped in and out (both voluntarily and involuntarily) of caregiving relations, while certain members seemed to be “sucked in” to a caring role, from which they could not extract themselves.

In summary, we make three main contributions relating family consumption and caregiving within family assemblages of care. First, we reveal how illness requiring care by family members for other family members emerged as a temporary form of symbolic pollution that modulated family assemblages and created a liminal altered sense of home and family. Building on prior research on symbolic pollution (Douglas 1997; Dion, Sabri and Guillard 2014), we reveal how family caregiving temporarily disrupts previous classifications of home and family, rendering both constantly in the making (Barnhart, Dinnin Huff and Cotte 2014). Second, we reveal how illness precipitated ongoing processes of deterritorialization within family assemblages. Illness transformed material capacities that typically provide a sense of home, denoting safely, comfort and welcome (homeyness) into sites of surveillance and fortification. We thus respond to Figueiredo’s (2016, 87) call to “understand which material and expressive capacities of resources facilitate movement and coupling with other territories, and which capacities hinder de-coupling and recoupling”. Third, we reveal that illness facilitated, stretched and altered relations and capacities with family assemblages, or a sense of family, which in turn necessitated symbolic boundary work. That is, illness contemporaneously de-constituted and reconstituted families throughout the caregiving trajectory. We conclude with limitations and an agenda for future research.

REFERENCES

- Barnhart, Michelle, Aimee Dinnin Huff, and June Cotte (2014), "Like a Member of the Family: Including and Excluding Paid Caregivers in Performances of Family," *Journal of Marketing Management*, 30(15-16), 1680-1702.
- Charmaz, Kathy (2006), *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*, London, UK: Sage Publications.
- Dinnin Huff, Aimee and June Cotte, (2016), "The Evolving Family Assemblage: How Senior Families "Do" Family," *European Journal of Marketing*, 50(5/6), 892-915.
- Dion, Delphine, Ouidade Sabri, and Valérie Guillard (2014), "Home Sweet Messy Home: Managing Symbolic Pollution," *Journal of Consumer Research*, 41(3), 565-589.
- Douglas, Mary (1967), *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*, London: Routledge and Kegan Paul.
- Epp, Amber M. and Sunaina R. Velagaletti (2014), "Outsourcing Parenthood? How Families Manage Care Assemblages Using Paid Commercial Services," *Journal of Consumer Research*, 41, 911-935.
- Figueiredo, Bernardo (2016), "Home in Mobility – An Exercise in Assemblage Thinking," in *Assembling Consumption, Researching Actors, Networks and Markets*, Oxon, UK: Routledge, 77-91.
- Lamont, Michele and Virag Molnar (2002), "The Study of Boundaries in the Social Sciences," *Annual Review of Sociology*, 28, 167–95.
- McCracken, Grant (1988), *The Long Interview*, Thousand Oaks, CA: Sage Publications.
- _____ (2005), *Culture and Consumption II: Markets, Meaning, and Brand Management.*, Vol. 2, Indiana: Indiana University Press
- Price, Linda and Amber Epp (2016), "The Heterogeneous and Open-Ended Project of Assembling Family," in *Assembling Consumption, Researching Actors, Networks and Markets*, Routledge:Oxon, UK, 57-76.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21(3), 194-203.

Birds of a Feather *Feel* Together: Emotional Ability Similarity in Consumer Interactions

Blair Kidwell, University of North Texas, USA
Christopher Blocker, Colorado State University, USA
Virginie Lopez Kidwell, University of North Texas, USA
Erick Mas, University of North Texas, USA

EXTENDED ABSTRACT

Interpersonal similarity is a fundamental contributor to exchange relationships (Palmatier et al. 2006), and its relevance for relationship development is one of the most widely accepted finding in social science (Mackinnon, Jordan, and Wilson 2011). Yet, despite a large body of research, scholars debate the precise nature of interpersonal similarity and the underlying mechanisms that drive its relational effects (Tidwell, Eastwick, and Finkel 2013). For decades, scholars have assumed that similarity of attitudes, beliefs, and other characteristics enhance mutual liking over time (Davis and Rusbult 2001). However, a meta-analysis of 313 studies finds that this link actually weakens and even disappears for partners with increasing interaction (Montoya, Horton, and Kirchner 2008). Thus, researchers have called for investigation into other potentially more powerful relationship facilitators such as interaction patterns and conversational flow (Koudenburg, Gordijn, and Postmes 2014; Montoya et al. 2008).

We take these insights as a point of departure and investigate a new form of similarity—similar emotional ability between two people—which reflects a deeper level of interpersonal similarity. The way in which people use and communicate emotions when interacting with others may play a crucial role in how they form relationships and make decisions. This exchange of emotional information potentially constitutes a powerful facilitator of consumer interactions, beyond the effects of traditional physical and attitudinal similarity.

Emotional ability (EA), commonly called emotional intelligence, reflects an individual's ability to reason about and apply emotional knowledge when achieving a desired outcome (Mayer and Salovey 1997). When interacting with others, EA determines how people communicate emotional information to their partners. These normative expectations of the appropriateness of how people use their emotions are referred to as “display rules” (Ekman 1982), “feeling” rules (Hochschild 1979), or more recently “emotion norms” (Ekman, Friesen, and Ellsworth 2013; Heise and Calhan 1995). Research suggests that two individuals with similar EA will likely use their emotions in similar ways. As such, EA should allow people to align their emotions, resulting in pleasant and effortless interactions. In contrast, those who use emotions differently are unlikely to align their emotions and thus, may have considerably more difficulty interacting. Beyond the established roles of attitudinal and physical similarity, we suggest that EA similarity may offer a new path for understanding consumer interactions and why they flourish or fail to develop.

Emotional Ability Similarity

We define EA similarity as an intuitive deep-level interpersonal ability to process emotional information in a congruent way based on shared emotion norms. Just as attitudinal similarity is based on congruent cognitive information that is recognized and understood by another (Brockner and Swap 1976), EA similarity is based on congruent emotional information that is exchanged allowing the subtle but powerful emotions of others to be recognized and understood in the same way by the receiver.

Research indicates that emotion norms can vary widely and are based on accumulated knowledge and past experiences using emotions when interacting with others (Miller and Prentice 1996). The development of emotional norms is understudied but central to emotional ability (Mayer and Geher 1996; Salovey and Grewal 2005). Druskat and Wolff (2001) found that the EA of group members corresponded to the emotional norms used within that group. For example, higher EA groups used more care and attention toward their partners and displayed better listening skills when communicating, whereas, low EA groups tended to use lengthy discussions to solve problems and then collected and combined perspectives in a mechanical way. George (2000) further indicated that when emotional norms are reciprocated they evoke emotions “stemming from a feeling of ‘rightness’ between individuals” (p.1045).

In line with this research, we suggest that different emotional norms are adhered to at varying levels of EA. Since high EA individuals are more effective at processing emotions, interactions at shared high levels of EA are likely to exhibit greater emotional expression and use of emotional information (Forbes and Jackson 1980; Lyons and Schneider 2005; Mayer and Geher 1996). Individuals interacting who share compatible emotional norms are likely feel significantly more connected, understood and validated.

In contrast, since low EA individuals are less effective at using emotions, interactions at shared low levels of EA likely rely less on emotions and thus are less expressive with their emotions in the interaction (Mayer and Geher 1996). Despite their low ability to use emotions effectively, individuals interacting who share compatible emotional norms are likely feel significantly more connected, understood and validated. Thus, as indicated in our conceptual model (figure 1), we predict:

Hypothesis 1: Dyads with EA similarity will exhibit greater relational outcomes than non-similar dyads, beyond the effects of conventionally measured surface-level physical and deep-level attitudinal similarity.

Effortless Communication Underlying Emotional Ability Similarity

If EA similarity leads to relational success in market interactions, what underlying process facilitates these effects? We suggest that dyads with EA similarity, by virtue of compatible emotional norms between members, are likely to experience *effortless interactions*. By easily recognizing and interpreting emotional information in their partner, EA similarity fosters a conversational flow that is smooth and comfortable. Effortless communication reflects the reduced mental energy needed to effectively interact, particularly as each person draws on limited resources to respond, seek goals, and make choices (Baumeister 2002). Furthermore, effortless communication can produce a feeling of genuineness and desirability for the other person through mutual intimacy and meaningful information (Cesario and Higgins 2008). In short, communication requires less effort when both individuals share compatible emotion norms,

thereby promoting enduring exchange relationships. Therefore, we predict:

Hypothesis 2: Effortless communication will mediate the relationship between EA similarity and relational success, such that dyads with EA similarity will exhibit a) less mental energy expended toward the interaction.

EA Similarity and Decision Quality

We extend our conceptualization to also include joint decision tasks made by consumers, and thus, advance the literature on social influence (Jiang et al. 2010; White and Argo 2011). We expect that partners with similar EA are likely to make higher quality joint decisions.

In contrast, non-similar dyads are likely to feel confused, misunderstood, and ignored in the decision process, ultimately disrupting meaningful communication and impeding the quality of their joint decisions. As individuals attempt to mentally align disparate perceptions and uses of emotional information with their exchange partner, they will likely be less able to isolate and incorporate relevant emotions and make informed decisions. Thus, we hypothesize:

Hypothesis 3: Dyads with EA similarity will make higher quality joint consumer decisions than non-similar dyads.

Study 1 – Field Study of Customer-Salesperson Relationships

The goal in study 1 was to demonstrate the effect of EA similarity on actual customer-salesperson relationships. Customers and salespeople with EA similarity (i.e. dyads with similar EA scores) are anticipated to experience greater relational success over time. Three indicators of exchange relationship success are loyalty, satisfaction, and positive word of mouth (WOM) communication (Crosby et al. 1990; Yim et al. 2008). To test our hypothesis, we focus on the extended process of home buying and capture dyadic responses from both customers and their real estate agent over time (1 year).

Sample and Procedure. We collected dyadic data by working with the salespeople of a Fortune 1000 real estate firm and their customers. First, with the help of senior management, we emailed 1,049 salespeople requesting their participation in a survey. The survey instructed salespeople to identify their last customer they worked with. Next, customers were notified and asked to respond to questions pertaining to the salesperson. We received 172 responses within two weeks for a response rate of 49%, resulting in 69 completed surveys and, thus, usable dyads for our longitudinal analyses.

Results

Test of Hypothesis 1. Using OLS regression (N= 69 dyads), EA similarity significantly predicted consumer loyalty ($b = -0.53, t = -3.40, p < .01$; model 1), customer satisfaction ($b = -0.53, t = -3.32, p < .01$; model 2), and positive word of mouth ($b = -0.38, t = -1.96, p < .05$; model 3), all above and beyond our set of controls. Negative coefficients indicate that dyads with lower differences among their EA scores (higher EA similarity) were more likely to report higher quality consumer relational outcomes. Taken together, these results offer support for H1.

Planned Contrasts for Similar and Non-similar EA Dyads. Additionally, we trichotomized each person's EA score ($M = 100, SD = 10$) into a high (>110), moderate (90-110), and low (<90), to compare how similar EA dyads (high-high, moderate-moderate, low-low) and

non-similar dyads (low-moderate, low-high, moderate-high) influence relational success. Loyalty to the salesperson was used as our focal outcome to examine how unique levels of EA influence relational success.

As a conservative test, the highest mean for non-similar EA dyads (mod-high; 2.83 average loyalty) is significantly different ($\Delta 1.38, t = -3.29, p < .01$) from the lowest mean for similar EA dyads (low-low; 4.21 average loyalty). This pattern held across all outcomes.

Study 2 – Sales Interaction Study

In study 2, we examine an underlying mechanism for why EA similarity promotes relational success. Specifically, we investigate whether similar EA dyads experience effortless interactions (less exertion during interactions). We used a mock sales interaction design which is comparable to those used by scholars examining interpersonal similarity.

Sample and Procedures. The sample included 104 respondents (ages 18-22) who answered initial EA questions, and then were randomly assigned role as a salesperson or customer. The salesperson was instructed to assist the customer with their purchase decision of a digital camera. After the interaction, lasting 10 minutes, participants returned to their cubical and filled out survey items about the other person and their interaction. They then completed items related to similarity, attractiveness, friendliness, familiarity, and relational success.

Next, respondents were thanked and asked to complete a brief unrelated study. Here we assessed the mental exertion that occurred for them during the interaction by evaluating their depletion levels via persistence on an anagram task. We recorded the total number of completed words from the total number of anagrams for each respondent, after checking they were English words with at least 3 letters, per task instructions.

Results

Test of Hypothesis 2. Mediation analyses were conducted using the PROCESS macro (Preacher and Hayes 2008). Similar EA dyads completed significantly more anagrams ($b = -.29, t = -2.82, p < .01$) beyond our set of controls. Furthermore, dyads with a higher number of completed anagrams experienced significantly more relational success (i.e., harmonious interactions; $b = .24, t = 3.10, p < .01$) beyond our set of controls. Additionally, a test of the mediation found that the 95% confidence interval of the indirect effect (Zhao et al. 2010) from EA similarity onto relational success through resource depletion was significant as it did not cross 0 ($a * b = -1.96, p < .01, CI: -.02$ to $-.01$) while the direct effect was non-significant ($c = .005, t = .87, p > .10$). These results suggest indirect-only mediation, in support of H2 and our conceptual model.

Planned Contrast by Similar and Non-similar EA Dyads. Similar to study 1, we trichotomized each person's EA into a high (>110), moderate (90-110), and low (<90), to compare how similar EA dyads (high-high, moderate-moderate, low-low) and non-similar dyads (low-moderate, low-high, moderate-high) score relative to effortless interaction (dyadic average total number of anagrams completed). Findings indicated a statistically significant difference between groups ($F(4,100) = 4.37, p = .003$).

Furthermore, as a conservative comparison test of unique EA levels, the highest mean for non-similar EA dyads (mod-high; 18.22 total completed anagrams) was significantly different ($\Delta 10.52, t = 2.25, p < .05$) from the lowest mean for similar EA dyads (low-low; 28.8 total completed anagrams). This provides further evidence that similar EA dyads were significantly less depleted than non-similar

dyads and thus experienced less effortful interactions, in support of H2.

Study 3 – Dyadic Decision Quality

The goal of study 3 was to extend the effects of EA similarity to a decision-making task in which members of a dyad must solve a food choice task by working together. Thus, we expect dyads with similar levels of EA to make higher quality joint consumption choices.

Sample and Procedures. Participants were 236 undergraduate business students who initially completed an online survey assessing their EA. Upon arrival, participants were randomly assigned to one of 118 dyads, including 31 male–male groups, 36 female–female groups, and 51 male–female groups. Participants were instructed to work together to solve a problem that student organizations face when planning events: menu selection for a dinner party. Various healthy and unhealthy options were available.

The decision quality outcome was measured by the total amount of calories that each dyad selected to be consumed through the menu selections. Total calories were calculated based on quantities cross-referenced from nutritional guides (e.g., www.calorieking.com) that should be minimized to maintain a healthy diet. This measure is similar to measures used in recent studies on cognitive biases in food choice decision-making (Chandon and Wansink 2007).

Results

Test of Hypothesis 3. OLS regressions were used to test hypothesis 3. Results indicated significant differences ($b = .36$, $t = 4.02$, $p < .001$) and a change in R square (ΔR -square = .12, $p = .000$). Dyads with less EA similarity (higher difference scores) selected meals with significantly higher calories. Thus, similar EA dyads made superior joint decisions relative to non-similar dyads in support of H3.

Planned Contrasts by Similar and Non-similar EA Dyads. Similar to studies 1 and 2, we trichotomized each person's EA into a high (>110), moderate (90–110), and low (<90), to compare how similar EA dyads (high-high, moderate-moderate, low-low) and non-similar dyads (low-moderate, low-high, moderate-high) performed on a joint decision task (total calories per dyad). Findings indicated a significant difference between groups ($F(4,118) = 7.03$, $p = .000$). Furthermore, as a conservative comparison test of unique EA levels, the lowest mean for non-similar EA dyads (mod-high; 5,396 total calories) was significantly different ($\Delta = 1427$, $t = 2.03$, $p < .05$) from the highest mean for similar EA dyads (mod-mod; 3,969 calories).

General Discussion

EA similarity reflects a deep-level of interpersonal similarity, beyond physical features and personal characteristics, and captures the ways that individuals jointly process emotional information and communicate on the same wavelength. Results from three studies reveal that EA similarity enables individuals to communicate with ease, which in turn, fosters easy and effortless interactions, and thus greater relational success that endures past initial interactions.

Overall, our findings challenge the received notion that higher EA is uniformly likely to create ideal outcomes for interacting with others. Rather, results indicate that people with similar EA communicate on a similar wavelength, “get along” better, make better joint decisions, and are more likely to form enduring relationships.

Notably, we find that EA similarity accounts for outcomes beyond commonly measured forms of similarity, attractiveness, familiarity, and friendliness. Collectively, these three studies provide evidence that birds of a feather not only flock together, but more precisely, *feel* together, and that consumer interactions must consider, at least in part, the role of EA similarity.

REFERENCES

- Ahearne, Michael, Thomas W. Gruen, and Cheryl Jarvis (1999), “If Looks Could Sell: Moderation and Mediation of the Attractiveness Effect on Salesperson Performance,” *International Journal of Research in Marketing*, 16 (4), 269–84.
- Bailey, Roger C., and Michael Kelly (1984), “Perceived Physical Attractiveness in Early, Steady, and Engaged Daters,” *The Journal of Psychology*, 116 (1), 39–43.
- Barrett, Lisa F., Batja. Mesquita, Kevin N. Ochsner, and James J. Gross (2007), “The Experience of Emotion,” *Annual Review of Psychology*, 58 (June), 373–403.
- Barsade, Sigal G. (2002), “The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior,” *Administrative Science Quarterly*, 47 (4), 644–75.
- Barsade, Sigal G., and Donald E. Gibson (2012), “Group Affect its Influence on Individual and Group Outcomes,” *Current Directions in Psychological Science*, 21 (2), 119–123.
- Baumeister, Roy F. (2002), “Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior,” *Journal of Consumer Research*, 28 (4), 670–76.
- Baumeister, Roy F., Erin A. Tyler F. and Kathleen D. Vohs (2008), “Free Will in Consumer Behavior: Self-control, Ego Depletion, and Choice,” *Journal of Consumer Psychology*, 18, 4–13.
- Brack, Anna Dorothea and Martin Benkenstein (2014), “Responses to Other Similar Customers in a Service Setting – Analyzing the Moderating Role of Perceived Performance Risk,” *Journal of Services Marketing*, 28 (2), 138–46.
- Brafman, Ori, and Rom Brafman (2010), *Click: The Magic of Instant Connections—and How They Can Transform Our Work and Relationships*. Random House.
- Brockner, Joel, and Walter C. Swap (1976), “Effects of repeated exposure and attitudinal similarity on self-disclosure and interpersonal attraction,” *Journal of Personality and Social Psychology*, 33 (5), 531–537.
- Brown, Jacqueline J., and Peter H. Reingen. (1987), “Social Ties and Word-of-Mouth Referral Behavior,” *Journal of Consumer Research*, 14, 350–62.
- Burgoon, Judee K. (1991), “Relational Message Interpretations of Touch, Conversational Distance, and Posture,” *Journal of Nonverbal Behavior*, 15, 233–58.
- Byrne, Donn (1961), “Interpersonal Attraction and Attitude Similarity,” *Journal of Abnormal and Social Psychology*, 62 (3): 713–15.
- Cappella, Joseph N. (1981), “Mutual Influence in Expressive Behavior: Adult–Adult and Infant–Adult Dyadic Interaction,” *Psychological Bulletin*, 89 (1), 101–18.
- Caruso, David R. and Peter Salovey (2004), *The Emotionally Intelligent Manager: How to Develop and Use The Four Key Emotional Skills of Leadership*. San Francisco: Jossey-Bass.
- Chandon, Pierre, and Brian Wansink (2007), “Is Obesity Caused by Calorie Underestimation? A Psychophysical Model of Meal Size Estimation,” *Journal of Marketing Research*, 44 (1), 84–99.
- Cesario, Joseph and E. Tori Higgins (2008), “Making Message Recipients “Feel Right”: How Nonverbal Cues Can Increase Persuasion,” *Psychological Science*, 19, 415–20.
- Crosby, Lawrence A., and Nancy Stephens (1987), “Effects of Relationship Marketing on Satisfaction, Retention, and Prices in the Life Insurance Industry,” *Journal of Marketing Research*, 24 (4), 404–11.

- Crosby, Lawrence A., Kenneth R. Evans and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (July), 68-81.
- Davis, Jody L. and Caryl E. Rusbult (2001), "Attitude Alignment in Close Relationships," *Journal of Personality and Social Psychology*, 81 (1), 65-84.
- Doney, Patricia M., and Joseph P. Cannon (1997). An Examination of the Nature of Trust in Buyer-Seller Relationships. *Journal of Marketing*, 61(2), 35-35.
- Duysen, Kim and John A. Teske (1993), "Meta-Attitudinal Similarity and Relationship Closeness," *Psychological Reports*, 73, 921-22.
- Dwyer, Sean, Richard Orlando, and C. David Shepherd (1998), "An Exploratory Study of Gender and Age Matching in the Salesperson-Prospective Customer Dyad: Testing Similarity-Performance Predictions," *Journal of Personal Selling & Sales Management*, 18 (4), 55-69.
- Dzhogleva, Hristina, and Cait Poyner Lamberton (2014), "Should Birds of a Feather Flock Together? Understanding Self-Control Decisions in Dyads," *Journal of Consumer Research*, 41 (2), 361-80.
- Eastwick, Paul W., Eli J. Finkel, and Alice H. Eagly (2011), "When and Why Do Ideal Partner Preferences Affect the Process of Initiating and Maintaining Romantic Relationships?" *Journal of Personality and Social Psychology*, 101 (5), 1012-32.
- Echterhoff, Gerald, E. Tory Higgins, and John M. Levine (2009), "Shared Reality Experiencing Commonality with Others' Inner States about the World," *Perspectives on Psychological Science*, 4 (5), 496-521.
- Ekman, Paul (1993), "Facial Expression and Emotion," *American Psychologist*, 48 (4), 384-91.
- Ekman, Paul, Wallace V. Friesen, and Phoebe Ellsworth (2013), "Emotion in the Human Face: Guidelines for Research and an Integration of Findings." Elsevier.
- Epp, Amber M., and Linda L. Price (2011), "Designing Solutions around Customer Network Identity Goals," *Journal of Marketing*, 75 (2), 36-54.
- Feingold, Alan (1988), "Matching for Attractiveness in Romantic Partners and Same-Sex Friends: A Meta-Analysis and Theoretical Critique," *Psychological Bulletin*, 104, 226-35.
- Fitness, Julie (2001), "Emotional Intelligence and Intimate Relationships," in *Emotional Intelligence and Everyday Life*, ed. J. Ciarrochi, J. P. Forgas, and J. D. Mayer, New York: Psychology Press, xi-xviii.
- Frijda, Nico H. and Batja Mesquita (1994), "The Social Roles and Functions of Emotions," in *Emotion and Culture: Empirical Studies of Mutual Influence*, ed. S. Kitayama and H. R. Markus, Washington, DC: American Psychological Association.
- Giardini, Angelo, and Michael Frese (2008), "Linking Service Employees' Emotional Competence to Customer Satisfaction: A Multilevel Approach," *Journal of Organizational Behavior*, 29 (2), 155-70.
- Grayson, Kent (2007), "Friendship Versus Business in Marketing Relationships," *Journal of Marketing*, 71 (4), 121-39.
- Grewal, Rajdeep, Thomas W. Cline, and Anthony Davies (2003), "Early-Entrant Advantage, Word-of-Mouth Communication, Brand Similarity, and the Consumer Decision-Making Process," *Journal of Consumer Psychology*, 13 (3), 187-97.
- Harrison, David A., Kenneth H. Price, Joanne H. Gavin, and Anna T. Florey (2002), "Time, Teams, and Task Performance: Changing Effects of Surface- and Deep-Level Diversity on Group Functioning," *Academy of Management Journal*, 45 (5), 1029-45.
- Heise, David R., and Cassandra Calhan (1995), "Emotion norms in interpersonal events." *Social Psychology Quarterly*, (1), 223-240.
- Hennig-Thurau, Thorsten, Markus Groth, Michael Paul, and Dwayne D. Gremler (2006), "Are All Smiles Created Equal? How Emotional Contagion and Emotional Labor Affect Service Relationships," *Journal of Marketing*, 70 (3), 58-73.
- Hodgetts, Carl J., Ulrike Hahn, and Nick Chater (2009), "Transformation and Alignment in Similarity," *Cognition*, 113 (1), 62-79.
- Homburg, Christian, Jan Wieseke, and Torsten Bornemann (2009), "Implementing the Marketing Concept at the Employee-Customer Interface: The Role of Customer Need Knowledge," *Journal of Marketing*, 73 (4), 64-81.
- Huber, George P. and Danial Power (1985), "Retrospective Reports of Strategic-Level Managers: Guidelines for Increasing Their Accuracy," *Strategic Management Journal*, 6, 171-80.
- Jiang, Lan, Joandrea Hoegg, Darren W. Dahl, and Amitava Chattopadhyay (2010), "The Persuasive Role of Incidental Similarity on Attitudes and Purchase Intentions in a Sales Context," *Journal of Consumer Research*, 36 (5), 778-91.
- Jones, Tim, Shirley F. Taylor, and Harvir S. Bansal (2008), "Commitment to a Friend, a Service Provider, or a Service Company—Are They Distinctions Worth Making?" *Journal of the Academy of Marketing Science*, 36 (4), 473-87.
- Kavanagh, David J., and Gordon H. Bower (1985), "Mood and self-efficacy: Impact of joy and sadness on perceived capabilities," *Cognitive Therapy and Research*, 9 (5), 507-525.
- Keltner, Dacher and Jonathan Haidt (1999), "Social Functions of Emotions at Four Levels of Analysis," *Cognition and Emotion*, 13, 505-21.
- Kidwell, Blair, David M. Hardesty and Terry L. Childers (2008), "Consumer Emotional Intelligence: Conceptualization, Measurement, and the Prediction of Consumer Decision Making," *Journal of Consumer Research*, 35 (June), 154-66.
- Kidwell, Blair, David Hardesty, Brian R. Murtha and Simon Sheng (2011), "Emotional Intelligence in Marketing Exchanges," *Journal of Marketing*, 75(1), 78-95.
- Kidwell, Blair, Jonathan Hasford, and David M. Hardesty (2015) "Emotional Ability Training and Mindful Eating," *Journal of Marketing Research*, 52 (February), 105-19.
- Koudenburg, Namkje, Ernestine H. Gordijn, and Tom Postmes (2014), "'More Than Words' Social Validation in Close Relationships," *Personality and Social Psychology Bulletin*, 40 (11), 1517-28.
- Krebs, Dennis and Allen A. Adinolfi (1975), "Physical Attractiveness, Social Relations, and Personality Style," *Journal of Personality and Social Psychology*, 31, 245-53.
- Leonard, Jonathan S., David I. Levine, and Aparna Joshi (2004), "Do Birds of a Feather Shop Together? The Effects on Performance of Employees' Similarity with One Another and with Customers," *Journal of Organizational Behavior*, 25 (6), 731-54.

- Liao, Hui, Aichia Chuang, and Aparna Joshi (2008), "Perceived Deep-Level Dissimilarity: Personality Antecedents and Impact on Overall Job Attitude, Helping, Work Withdrawal, and Turnover," *Organizational Behavior and Human Decision Processes*, 106 (2), 106–24.
- Lopes, Paulo N., Marc A. Brackett, John B. Nezlek, Astrid Schütz, Ina Sellin, and Peter Salovey (2004), "Emotional Intelligence and Social Interaction," *Personality and Social Psychology Bulletin*, 30 (8), 1018–34.
- Lott, Bernice, and Albert J. Lott (1985), "Learning Theory in Contemporary Social Psychology," In G. Lindzey, and E. Aronson (Eds.), *Handbook of Social Psychology* (47-108). New York: Random House.
- Mackinnon, Sean P., Christian H. Jordan, and Anne E. Wilson (2011), "Birds of a Feather Sit Together: Physical Similarity Predicts Seating Choice," *Personality and Social Psychology Bulletin*, 37(7), 879-92.
- Mayer, John D., Richard D. Roberts, and Sigal G. Barsade (2008), "Human Abilities: Emotional Intelligence," *Annual Review of Psychology*, 59 (1), 507-536.
- Mayer, John D., Peter Salovey and David Caruso (2000), "Models of Emotional Intelligence," in *The Handbook of Intelligence*, ed. R. J. Sternberg. New York: Cambridge University Press, 396-420.
- Mayer, John D., Peter Salovey, David R. Caruso, and Gill Sitarenios (2003), "Measuring Emotional Intelligence with the MSCEIT V2.0," *Emotion*, 3 (1), 97-105.
- McFarland, Richard G., Goutam N. Challagalla, and Tasadduq Shervani (2006), "Influence Tactics for Effective Adaptive Selling," *Journal of Marketing*, 70 (4), 103–17.
- Montoya, R. Matthew and Robert S. Horton (2013), "A Meta-Analytic Investigation of the Processes Underlying the Similarity-Attraction Effect," *Journal of Personal and Social Relationships*, 30, 64-94.
- Montoya, R. Matthew, Robert S. Horton, and J. Kirchner (2008), "Is Actual Similarity Necessary for Attraction? A Meta-Analysis of Actual and Perceived Similarity," *Journal of Social and Personal Relationships*, 25(6), 889-922.
- Morgan, Robert M., and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (5), 20-38.
- Muraven, Mark, and Roy F. Baumeister (2000), "Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?" *Psychological Bulletin*, 126 (2), 247-56.
- Netemeyer, Richard G., Carrie M. Heilman, and James G. Maxham III (2012), "Identification with the Retail Organization and Customer-Perceived Employee Similarity: Effects on Customer Spending," *Journal of Applied Psychology*, 97 (5), 1049-1104.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Kenneth R. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis," *Journal of Marketing*, 70 (4), 136–153.
- Palmatier, Robert W., Lisa K. Scheer, and Jan-Benedict E. M. Steenkamp (2007), "Customer Loyalty to Whom? Managing the Benefits and Risks of Salesperson-Owned Loyalty," *Journal of Marketing Research*, 44 (2), 185–99.
- Peter, J. Paul, Gilbert A. Churchill Jr, and Tom J. Brown (1993), "Caution in the Use of Difference Scores in Consumer Research," *Journal of consumer research*, 3, 655-62.
- Preacher, Kristopher J. and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40(3), 879-91.
- Price, Linda L., and Eric J. Arnould (1999), "Commercial Friendships: Service Provider-Client Relationships in Context," *Journal of Marketing*, 63 (4), 38-56.
- Reeve, John Marshall, (2014), *Understanding motivation and emotion*. John Wiley & Sons.
- Riordan, Edward A., Richard L. Oliver, and James H. Donnelly Jr. (1977), "The unsold prospect: Dyadic and attitudinal determinants," *Journal of Marketing Research*, 1, 530-537.
- Salovey, Peter, Alexander J. Rothman, Jerusha B. Detweiler, and Wayne T. Steward (2000), "Emotional States and Physical Health," *American Psychologist*, 55 (1), 110–21.
- Schaubroeck, John, and Simon SK Lam (2002), "How Similarity to Peers and Supervisor Influences Organizational Advancement in Different Cultures," *Academy of Management Journal*, 45 (6), 1120–36.
- Shaikh, Taiyoba, and Suresh Kanekar (1994), "Attitudinal similarity and affiliation need as determinants of interpersonal attraction," *The Journal of Social Psychology* 134 (2), 257-259.
- Siegel, D. J (2010), *Mindsight: The New Science of Personal Transformation*. Bantam Dell Publishing Group.
- Sunnafrank, Michael J. and Gerald R. Miller (1981), "The Role of Initial Conversations in Determining Attraction to Similar and Dissimilar Strangers," *Human Communication Research*, 8 (1), 16-25.
- Tidwell, Natasha D., Paul W. Eastwick, and Eli J. Finkel (2013), "Perceived, Not Actual, Similarity Predicts Initial Attraction in a Live Romantic Context: Evidence from the Speed-Dating Paradigm," *Personal Relationships*, 20 (2), 199–215.
- Van Kleef, Gerben A., Astrid C. Homan, and Arik Cheshin (2012), "Emotional Influence at Work: Take It EASI," *Organizational Psychology Review*, 2 (4), 311-39.
- White, Katherine and Jennifer J. Argo (2011), "When Imitation Doesn't Flatter: The Role of Consumer Distinctiveness in Responses to Mimicry," *Journal of Consumer Research*, 38 (4), 667-80.
- Weitz, Barton A. (1981), "Effectiveness in sales interactions: a contingency framework," *Journal of Marketing*, 45 (1), 85-103.
- Yim, Chi Kin, David K. Tse, and Kimmy Wa Chan (2008), "Strengthening Customer Loyalty through Intimacy and Passion: Roles of Customer-Firm Affection and Customer-Staff Relationships in Services," *Journal of Marketing Research*, 45 (6), 741–56.
- Zhao, Xinshu, John G. Lynch and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37 (August), 197-206.

When and How Consumers Defend Their Psychological Possessions

Colleen P. Kirk, New York Institute of Technology, USA

Joann Peck, University of Wisconsin – Madison, USA

Scott D. Swain, Clemson University, USA

EXTENDED ABSTRACT

The concept of psychological ownership (a feeling that “It is *mine!*”; Pierce, Kostova, & Dirks, 2003) has recently garnered significant attention in the marketing literature, largely due to its positive implications for marketers, such as willingness to pay more (Peck & Shu, 2009). In the present research we draw attention to the edgier side of psychological ownership (PO): its potential to engender territorial responses (Brown, Lawrence, & Robinson, 2005).

We propose that consumers perceive infringement, or threat, with respect to a psychologically owned target when they believe that another person is signaling PO of the same target. That is, consumers’ perceptions of infringement and subsequent territorial responses are stronger when they infer that another individual is signaling control over, investment of self in, or intimate knowledge of their psychologically-owned target. Further, we argue that these effects are more intense when consumers believe they have strongly signaled their own PO of a target (i.e., their territory) in advance.

Across five studies, we manipulate a consumer’s PO of a target product and/or their communication (marking) of that PO. We also vary another person’s PO signal of the same target. We then measure the consumer’s infringement perception and observe and document their territorial behaviors. Contributing to the PO and territoriality literatures, this research provides the first demonstration of the role of the antecedents of PO in ownership signaling, as well as the first evidence that consumers’ territorial responses depend on their own PO of a target, their communication of that PO, and others’ PO signals. In so doing, we contribute to the nascent literature on consumer territoriality (Ashley & Noble, 2014) by demonstrating the anticipatory and reactionary defenses that result.

Study 1 was a laboratory experiment in a restaurant context in which we elicited high PO of a cup of coffee and then manipulated a server’s (the other’s) PO signal by having the server move (not move) the participant’s coffee cup. Observers recorded participants’ behaviors, participants were invited to tip the server, and infringement perception and additional territorial responses were measured. Among other responses, participants whose coffee cup was moved by the server tipped the server less, were less likely to respond positively to the server, and were more likely to move the coffee cup toward themselves and to exhibit a negative nonverbal expression. Territorial responses were mediated by participants’ infringement perception.

Touch elicits PO through its effect on perceived control (Peck, Barger, & Webb, 2013). Accordingly, another individual’s touch should signal their PO and thus trigger infringement perception on the part of a consumer. In study 2, participants either imagined wearing (high PO) or evaluating (low PO) a sweater at a retail store checkout counter (Spears & Yazdanparast, 2014). They were then told that the customer behind them touched the sweater, either seeking (no PO signal) or not seeking (control-oriented PO signal) prior permission.

Infringement perception was greater when the sweater was touched without (versus with) prior permission, but only when PO of the sweater was high (versus low). Additionally, infringement perception triggered anticipatory and reactionary defenses (Brown, 2009) including putting down the separator bar, not telling the infringer about money they dropped (retaliation), giving the other cus-

tomers a nasty look, perceiving the other customer to be “crazy” or ill-mannered, and picking up or moving the sweater.

In study 3, participants volunteered for a nonprofit organization in a lab setting and either copied an artistic design (low) or created their own (high PO). The assistant signaled (did not signal) ownership of the design by stating “That looks like my design” (stating nothing). Replicating prior results with an intangible target of ownership, participants exhibited reactionary defenses such as not picking up the assistant’s dropped pen, less positive word-of-mouth intentions, and lower donation intentions. They also exhibited anticipatory defenses by indicating they would leave more quickly and be more likely to post a selfie with their design on social media.

Study 4 was a field experiment that builds on research suggesting that individuals feel ownership for the space around them and may respond territorially when their space is invaded (Altman, 1975). Passers-by on a busy thoroughfare in a city were given \$3.00 and asked to purchase a snack in the university convenience store. A confederate customer invaded their personal space either saying nothing, or saying “Excuse me, sorry.” Both reactionary (e.g. not picking up the infringer’s dropped pen) and anticipatory (e.g. leaving more quickly) defenses were observed.

Narcissists are more likely to overestimate the degree to which others find them physically attractive (Carlson, Vazire, & Oltmanns, 2011), and they likely also overestimate others’ assessment of their psychological ownership of an attractive target. These exaggerated metaperceptions should lead narcissists (but not non-narcissists) to perceive infringement even in the absence of clearly marked territory.

In study 5, participants imagined locating a pizza stand intentionally (high) or by chance (low PO). Anthropomorphization of an inanimate object transforms the object into a social entity (Beggan, 1992), and thus should enhance others’ perceptions of intimate knowledge of an ownership target. Therefore, participants were told that while they were looking at the pizza, a stranger approached and said either “I am not familiar with this pizza” (no PO signal) or “I know this pizza well. I call this pizza Antonio” (intimate knowledge-oriented PO signal).

Replicating prior results, infringement perception was greater when the consumer’s PO was high than when it was low, but only when the other customer signaled PO of the pizza by naming it. The interaction was significant for participants who were high, but not low, in narcissism. Territorial responses triggered by infringement perception included leaving the pizza stand quickly, responding negatively to the other consumer, and classifying the other’s behavior as “weird” or “mentally ill.” A posttest confirmed the positive association between narcissism and psychological ownership metaperception.

Across five studies in different contexts, these results demonstrate when and how psychological ownership signals of others, both consumers and employees, can result in consumers’ territorial responses, and what kind of reactions may occur.

REFERENCES

- Altman, I. (1975). *The Environment and Social Behavior: Privacy, Personal Space, Territory, and Crowding*. Belmont, CA: Wadsworth Publishing Company.

- Ashley, C., & Noble, S. M. (2014). It's Closing Time: Territorial Behaviors from Customers in Response to Front Line Employees. *Journal of Retailing*, 90(1), 74-92.
- Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. *Journal of Personality and Social Psychology*, 62(2), 229.
- Brown, G. (2009). Claiming a corner at work: Measuring employee territoriality in their workspaces. *Journal of environmental psychology*, 29(1), 44-52.
- Brown, G., Lawrence, T. B., & Robinson, S. L. (2005). Territoriality in organizations. *Academy of Management Review*, 30(3), 577-594.
- Carlson, E. N., Vazire, S., & Oltmanns, T. F. (2011). You probably think this paper's about you: Narcissists' perceptions of their personality and reputation. *Journal of Personality and Social Psychology*, 101(1), 185-201.
- Peck, J., Barger, V., & Webb, A. (2013). In Search of a Surrogate for Touch: The Effect of Haptic Imagery on Perceived Ownership. *Journal of Consumer Psychology*, 23(2), 189-196.
- Peck, J., & Shu, S. B. (2009). The Effect of Mere Touch on Perceived Ownership. *Journal of Consumer Research*, 36(3), 434-447.
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of general psychology*, 7(1), 84.
- Spears, N., & Yazdanparast, A. (2014). Revealing obstacles to the consumer imagination. *Journal of Consumer Psychology*, 24(3), 363-372.

Giving More or More Giving: Comparing the Appeal to Make a Difference versus Express Support in Charitable Giving

Minjung Koo, SKK GSB, Sungkyunkwan University, Korea

Ayelet Fishbach, University of Chicago, USA

Hye Kyung Park, Community Chest of Korea, Korea

EXTENDED ABSTRACT

Marketers of charities use various solicitation methods to persuade consumers to invest resources to advance certain social causes. In general, charitable organizations seek different levels of contributions, from symbolic contributions (e.g., petition signing) to substantial help (e.g., making large contributions). In addition, some charitable organizations wish to increase their outreach by building a social movement that involves as many people as possible, whereas others focus on raising a few large donations, with less concern about outreach.

To encourage more people to give and to encourage people to give more, charitable organizations develop and use different persuasive appeals. The current research compares two categories of appeals—one calling to express support and the other to make a difference—and tests the distinct effects these appeals have on both the number of contributors (participation rates) and the average contribution size. We predict whether an appeal to express support for a cause increases the participation rate by tapping into people's motivation to express commitment to the cause via widespread symbolic giving. In contrast, we predict an appeal to make a difference increases the average contribution by tapping into people's motivation to help a social organization make progress on solving a problem. We further argue that these decisions—whether versus how much to give—are partially independent.

We build on research on the dynamics of regulation, which distinguishes between the motivation to make progress and the motivation to signal personal commitment, in goal pursuit (Koo and Fishbach 2008; Fishbach et al. 2014). At times, people choose goal-directed actions with the motivation to make progress on and eventually complete a goal, whereas at other times, their main motivation is to express their commitment to pursuit of the goal regardless of progress. Likewise, we suggest that people may give to express commitment to a cause or to make progress in solving the problem. We further propose that social campaigns and fundraisers tend to rely on two common categories of persuasive appeals, which map onto and activate these distinct motivations.

First, an appeal to express support (e.g., “express your support” “show that you care”) taps into commitment-based motivation: motivation to choose more symbolic actions that are less concerned with moving the goal forward than with demonstrating that many people endorse the goal. An appeal to express support encourages many people to participate in a campaign by contributing something, even if it is a small amount, because people understand that the number of contributors matters for successfully communicating support.

By contrast, an appeal to make a difference (e.g., “make a difference,” “let's make progress”) taps into progress-based motivation: motivation to move a goal forward, close the gap, and complete the goal. These appeals encourage actions that are designed to change the status of a goal. Therefore, when a social organization encourages people to make a difference, it communicates that the amount of contributions matters most, such that a few large contributions are as useful as many small contributions.

Accordingly, our hypothesis is that express-support (vs. make-a-difference) appeals would generate a larger number of contributions, because it motivates people to give symbolically to express

their commitment. By contrast, make-a-difference (vs. express-support) appeals would generate higher average contributions, because it motivates givers to give substantially to make progress.

We report two field studies and two lab studies. Study 1 was a field study in which we mailed solicitation letters to a selected group of alumni (N = 10,189) as a part of an annual fundraising campaign at a large business school. We framed the request as “express support of the school” or “make a difference for the school” in the letter. As predicted, we found a greater participation rate in the express-support appeal than in the make-a-difference appeal, but a greater donation amount in the make-a-difference appeal than in the express-support appeal.

Study 2 was another field experiment with Compassion International, including a control condition (neutral appeal) to demonstrate the observed effects were driven by the positive impact of the appeals, not by the negative impact. We asked participants to write a message to children on a campaign website and told them that the university would donate 1 cent per character submitted by each participant (i.e., the longer the message, the greater the donation amount). The participation rate was higher in the express-support condition than other conditions, whereas the average length of message was longer in the make-a-difference condition than other conditions.

Whereas field studies with real contributions provide high external validity, they also create a natural dependence between the decision to give and the decision about the amount to give. To address the dependency, in Study 3, we moved to a lab setting to have participants make only one decision: either decide whether to give or how much to give. Participants were presented with one of the following appeals: expressing support, making a difference, or no appeal (control), and indicated either the likelihood of donating something (%), or the amount of donation assuming they all donate something (\$). Donation rate was higher in the express-support condition than other conditions, whereas donation amount was higher in the make-a-difference condition than other conditions.

In Study 4, we provide more evidence for process underlying the distinct patterns to solicitations. In a two-step study, we showed (a) express-support versus make-a-difference appeals activate distinct motivations (commitment vs. progress), and (b) a manipulation of these distinct motivations affected the pattern of donation decisions (more giving vs. giving more).

When people join a social movement to promote a social cause, free riding and social loafing naturally result in motivational deficits. Therefore, understanding people's source of motivation for contributing personal resources toward a social cause is critical. This research finds that different persuasive appeals evoke different motivations for giving, which has implications for whether and how much people give.

REFERENCES

- Aquino, Karl and Americus Reed II (2002), “The Self-Importance of Moral Identity,” *Journal of Personality and Social Psychology*, 83(December), 1423-40.
- Belk, Russell W. (1979), “Gift-Giving Behavior,” in *Research In Marketing*, Jagdish N. Sheth, eds., Greenwich CT, JAI Press, 95-126.

- Duncan, Brian (2004), "A Theory of Impact Philanthropy," *Journal of Public Economics*, 88(August), 2159-80.
- Fishbach, Ayelet, Minjung Koo, and Stacey R. Finkelstein (2014), "Motivation Resulting From Completed And Missing Actions," in *Advances in Experimental Social Psychology*, 50, James M. Olson and Mark P. Zanna, eds., UK, Elsevier, 257-307.
- Grant, Adam M. (2007), "Relational Job Design and The Motivation To Make A Prosocial Difference," *Academy of Management Review*, 32(April), 393-417.
- Karau, Steven J. and Kipling D. Williams (1993), "Social loafing: A Meta-Analytic Review and Theoretical Integration," *Journal of Personality and Social Psychology*, 65(October), 681-706.
- Koo, Minjung and Ayelet Fishbach (2008), "Dynamics Of Self-Regulation: How (Un) Accomplished Goal Actions Affect Motivation," *Journal of Personality and Social Psychology*, 94(February), 183-95.

It's Mine, But I'll Help You: How Ownership Salience Increases Prosocial Behavior

Maryam Kouchaki, Northwestern University, USA
Ata Jami, University of Central Florida, USA
Francesca Gino, Harvard University, USA

EXTENDED ABSTRACT

Feelings of ownership are an important ingredient to individuals' lives given that each of us interacts daily with various material and immaterial objects we own. Ownership satisfies people's need for self-identity, helping them "define themselves, express their self-identity to others, and maintain the continuity of the self across time" (Pierce, Kostova, and Dirks, 2003, 89). Moreover, one's possessions help individuals respect themselves, feel satisfied with themselves, feel they have much to be proud of. As such, possessions can confer a sense of self-worth.

Despite benefits of psychological ownership to individuals in expressing self-identity and enhancing self-worth, religious and other writings suggest that materialistic individuals are self-centered and that the overemphasis on material possessions and acquisition are "inherently incompatible with sharing and giving to others" (Richins and Dawson 1992, 308). In this research, we propose and show that contrary to normative beliefs, psychological ownership, or the salience of one's possessions, does not hinder prosocial behavior; instead, it increases it by enhancing individuals' feelings of self-worth.

Ownership has been examined in a wide range of disciplines, from anthropology, sociology, and psychology to consumer behavior and management. Research on the state of psychological ownership (i.e., "mine-ness") has focused primarily on its roots, how people experience it, and the owner's relationship to the owned entity to make predictions about emotions, cognitions, and behaviors towards the entity (Pierce et al. 2003; Pierce and Jussila 2011). Psychological ownership has been shown to influence an individual's attitudes, values, and behavior toward the target entity (Peck and Shu 2009; Shu and Peck 2011; Weiss and Johar 2013). Though insightful, past research has not yet examined how psychological ownership influences cognitions and behaviors unrelated to the owned entity.

Research suggests that psychological ownership can convey a sense of worth, affecting global judgments of one's self-worth (Belk 1988). In fact, a large body of research has shown a compensatory relationship between self-esteem and materialism, such that low self-esteem increases materialistic tendencies since possessions compensate by providing a sense of worth (Chaplin and John 2007; Ferraro, Escalas, and Bettman 2011).

State self-esteem refers to a person's sense of her/his value or worth in the moment, and a boost to self-worth means that the person feels proud, pleased with oneself, and valuable. Self-consistency and self-enhancement theories (Epstein 1973; Swann et al. 1987) predict that in such situations people act prosocially to maintain or enhance self-esteem because positive behavior towards others reinforces a positive sense of self that maintains cognitive consistency. Thus, we expect that psychological ownership (i.e., when people are thinking about the things they own) enhances state self-worth, which in turn increases subsequent prosocial behavior.

Value of possessions varies across different individuals. Materialism captures "the importance a consumer attaches to worldly possessions" (Belk 1984, 291). Therefore, we expect individual differences in materialism to be important moderating factors predicting the effect of salience of ownership on subsequent prosocial behavior. Specifically, we do not expect a boost in one's state self-worth to

happen when ownership becomes salient for individuals low on materialism because they do not assess their self-worth strongly by their possessions. As such we do not expect salience of one's possession to increase helping behavior in individuals that are less materialistic.

Central to our argument linking salience of possessions to self-worth is the contention that individuals regard their possessions as part of themselves. Previous work has identified "mine-me sensitivity" (Weiss and Johar 2013) as an important individual difference that captures differences in the extent to which individuals associate "mine" with "me." Individuals low in mine-me sensitivity have weaker associations between possessions ("mine") and the self ("me"). For these individuals, the association between objects and the self does not change much based on whether they own the objects or not. When ownership becomes salient (i.e., when people are thinking about the things they own) individuals use their possessions to determine their state self-worth. However, because low mine-me sensitivity indicates weaker associations between possessions and self, salience of ownership should not boost self-worth compared to those high on mine-me sensitivity, hence, ownership salience should not predict helping behavior of individuals low on mine-me sensitivity.

We ran six studies to test the effect of ownership salient on self-worth and prosocial behavior and to examine factors moderating this effect. In Study 1A, owners behaved more generously toward partners in a dictator game than did non-owners. In Study 1B, felt ownership, induced by touching an object, increased subsequent helping. In Study 2, we examined state self-worth as a psychological mechanism underlying these effects. Ownership salience led to a boost in self-worth encouraging individuals to be more helpful. In Studies 3 and 4, we examined materialism and mine-me sensitivity as individual differences moderating the effect of ownership salience on prosocial behavior, showing that our proposed effect did not hold for individuals low on materialism or low on mine-me sensitivity. In Study 5, we attenuated the effect of ownership salience on donation by making the negative attributes of one's possessions relevant.

In this research, we tested a counterintuitive hypothesis, that is, increasing the salience of possessions encourages giving and sharing. We found that ownership salience boosts self-worth, which results in greater prosocial behavior towards various beneficiaries. Relying on a psychological perspective of ownership, our paper goes beyond existing work and offers a novel perspective for understanding the positive consequences of salience of possession. We detail the psychological mechanism and test it in controlled laboratory studies using both a mediation and moderation approach, as well through a variety of manipulations of psychological ownership and different tasks to assess prosocial behavior. We provide fresh insights into the psychology of ownership, an important area of inquiry in the consumer literature.

REFERENCES

- Belk, Russell W. (1984), "Three Scales to Measure Constructs Related To Materialism: Reliability, Validity, and Relationships to Measures of Happiness," *NA-Advances in Consumer Research*, 11, 291-7.

- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15(2), 139-68.
- Chaplin, Lan Nguyen, and Deborah Roedder John (2007), "Growing Up in A Material World: Age Differences in Materialism in Children and Adolescents," *Journal of Consumer Research*, 34(4), 480-493.
- Epstein, Seymour (1973), "The Self-Concept Revisited: Or A Theory of A Theory," *American Psychologist*, 28(5), 404-416.
- Ferraro, Rosellina, Jennifer Edson Escalas, and James R. Bettman (2011), "Our Possessions, Our Selves: Domains of Self-Worth and the Possession-Self Link," *Journal of Consumer Psychology*, 21(2), 169-177.
- Peck, Joann, and Suzanne B. Shu (2009), "The Effect of Mere Touch on Perceived Ownership," *Journal of Consumer Research*, 36(3), 434-47.
- Pierce, Jon L., Tatiana Kostova, and Kurt T. Dirks (2003), "The State of Psychological Ownership: Integrating and Extending A Century of Research," *Review of General Psychology*, 7(1), 84-107.
- Pierce, Jon L., and Iiro Jussila (2011), *Psychological Ownership and the Organizational Context: Theory, Research Evidence, and Application*, Edward Elgar Publishing.
- Richins, Marsha L., and Scott Dawson (1992), "A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation," *Journal of Consumer Research*, 19(3), 303-316.
- Shu, Suzanne B., and Joann Peck (2011), "Psychological Ownership and Affective Reaction: Emotional Attachment Process Variables and the Endowment Effect," *Journal of Consumer Psychology*, 21(4), 439-452.
- Swann, William B., John J. Griffin, Steven C. Predmore, and Bebe Gaines (1987), "The Cognitive-Affective Crossfire: When Self-Consistency Confronts Self-Enhancement," *Journal of Personality and Social Psychology*, 52(5), 881-889.
- Weiss, Liad, and Gita V. Johar. (2013), "Egocentric Categorization and Product Judgment: Seeing Your Traits in What You Own (and Their Opposite in What You Don't)," *Journal of Consumer Research*, 40(1), 185-201.

It's Your Experience: Investigating the Effect of Asymmetric Resource Investments on the Enjoyment of Group Consumption Experiences

Aleksandra Kovacheva, SUNY - Albany, USA

Cait Lambertson, University of Pittsburgh, USA

Eugenia Wu, University of Pittsburgh, USA

EXTENDED ABSTRACT

Group consumption experiences (e.g., parties, community group events) are not only ubiquitous in our everyday lives, but also have important economic and social implications. Further, despite the fact that a large segment of the experiential economy is devoted to these more complex events, little research has examined the utility that consumers obtain from such group experiences. Past work has mainly focused on dyadic groups and on situations where all parties are assumed to make a symmetric contribution to the consumption event (e.g., Ariely and Levav 2000; Bhargava and Montgomery 2013; Dzhogleva and Lambertson 2014).

In the present paper, we explore more complex group consumption dynamics. Specifically, we propose that when consumers take part in group experiences, they invest asymmetric resources: some take responsibility over management of the experience, while others contribute little beyond their personal participation. We theorize and find that this asymmetry impacts the anticipated and experienced utility extracted from joint experiences.

The theoretical basis for this prediction comes both from prior literature on resource investments and experiential utility. In prospect, individuals who assume greater responsibility anchor on the work involved in the management of the event and anticipate lower enjoyment compared to the rest of the group (H1). This is because work and fun are construed as two separate, mutually exclusive dimensions of volitional behaviors (Laran and Janiszewski 2011). Thus, consumers who contribute significantly to the event may anticipate fewer opportunities for enjoyment. In contrast, in retrospect, consumers with greater resource investments may extract greater experiential utility than the rest of the group (H2). This may be because higher resource investments also allow for the customization of the event, may lead to feelings of pride and competence (Franke et al. 2010; Mochon et al. 2012), may make consumers more connected to the rest of the group (Reis et al. 2000), or may create greater busyness and flow (H3; Csikszentmihalyi 1996; Hsee et al. 2010). Each of these mechanisms can enhance the actual enjoyment for consumers with high (but not low) resource involvement.

Study 1 used a prediction-experience paradigm to test whether our proposed miscalibration emerges, and if it is specific to individuals who invest greater effort in a group consumption experience. Based on pretests, we use the roles of host (higher investment) and guest (lower investment) as proxies for asymmetric effort investment. Five hundred thirty-nine MTurk participants completed a 2 (role: host, guest) x 2 (experience: prediction vs. experienced) study. Hosts (guests) imagined organizing (being invited to) a beer tasting party. Experiencers imagined the activities using pictures, cued imagery and descriptions, while those in the anticipated condition proceeded directly to the measures. We first note that there was no difference in the vividness with which hosts and guests imagined the event ($F's < 1$), while there was a main effect of the experience condition ($M_{\text{anticipated}} = 5.53$ vs. $M_{\text{experienced}} = 5.77$; $F(1, 535) = 6.90$, $p = .009$), suggesting that the experiential manipulation was successful. Importantly, the effort contribution by experience v. predictor interaction on enjoyment was significant ($F(2, 535) = 13.62$, $p < .001$, see figure 1). Hosts predicted lower enjoyment of the event than guests (5.46 vs. 5.78; $F(1, 535) = 6.17$, $p = .01$) but reported higher

enjoyment than guests in retrospect (6.20 vs. 5.84; $F(1, 535) = 7.47$, $p = .006$). Further, hosts' anticipated enjoyment was lower than their experienced enjoyment ($F(1, 535) = 31.86$, $p < .001$), demonstrating that hosts engage in affective misforecasting.

In study 2, 170 MTurk participants imagined the same scenario as in study 2. After rating their enjoyment of the event, they indicated to what extent they experienced flow, pride, and connectedness to others. Hosts reported higher enjoyment of the event than guests (6.21 vs. 5.83, $F(1, 168) = 9.34$, $p = .003$). Importantly, experienced flow was the only significant mediator (coefficient = .19, 95% CI: .04 to .34) such that hosts experienced great flow, which lead to greater enjoyment.

Study 3 investigated an intervention that can increase the experienced enjoyment for guests and thus, provided process evidence through moderation (Spencer et al. 2005). The design was 2 (role: host, guest) x 2 (flow: control, flow). Participants imagined being hosts or guests at a game night party. The game was described either as challenging and highly engaging (flow manipulation) or not so engaging (control). In the control condition, we replicated that hosts reported greater enjoyment than guests (5.19 vs. 5.70; $F(2, 352) = 5.39$, $p = .02$; see figure 3) while in the flow condition the difference was not significant (6.13 vs. 6.07, $F < 1$).

To illustrate a boundary condition and ensure that the experienced enjoyment was not driven by cognitive dissonance, study 4 used a 2 (role: host, guest) x 2 (outcome: good vs. bad) between-subjects design. Participants ($N = 493$, MTurk) imagined hosting (being a guest) at a game night party which was described as either successful (good outcome) or not (bad outcome) and then reported their enjoyment of the event. The outcome by event role interaction on enjoyment was significant ($F(1, 489) = 12.99$, $p < .001$, see figure 2). In the good outcome condition, hosts reported higher enjoyment than guests (6.26 vs. 6.06, $F(1, 489) = 3.20$, $p = .07$), thus replicating our previous findings; in the bad outcome condition, hosts reported lower enjoyment than guests (2.81 vs. 3.20; $F(1, 489) = 10.87$, $p = .001$). Importantly, regardless of the outcome, hosts reported investing more resources than guests (5.05 vs. 2.51; $F(1, 489) = 759.79$, $p < .001$; interaction is ns). Hence, the enhanced utility hosts report in retrospect cannot be explained by cognitive dissonance.

This paper is the first to examine consumers' satisfaction with joint experiences which involve asymmetric resource investments and to conceptualize and study the role of host vs. guest. We find an interesting case of affective misforecasting – hosts anticipate lower utility from group experiences compared to guests but extract greater happiness in retrospect. Process evidence suggests that hosts' greater enjoyment of group events is driven by greater experience of flow. We are about to run a field experiment to provide additional process evidence.

REFERENCES

- Ariely, Dan, Emir Kamenica, and Dražen Prelec. "Man's search for meaning: The case of Legos." *Journal of Economic Behavior & Organization* 67, no. 3 (2008): 671-677.
- Bhattacharjee, Amit and Cassie Mogilner (2014), "Happiness from Ordinary and Extraordinary Experiences," *Journal of Consumer Research*, 41 (June), 1-17.

- Csikszentmihalyi, Mihaly. "Flow and the psychology of discovery and invention." *New York: Harper Collins* (1996).
- Csikszentmihalyi, Mihaly. *Finding flow: The psychology of engagement with everyday life*. Basic Books, 1997.
- Franke, Nikolaus, Peter Keinz, and Christoph J. Steger. "Testing the value of customization: when do customers really prefer products tailored to their preferences?," *Journal of Marketing* 73, no. 5 (2009): 103-121.
- Hsee, Christopher K., Adelle X. Yang, and Liangyan Wang. "Idleness aversion and the need for justifiable busyness." *Psychological Science* 21, no. 7 (2010): 926-930
- Laran, Juliano, and Chris Janiszewski. "Work or fun? How task construal and completion influence regulatory behavior." *Journal of Consumer Research* 37, no. 6 (2011): 967-983.
- Reis, Harry T., Kennon M. Sheldon, Shelly L. Gable, Joseph Roscoe, and Richard M. Ryan. "Daily well-being: The role of autonomy, competence, and relatedness." *Personality and social psychology bulletin* 26, no. 4 (2000): 419-435.

Religious Shoppers Spend Less Money

Didem Kurt, Boston University, USA

J. Jeffrey Inman, University of Pittsburgh, USA

Francesca Gino, Harvard University, USA

EXTENDED ABSTRACT

Four out of every five people in the United States are affiliated with a religion, according to a 2015 Pew Research Center study. Despite being a widespread part of American society, limited research has been conducted on how religion affects people's routine, non-religious activities. In the present research, we examine whether religiosity affects the money and time people spend on their grocery purchases, which represent a major and frequent consumption activity.

We are surrounded by religious symbols and cues that remind us of religious values that guide our or others' actions. Such symbols and cues, research has found, powerfully affect our behavior. For instance, reminders of God have been shown to influence the way people behave in risky domains such as skydiving (Chan, Tong, and Tan 2014; Kupor, Laurin, and Levav 2015). Thinking about God provides people with a sense of security, which induces greater risk taking as long as the risky behavior does not fall outside of one's moral boundaries. Research has also found a link between religiosity and virtuous behavior. In fact, reminders of religion (such as recalling the Ten Commandments) have been shown to reduce unethical behavior (Mazar, Amir, and Ariely 2008).

More relevant to the current topic, research has found that people with stronger religious beliefs exhibit less brand reliance (Shachar et al. 2011) and are less likely to engage in conspicuous consumption (Stillman et al. 2012) than those with weaker or no religious beliefs. In addition, being exposed to brands has been shown to reduce one's commitment to religion (Cutright et al. 2014). These findings are consistent with the notion that religious thoughts lead to distancing oneself from materialism and unjustified spending. In many religions, overspending is perceived as an immoral behavior because it wastes resources. Being careful with one's spending, instead, is commonly viewed as virtuous.

More generally, religious people have value systems that differ from those of less or non-religious people (Mokhlis 2006), and they follow religious principles and values in their daily life. They tend to have greater concern for moral standards (Wiebe and Fleck 1980) and more traditional views (Wilkes, Buurnett, and Howell 1986), and they tend to be more conservative (Barton and Vanghan 1976) and satisfied with their lives (Wilkes et al. 1986) than less religious people. Building on this body of research, we argue that a higher degree of religiosity (either at the individual or community level) is associated with conservative shopping behavior, such that those high in religiosity spend less money on their purchases, make fewer unplanned purchases, and spend less time shopping. We also suggest that, more generally, religiosity affects people's spending behavior, such that even being reminded of God makes people less likely to spend money. We maintain that this occurs due to the belief common to many religions that one should refrain from overspending time and money on consumption. These beliefs, which can be made salient not only by a religion's tenets but more generally by priming religion, translates into real consumption behavior. We test our hypotheses in four studies using both field and lab data.

Study 1: Religiosity and Spending on Groceries at the County-Level

Every five years, the U.S. Census Bureau surveys businesses around the country as a part of the Economic Census and releases

information on industry revenues and other relevant metrics, broken down to the county level. We collected the data on grocery store sales from the 2012 Economic Census. We obtained county-level data on religiosity from the Association of Religion Data Archives (ARDA), which conducted its most recent survey in 2010. Over 230 religious groups reporting more than 150 million adherents participated in the survey.

Our dependent variable is grocery store sales per store in a particular county. Our key independent variable is the number of religious adherents (per 1,000 population) reported for a county. In the regression model, we control for several county characteristics such as the log of population, the log of median income, and the log of median age.

Consistent with our prediction, the regression results reveal a negative relation between religiosity and grocery store sales ($b = -0.162, p < .05$). The estimated coefficient on religiosity suggests that a 20% increase in the number of religious adherents living in a county is associated with about a 3.2% decline in the county's grocery store sales per store.

Study 2: Shoppers in More Religious Counties Spend Less Money on Their Purchases

This study uses data collected by the Point of Purchase Advertising International in 2011-2012. Shoppers at 35 different grocery stores across 10 states in the U.S. were randomly intercepted by interviewers as they entered the store and asked to complete pre- and post-shopping surveys in exchange of a \$25 store gift card. 2,401 shoppers completed the survey (mean age = 46.4 years, mean income = \$60,794, 75.2% female). As a part of the survey, participants were asked to provide their zip code for survey validation. We use this information to match each observation with the county-level religiosity data obtained from the ARDA. We have three dependent variables: (1) total money spent, (2) the number of unplanned items purchased, and (3) time spent shopping.

As in Study 1, the independent variable of interest is the log of the number of religious adherents (per 1,000 population) who live in the same county as the participant. Following previous research (e.g., Inman, Wiener, and Ferraro 2009), our regression models control for various shopper and shopping trip characteristics such as the log of shopper age and the log of shopping trip budget.

We excluded 500 observations without information on zip code because we cannot match these observations with the religiosity data. We further excluded 197 participants who participated in a simultaneous EEG-eye-tracking study and put on special equipment that monitored their activity during the entire shopping trip. Finally, we discarded 177 observations due to missing data on items purchased, shopping budget, income, or age. These exclusions yield a final sample with 1,527 observations.

Supporting our prediction, we find that county-level religiosity is negatively associated with participants' total spending ($b = -0.168, p < .01$), unplanned purchases ($b = -0.135, p < .05$), and shopping time ($b = -0.199, p < .05$). The results imply that a 20% increase in the total number of religious adherents living in a county is associated with about a 3.4% decline in total spending, about a 2.7% decline in the number of unplanned items purchased, and about a 4% decline in time spent shopping.

Study 3: Individuals' Religiosity and Their Willingness to Pay

We recruited participants from Amazon's MTurk. 606 adults completed the study (mean age = 34.1 years, mean income = \$47,739, 59.6% female).

This study employs a hypothetical grocery shopping scenario. We asked participants to imagine that they were going grocery shopping and planned to spend about \$25 during their shopping trip. The shopping task consisted of two parts: (1) browsing and buying relatively typical grocery items, and (2) deciding how much to pay for an unplanned item toward the end of the shopping trip. Specifically, in the first part, participants picked an item among several options presented under seven different product categories (i.e., grapes, milk, eggs, frozen pizza, snacks, soda, and bread). To ensure that all participants spent the same amount of money prior to the unplanned shopping task (i.e., \$24.50 in total), the price of each item in a given category was the same (e.g., red grapes, green grapes, and black grapes were all priced at \$2 per pound).

After participants completed the first part of the task, we asked participants to imagine that they had come across a special issue of one of their favorite magazines as they were going to the cashier to pay for their purchases. Following Haws, Bearden, and Nenkov (2012), we measured participants' willingness to pay (WTP) for the magazine by asking them to indicate whether they would purchase the magazine at different prices ranging from \$0 to \$8 with \$0.50 increments. Upon completion of the shopping task, participants answered a set of demographic questions, which included a five-item religiosity scale adapted from Worthington et al.'s (2003) religious commitment inventory ($\alpha = .98$).

We excluded 11 participants who provided non-monotonic responses to the WTP question (e.g., a participant was not willing buy the magazine at \$2.00 but would do so at \$2.50). We further removed eight participants whose WTPs were greater than or equal to \$7.50, as such values are more than three standard deviations above the mean ($M = \$2.50$, $SD = \$1.63$). These exclusions yield a final sample with 587 observations.

Supporting our prediction, we find a negative relation between participants' religiosity and their WTP for the magazine ($b = -0.096$, $p < .05$). Specifically, one standard deviation increase in religiosity is associated with a 5.41% decline in the average participant's WTP. Note that our regression model controls for such variables as the participant's age, gender, and education. Also, controlling for participants' impulsivity did not alter our results.

Study 4: Religiosity Prime and Spending Behavior

We recruited participants from Amazon's MTurk. 809 adults completed the study (mean age = 35.3 years, mean income = \$52,250, 58.2% female).

This study uses the same shopping task employed in Study 3. To manipulate religiosity, we asked participants before they began shopping to watch a short video and rate the speaker in the video on various dimensions (e.g., the use of body language). Participants were randomly assigned to either the religiosity condition or the control condition. In the former condition, participants watched a video of a speaker discussing God's presence. In the latter condition, they were shown a video of a speaker presenting oil painting tips.

After participants made their product choices and indicated their WTP for the magazine, we presented them with a three-item scale used to measure the extent to which they believed that buying the magazine would be a waste of money. The items included in the scale are "Buying the magazine would be wasting money," "If I buy the magazine, that would be a wasteful consumption," and

"It would be irresponsible of me to spend money on the magazine" (1 = *strongly disagree*, 7 = *strongly agree*; $\alpha = .95$). We averaged participants' responses to these items and created a single measure of beliefs about wasting money. We use this measure as a potential mediator of the effect of religiosity prime on participants' willingness to spend money on the magazine.

Among the participants, 35.2% indicated that they had no religion (116 were atheists and 169 were agnostic), 21.5% were Protestant, 15.7% were Catholic, 20.6% reported that they follow other religions, and 6.9% declined to answer. We excluded the participants with no religion from the analysis as the religiosity prime lacks relevance for them and thus may fail to generate the predicted effect. A manipulation check conducted with participants from the same subject population supports this view. Specifically, we measured participants' feelings toward God using the following four items: "I feel God's presence," "I desire to be closer to God," "I believe God watches over me and others," and "One should seek God's guidance when making decisions" (1 = *strongly disagree*, 5 = *strongly agree*, $\alpha = .98$). Whereas the religiosity prime invoked stronger feelings toward God among participants with a religion ($M_{\text{Religiosity}} = 3.89$ vs. $M_{\text{Control}} = 3.58$, $t(272) = 2.40$, $p < .05$), this was not the case among those with no religion ($M_{\text{Religiosity}} = 1.54$ vs. $M_{\text{Control}} = 1.49$, $t(125) = 0.36$, n.s.).

Further, we excluded 15 participants who provided non-monotonic responses to the WTP question. We also removed 7 participants whose WTPs are more than three standard deviations above the mean. These exclusions resulted in a final sample with 502 observations.

As expected, participants in the religiosity condition were willing to spend 9.5% less on the magazine ($M = \$2.29$, $SD = \$1.50$) than those in the control condition ($M = \$2.53$, $SD = \$1.50$), $t(500) = 1.85$, $p = .066$, $d = 0.16$. We obtained consistent results in a multivariate setting with control variables. As an additional analysis, we also controlled for participants' emotional states measured with a PANAS scale. Our results did not change.

Further, we tested whether participants' feelings about wasting money mediates the effect of religiosity prime on their WTP for the magazine. When we included feelings about wasting money in the regression model, it predicted WTP for the magazine ($b = -0.489$, $p < .01$). More important, after controlling for feelings about wasting money, the effect of the religiosity prime on WTP became statistically insignificant ($b = -0.141$, $p = .237$). Supporting the mediation, the 95% bootstrapped confidence interval for the indirect effect of the religiosity prime on participants' WTP for the magazine through feelings of wasting money does not contain zero (i.e., $CI = [-0.254, -0.008]$).

General Discussion

Although religion represents a key aspect of many people's lives, little is known about how religion affects one's non-religious routines. In the present research, we identify a frequent consumption activity that is influenced by religiosity: grocery shopping. Our evidence shows that religiosity curbs the money and time people spend on their grocery purchases. We find that people who live in more religious counties spend less money on groceries and less time shopping for groceries than those in less religious counties. Focusing on religiosity at the individual level yields parallel results: The more religious people are, the less willing they are to seize on purchase opportunities that arise during a shopping trip. This effect seems to be due to a common religious principle: it is wrong to waste one's money and time on material things. Overspending and consuming

more than one needs are typically unwelcomed behaviors in communities with strong religious ties.

An alternative hypothesis—that greater religiosity leads to higher spending—is not supported by our data sets. Nevertheless, anecdotal evidence suggests that some religious leaders and prominent figures in predominantly religious countries endorse lavish life styles. In such cases, religion may have a “licensing effect” on spending (e.g., “God has given me wealth and spending ability” or “I deserve better things because my religion makes me a better person”) that could be compounded by religion’s positive effect on risk taking (e.g., “God protects me, so I can take the risk of spending money”). We encourage future research to examine whether religion’s effect on spending is conditional on one’s social status and wealth.

REFERENCES

- Barton, Keith and G.M. Vaughan (1976), “Church Membership and Personality: A Longitudinal Study,” *Social Behavior and Personality: An International Journal*, 4 (1), 11-16.
- Chan, Kai Qin, Eddie Mun Wai Tong, and Yan Lin Tan (2014), “Taking a Leap of Faith: Reminders of God Lead to Greater Risk Taking,” *Social Psychological and Personality Science*, 5, 901-909.
- Cutright, Keisha M., Tulin Erdem, Gavan J. Fitzsimons (2014), “Finding Brands and Losing Your Religion?,” *Journal of Experimental Psychology: General*, 143 (6), 2209-2222.
- Haws, Kelly L., William O. Bearden, and Gergana Y. Nenkov (2012), “Consumer Spending Self-Control Effectiveness and Outcome Elaboration Prompts,” *Journal of the Academy of Marketing Science*, 40 (5), 695-710.
- Inman, J. Jeffrey, Russ S. Winer, and Rosellina Ferraro (2009), “The Interplay among Category Characteristics, Customer Characteristics, and Customer Activities on In-Store Decision Making,” *Journal of Marketing*, 73 (5), 19-29.
- Kupor, Daniella M., Kristin Laurin, and Jonathan Levav (2015), “Anticipating Divine Protection? Reminders of God Can Increase Nonmoral Risk Taking,” *Psychological Science*, 26 (4), 374-384.
- Mazar, Nina, On Amir, and Dan Ariely (2008), “More Ways to Cheat: Expanding the Scope of Dishonesty,” *Journal of Marketing Research*, 45 (6), 651-653.
- Mokhlis, Safiek (2006), “The Effect of Religiosity on Shopping Orientation: An Exploratory Study in Malaysia,” *Journal of American Academy of Business*, 9 (1), 64-74.
- Puri, Radhika (1996), “Measuring and Modifying Consumer Impulsiveness: A Cost-Benefit Accessibility Framework,” *Journal of Consumer Psychology*, 5 (2), 87-113.
- Shachar, Ron, Tulin Erdem, Keisha M. Cutright, Gavan J. Fitzsimons (2011), “Brands: The Opiate of the Nonreligious Masses?,” *Marketing Science*, 30 (1), 92-110.
- Stillman, Tyler F., Frank D. Fincham, Kathleen D. Vohs, Nathaniel M. Lambert, and Christa A. Phillips (2012), “The Material and Immaterial in Conflict: Spirituality Reduces Conspicuous Consumption,” *Journal of Economic Psychology*, 33 (1), 1-7.
- Wiebe, Ken F., & J. Roland Fleck (1980), “Personality Correlates of Intrinsic, Extrinsic, and Nonreligious Orientations,” *Journal of Psychology*, 105 (2), 181-187.
- Wilkes, Robert E., John J. Burnett, and Roy D. Howell (1986), “On the Meaning and Measurement of Religiosity in Consumer Research,” *Journal of the Academy of Marketing Science*, 14 (1), 47-56.
- Worthington Jr., Everett L., Nathaniel G. Wade, Terry L. Hight, Jennifer S. Ripley, Michael E. McCullough, Jack W. Berry, Michelle M. Schmitt, James T. Berry, Kevin H. Bursley, and Lynn O’Connor (2003), “The Religious Commitment Inventory--10: Development, Refinement, and Validation of a Brief Scale for Research and Counseling,” *Journal of Counseling Psychology*, 50 (1), 84.

The Effects of Perspective on Prosocial Emotions and Intent

Canice M. C. Kwan, Lingnan (University) College, Sun Yat-Sen University, China

Robert S. Wyer, The Chinese University of Hong Kong, Hong Kong

Xianchi Dai, The Chinese University of Hong Kong, Hong Kong

EXTENDED ABSTRACT

When imagining someone in pain, individuals can either putting themselves into the victim's shoes or evaluate the possible remedies for the situation from an observer's perspective. The affective reactions to the situation depend on the perspective that they take (Jones and Nisbett 1972). That is, individuals who appraise a situation from different perspectives can have different emotional reactions (Hung and Mukopaphyay 2012). In a case that they get too close to the victim and lose themselves, they may be too distressed to consider help. Yet in another case if they stay too distant, they may become disinterested to empathize and fail to recognize the need of help. These cases highlight the mixed findings in literature concerning which perspective, of the victim or of an observer, is more effective to motivate prosocial intents.

To reconcile this dilemma, we theorize that the effects of perspective are underlain by two opposite forces—the capacity to empathize and self-awareness to evaluate potential obligations. In literature, empathy and self-consciousness have been treated as opposite ends of a continuum. That is, people who imagine the situation from the victims' perspective are assumed to lose themselves in the situation, blurring the subjective distinction between themselves and the others (Green and Brock 2000). However, this conceptualization does not account for all of the effects that perspectives might have. When several parties are involved in a situation, people might imagine the situation from the two basic perspectives but also that of persons other than the victim who are involved in the situation. The effects of taking the perspective of this involved observer have not been articulated.

This research sets out to understand the effects of the perspective of *involved* observer and shows that this perspective is optimal in stimulating prosocial intent. We predict that although both the perspectives of victim and involved observer boost empathy and distress as compare to that of disinterested observer, only the latter elicit more guilt and results in enhanced prosocial intent. These effects can be summarized in two parallel routes, empathy-based and obligation-based.

Three experiments validate the proposed effects and mechanism. In the studies, participants read about a fatal ferry collision. In *disinterested-observer* conditions, they imagined the situation as if they watched a new report of it on television. In *involved-observer conditions*, they imagined themselves as passengers on the undamaged boat which left the scene immediately after the collision. (In study 3, participants imagined themselves as a passenger on the ship passing by the scene.) In *victim* conditions, they imagined themselves as a passenger on the sinking boat. Then participants listed their thoughts, and reported their emotions and prosocial intent.

In study 1 ($N = 71$), participants reported more distress when taking either an involved observer's perspective ($M = 7.41$) or the victims' perspective ($M = 6.41$) than by taking a disinterested observer's perspective ($M = 5.70$; $F(2, 68) = 4.39, p = .016$). However, the involved observer's perspective induced more guilt ($M_{IO} = 5.87$ vs. $M_{vic} = 4.20$ vs. $M_{DO} = 3.89, F(2,68) = 4.26, p = .018$) and a greater prosocial intent ($M_{IO} = 8.04$ vs. $M_{vic} = 6.35$ vs. $M_{DO} = 6.75, F(1, 68) = 3.20, p = .078$). We created two contrast variables to examine the empathy-based (1, 1, and -2 for involved observer, victim, and disinterested observer perspectives respectively) and the obliga-

tion based routes (1, -1, and 0 respectively). Bootstrapping analyses (Model 4, Hayes 2013, based on 5000 resamples) supported for both the empathy-based (95%CI: .0574 to .5406, empathic distress as the mediator) and the obligation-based routes (95%CI: .0071 to .6532, guilt as the mediator).

In study 2 ($N = 118$), participants completed a more extensive questionnaire which assessed the underlying processes. The results replicated the observed effects of perspective on distress ($M_{IO} = 5.98$ vs. $M_{vic} = 5.33$ vs. $M_{DO} = 4.27, p < .001$) and guilt ($M_{IO} = 4.77$ vs. $M_{vic} = 3.24$ vs. $M_{DO} = 2.30, p < .001$). As predicted, results indicated that the effect of perspective on empathy mirrored its effect on distress ($M_{IO} = 6.43$ vs. $M_{vic} = 6.41$ vs. $M_{DO} = 5.12, p = .019$) while the effect on self-consciousness was parallel with that on guilt ($M_{IO} = 6.76$ vs. $M_{vic} = 5.74$ vs. $M_{DO} = 5.57, p = .024$). As in Study 1, planned contrasts were created to examine the mediating effects of empathic distress and obligation-based mechanisms (Model 6, Hayes 2013). Bootstrapping yielded a significant mediation pathway for both the empathy-based (95%CI: .0014 to .0670) and the obligation-based routes (95%CI: -.0706 to -.0014).

Study 3 employed a 3 (perspective: victim vs. involved observer vs. disinterested observer) \times 2 (context: newspaper vs. donation appeal) between-subjects design. We predicted that donation appeals enable individuals who take the victim's perspective to recognize their role as a help-giver at the outset and thus these individuals adopt a perspective similar to that of involved observers in the situation we have considered. Specifically, context moderated the effects of perspective on guilt ($F(2, 219) = 2.61, p = .076$) and prosocial intent ($F(2, 219) = 3.12, p = .046$), but not empathic distress ($M_{IO} = 5.75$ vs. $M_{vic} = 5.84$ vs. $M_{DO} = 4.76, p = .001$). In the newspaper conditions, the effects of perspective on guilt ($M_{IO} = 4.07$ vs. $M_{vic} = 2.53$ vs. $M_{DO} = 2.75, p = .002$) and prosocial intent ($M_{IO} = 7.22$ vs. $M_{vic} = 6.04$ vs. $M_{DO} = 6.62, p = .031$) observed in earlier studies were replicated. In the donation appeal conditions, however, the feelings of guilt ($M_{IO} = 3.51$ vs. $M_{vic} = 3.24, F < 1$) and motivation to help ($M_{IO} = 6.70$ vs. $M_{vic} = 6.76, F < 1$) of the participants who employed the victim's perspective increased to the level experienced by who employed that of the involved observers. Comparably, that of disinterested observer induced less intense feelings of guilt ($M_{DO} = 2.18$) and prosocial intent ($M_{DO} = 5.96$). This suggests that to consider helping, individuals must be conscious of the distinction between themselves and the victims and thus of being a position to help.

Past research assumed that individuals would lose themselves completely in a situation when they imagine it vividly and empathize with the protagonists. However, the present studies show that the disposition to empathize and the level of self-consciousness can be induced independently in a given perspective. This occurs when individuals imagine themselves as an observer who is physically (or emotionally) involved in the situation.

REFERENCES

- Green, Melanie C., and Timothy C. Brock (2000), "The role of transportation in the persuasiveness of public narratives," *Journal of Personality and Social Psychology*, 79(5), 701–721.

Hung, Iris W. and Anirban Mukhopadhyay (2012), "Lenses of the Heart: How Actors' and Observers' Perspectives Influence Emotional Experiences," *Journal of Consumer Research*, 38 (April), 1103–1115.

Jones, Edward E. and Richard E. Nisbett (1972), "The Actor and the Observer: Divergent Perceptions of the Cause of Behavior," in *Attribution: Perceiving the Causes of Behavior*, ed. Edward E. Jones, David E. Kanouse, Harold H. Kelley, Richard E. Nisbett, Stuart Valins, and Bernard Weiner, Morristown, NJ: General Learning Press, 79–94.

The Effect of Societal Nostalgia on Future Optimism and Public Policy Endorsement

Canice M C Kwan, Lingnan (University) College, Sun Yat-sen University, China

Shirley Y Y Cheng, Hong Kong Baptist University, Hong Kong

Alex S L Tsang, Hong Kong Baptist University, Hong Kong

EXTENDED ABSTRACT

Consumers feel nostalgic not only toward their own personal past, but also toward a society's past in which the individuals might not personally experience (Davis 1979). In practice, reminiscence about a society's past has been used as an effective marketing appeal (Muehling and Pascal 2011). This type of nostalgia is not less common than reminiscences about one's personal past (Holbrook 1993; Sedikides et al. 2006; Wood 2010). However, its effects other than those on advertising effectiveness have not been systematically examined.

Focusing on societal nostalgia, we show that it increases optimism towards the society's future. While this effect seems to parallel the effects previously shown with personal nostalgia (Cheung et al. 2013), we show that it is driven by a distinct process. That is, societal nostalgia enhances identification with the society, which is based on a common social category rather than relational bonds with others (Sedikides and Brewer 2001). Specifically, we conceptualize that a nostalgic experience can be associated with relational or collective identities (Brewer and Gardner 1996), depending on the emphasis of the reflection. For example, individuals often reflect on nostalgic events in their student life. These events are associated with the relational self if the focus is on their personal relationships with others, such as their cohorts or even acquaintances (Wildschut et al. 2014). However, these events can also relate to a person's collective identity if the reflection focuses on the self as a student of one's alma mater (i.e., a depersonalized social entity). According to identity theories, the nostalgia effects observed in prior research concern relational identities. Nostalgia of this sort is evoked by the reminiscences of a person's own past and leads to a positive affect and a sense of social connectedness. This connectedness in turn bolsters one's self esteem, induces upbeat feelings about the future, and elicits optimism. Societal nostalgia, on the other hand, concerns individuals' collective identity of being a member of a society. It enables individuals to re-experience the successes and failures of the past society. These experiences augment the extent to which being a member of the society, as a collective identity, fulfills the need to maintain a meaningful identity. Thus, identification with the society can be consolidated as an individual reminisces nostalgically about the society's past.

Enhanced identification has implications for how people perceive the society. People who identify with a group tend to believe that their fellow members work as a cohesive unit for collective welfare (Brewer and Kramer 1986), thereby feeling less vulnerable to societal changes (Jenson 1998, 2002) and forseeing a reasonable chance to succeed (Stanley 2003). Besides, identification also associated with reduced social uncertainty (Hogg 2000, 2009). Taken together, identification with a society gives rise to the belief that everyone in that society is likely to restrict their self-interests to preserve a collective good (Brewer and Kramer 1986). Therefore, we predict that societal nostalgia enhances identification and, with it, an optimistic outlook toward the society's future and actions for social progress.

In four experiments, we examined the effects, the mechanism, and boundary condition of societal nostalgia, with similar procedure and manipulation. We specifically manipulated nostalgia along two independent dimensions: temporal foci (past vs. present) and content (personal vs. societal). In the past conditions, participants wrote

about a food stimulus (a traditional snack or coffee) in relation to their childhood or the past society (personal vs. societal). In the present conditions, they wrote about the stimulus in relation to their daily life or the society today respectively. In the control condition, they wrote a description about the features of the stimulus. Then in ostensibly unrelated tasks, all participants rated their mood, reported their optimism towards the society's future, and responded to other measures concerning possible processes and decisions.

In a 2 (temporal foci: present vs. past) \times 2 (content: personal vs. societal) design, study 1 demonstrated that societal nostalgia boosts societal optimism, and that this effect is due to nostalgic reminiscences about the society's past and not a mere activation of the concept of society. In a similar design with an additional control condition, study 2 validated the proposed mechanism, showing that identification with the society mediates the effects of societal nostalgia on optimism and consumer confidence). Study 3 employed a single-factor between-subjects design (three level, societal past vs. personal past vs. control) and provided converging evidence for the proposed account. It also showed that societal nostalgia makes participants more risk-taking in public policy endorsement but not in their personal decisions. To distinguish the identification-based and the connectedness-based account, in study 4, participants listed either the general attributes of the members in the society or their negative characteristics before the nostalgia treatment. The results indicated that the effects of societal nostalgia were independent of member evaluation while the effects of personal nostalgia may attenuate when unfavorable thoughts about the members were salient. Across the four studies, societal nostalgia had little effect on mood, perceptual contrast (competence, studies 1-3; general evaluation of society, study 4), and changes in psychological distance (temporal construal, studies 2-3; self-construal, study 3; construal level such as abstract-concrete and global-local thinking, study 4).

To conclude, societal nostalgia has received scant attention in the literature. This paper explores the psychological effects of this specific type of nostalgia on individuals' perceptions about the society's future and decisions for the society. These effects were evident across cultures (Hong Kong and US) for both traditional and mundane (coffee) stimuli. However, they did not occur when people thought only about the society at present. Drawing upon identity theories, we validated that societal nostalgia lies in an impersonal identification process rather than interpersonal bonds, and it evokes a unique psychological process that cannot be explained by several intuitive alternative accounts. However, we did not contend that the identification process (and its downstream effects) is the only pathway of influence. Other psychological effects, such as those induced by high-level construal, stemming by societal nostalgia await further investigation.

REFERENCES

- Brewer, Marilynn B. and Wendi Gardner (1996), "Who Is this "We"? Levels of Collective Identity and Self-Representations," *Journal of Personality and Social Psychology*, 71 (1), 83-93.
- and Roderick M. Kramer (1986), "Choice Behavior in Social Dilemmas: Effects of Social Identity, Group Size, and Decision Framing," *Journal of Personality and Social Psychology*, 50 (3), 543-49.

- Cheung, Wing-Yee, Tim Wildschut, Constantine Sedikides, Erica G. Hepper, Jamie Arndt, and Ad J. J. M. Vingerhoets (2013), "Back to the Future: Nostalgia Increases Optimism," *Personality and Social Psychology Bulletin*, 39 (11), 1484–96.
- Davis, Fred (1979), *Yearning for Yesterday: A Sociology of Nostalgia*. New York: Free Press.
- Hogg, Michael A. (2000), "Subjective Uncertainty Reduction through Self-Categorization: A Motivational Theory of Social Identity Processes," *European Review of Social Psychology*, 11 (1), 223–55.
- (2009), "Managing Self-Uncertainty through Group Identification," *Psychological Inquiry*, 20 (4), 221–24.
- Jenson, Jane. (1998), *Mapping Social Cohesion: The State of Canadian Research*, CPRN Study No. F|03. Ottawa: Canadian Policy Research Network.
- (2002), "Identifying the Links: Social Cohesion and Culture in Making Connections: Culture and Social Cohesion in the New Millennium," *Canadian Journal of Communications*, 27 (2/3), 141–51.
- Holbrook, Morris B. (1993), "Nostalgia and Consumption Preferences: Some Emerging Patterns of Consumer Tastes," *Journal of Consumer Research*, 20 (2), 245–56.
- Muehling, Darrel D. and Vincent J. Pascal (2011), "An Empirical Investigation of the Differential Effects of Personal, Historical, and Non-Nostalgic Advertising on Consumer Responses," *Journal of Advertising*, 40 (2), 107–22.
- Sedikides, Constantine and Marilynn B. Brewer (2001), *Individual Self, Relational Self, Collective Self*. New York: Psychology Press.
- , Tim Wildschut, Jamie Arndt, and Clay Routledge (2006), "Affect and the Self," in *Affect in Social Thinking and Behavior*, Joseph P. Forgas, ed. New York: Psychology Press, 197–215.
- Stanley, Dick (2003), "What Do We Know about Social Cohesion: The Research Perspective of the Federal Government's Social Cohesion Research Network," *The Canadian Journal of Sociology*, 28 (1), 5–17.
- Wildschut, Tim, Martin Bruder, Sara Robertson, Wijnand A. P. van Tilburg, and Constantine Sedikides (2014), "Collective Nostalgia: A Group-Level Emotion That Confers Unique Benefits on the Group," *Journal of Personality and Social Psychology*, 107 (5), 844–63.
- Wood, Stacy (2010), "The Comfort Food Fallacy: Avoiding Old Favorites in Times of Change," *Journal of Consumer Research*, 36 (6), 950–63.

Your Lay Beliefs about Your Personality Predict Your Political Ideology

Jaehwan Kwon, Baylor University, USA

Claire Heeryung Kim, Indiana University, USA

Dhananjay Nayakankuppam, University of Iowa, USA

Adam Duhachek, Indiana University, USA

EXTENDED ABSTRACT

Ideology is a subject of enormous interest with theoretical, practical and policy implications. The traditional conceptualization since the French Revolution was of political ideology lying along a single left-right dimension (derived from which side of the French Assembly Hall supporters and opponents of the status quo sat). This formulation usually contains two inter-related aspects: 1) advocating versus resisting social change and 2) rejecting versus accepting inequality (Bobbio 1996; Burek 1987; Jost, Federico, and Napier 2009). Numerous studies demonstrate a stubborn and reliable negative correlation between liberalism and conservatism (Jost, Glaser, Kruglanski, and Sulloway 2003b; Sidanius and Pratto 1999; Weber and Federico 2007; Whitley 1999).

In the current research, we provide empirical evidence that an epistemic motivation (i.e., implicit self-theory) contributes to political ideology. This is of interest because theorists have made conflicting predictions. One account based on personal control suggests that some individuals endorse conservatism because they perceive the world and individuals as fixed and unvarying (i.e., entity theorists) and this belief can increase a sense of personal control which has been shown to reduce support of big government (Kay, Gaucher, Napier, Callan, and Laurin 2008). Another possible account based on threat sensitivity, however, predicts exactly the opposite: it suggests that individuals who view the world as constantly changing (i.e., incremental theorists) will be more sensitive to changes because they view the world as consistently changing and changes are uncertain and uncertainty is threatening, which will lead them to support conservatism (Jost, Federico, and Napier 2008). These two arguments thus make opposite predictions regarding the relationship between political ideology and implicit self theories. The current research addresses this ambiguity directly.

In Experiment 1, we attempted to provide initial evidence of the association between implicit self-theory and political ideology. Participants' political ideology was measured by asking their overall political orientation, social and cultural orientation, and economic orientation using established scales (Carney, Jost, Gosling, and Potter 2008). Next, each participant's implicit self-theory was assessed using the Implicit Person Theories Measure (Levy, Stroessner, and Dweck 1998). Finally, they provided demographic information such as age, gender, race, having a child or not, and household income (HHI). We regressed political ideology on implicit self-theory after controlling for age, gender, HHI, education, race, and children variables. We found that the impact of implicit self-theory on political ideology was significant, even after the effects of demographic variables were controlled, suggesting that entity (incremental) theory is associated with conservatism (liberalism) and supporting the personal control account.

In Experiment 2, we examine the causal relationship between implicit self-theory and political ideology via the theorized underlying mechanism of personal control. Participants were randomly assigned to a single-factor (implicit self-theory: entity vs. incremental) between-participants design. First, participants were primed with implicit self-theory by reading a "mock" scientific article presenting views consistent with either entity theory or incremental theory, depending on experimental conditions. Then, they indicated their

personal control and political ideology using the same items used in Experiment 1. A one-way ANOVA on political orientation revealed that entity theorists indicated greater conservative orientations than incremental theorists. In addition, a test of mediation with 1,000 bootstrapped samples revealed that personal control mediated the effect of implicit self-theory on political orientation. These findings support the theorizing that entity theorists who perceive greater stability in the world, thus perceive greater personal control, ultimately leading to inflated conservatism.

In Experiment 3, we manipulated personal control. Upon arrival, participants were randomly assigned in a 2 (implicit self-theory: entity vs. incremental) X 3 (personal control (PC): high vs. low vs. control condition) between-participants design. After being primed with one of the implicit self-theory orientations, participants were asked to write a short essay about different topics to alter their levels of personal control (Cutright, Bettman, and Fitzsimons 2013). After then, participants indicated their political ideology using the measure from Experiment 2. A 2 X 3 ANOVA on political ideology yielded a significant interaction effect between implicit self-theory and personal control (PC hereafter), along with the main effects of implicit self-theory and of personal control. Planned analysis showed that the control PC conditions replicated the results of Experiment 2. Among entity theorists, only those in the low PC condition differed from the control PC condition in terms of their political ideology: the entity-low PC condition was significantly different from the entity-high PC condition and from the entity-control PC condition, but the entity-high PC and the entity-control PC conditions did not differ in their political ideology, suggesting that the "default" PC for entity theorists is a high level of control. In contrast, among incremental theorists only the high PC condition resulted in a difference in ideology from the control PC condition, suggesting the "default" for incremental theorists is a lower level of personal control.

In Experiment 4, we attempted to show how the documented effect of implicit self-theories on political ideology could be utilized in a political campaign. We constructed four different versions of print advertisements for a political candidate differing on a 2 (advertising copy: entity vs. incremental) X 2 (political party of the candidate: Republican vs. Democratic) between-participants factors. Participants were randomly given only one version of the four print ads and asked participants to indicate their attitudes toward the candidate, attitude certainty (capturing how certain they were about their attitudes), as well as their intention to vote for the candidate. As predicted, we found a significant interaction effect between the advertising copy and the political party of a candidate on attitude, on attitude certainty and on the intention to vote for the candidate, suggesting that fit between ad messages and political affiliation of the candidate increases persuasion.

The current research provides empirical evidence that an individual's implicit self-theory orientation influence his/her perception about personal control, which, in turn, decides his/her political ideology.

REFERENCES

- Bobbio, Norberto and Allan Cameron (1996), *Left and Right: The Significance of a Political Distinction*, Chicago, IL: University of Chicago Press.
- Carney, Dana R., John T. Jost, Samuel D. Gosling, and Jeff Potter (2008), "The Secret Lives of Liberals and Conservatives: Personality Profiles, Interaction Styles, and the Things They Leave Behind," *Political Psychology*, 29 (6), 807-40.
- Cutright, Keisha M., James R. Bettman, and Gavan J. Fitzsimons (2013), "Putting Brands In Their Place: How A Lack Of Control Keeps Brands Contained," *Journal of Marketing Research*, 50 (3), 365-77.
- Dweck, Carol S., Chi-yue Chiu, and Ying-yi Hong (1995), "Implicit Theories and Their Role in Judgments and Reactions: A Word from Two Perspectives," *Psychological Inquiry*, 6 (4), 267-85.
- Jost, John T., Christopher M. Federico, and Jaime L. Napier (2009), "Political Ideology: Its Structure, Functions, and Elective Affinities," *Annual Review of Psychology*, 60, 307-37.
- Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway (2003), "Political Conservatism as Motivated Social Cognition," 129 (3), 339-75.
- Kay, Aaron C., Danielle Gaucher, Jamie L. Napier, Mitchell J. Callan, and Kristin Laurin (2008), "God and the Government: Testing a Compensatory Control Mechanism for the Support of External Systems," *Journal of Personality and Social Psychology*, 95 (1), 18-35.
- Kidwell, Blair, Adam Farmer, and David M. Hardesty (2013), "Getting Liberals and Conservatives to Go Green: Political Ideology and Congruent Appeals," *Journal of Consumer Research*, 40 (3), 350-67.
- Kwon, Jaehwan, and Dhananjay Nayakankuppam (2015), "Strength Without Elaboration: The Role of Implicit Self-Theories in Forming and Accessing Attitudes," *Journal of Consumer Research*, 42 (2), 316-39.
- Kwon, JaeHwan, and Dhananjay Nayakankuppam (2016), "Two Different Views on the World around Us: The World of Uniformity Versus Diversity," *PloS one*, 11 (12), 1-12.
- Kwon, JaeHwan, Yuri Seo, and Dongwoo Ko (2016), "Effective Luxury-Brand Advertising: The ES-IF Matching (Entity-Symbolic Versus Incremental-Functional) Model," *Journal of Advertising*, 45 (4), 459-71.
- Levy, Sheri R., Steven J. Stroessner, and Carol S. Dweck (1998), "Stereotype Formation and Endorsement: The Role of Implicit Theories," *Journal of Personality and Social Psychology*, 74 (6), 1421-436.
- Sidanius, Jim and Felicia Pratto (2001), *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*, New York, NY: Cambridge University Press.
- Weber, Christopher and Christopher M. Federico (2007), "Interpersonal Attachment and Patterns of Ideological Belief," *Political Psychology*, 28 (4), 389-416.
- Whitley, Richard (1999), *Divergent Capitalisms: The Social Structuring and Change of Business Systems*, Oxford, UK: Oxford University Press.
- Yorkston, Eric A., Joseph C. Nunes, and Shashi Matta (2010), "The Malleable Brand: The Role of Implicit Theories in Evaluating Brand Extensions," *Journal of Marketing*, 74 (1), 80-93.

The Moral Nature of Stigmatization: Mitigating the Negative Effects of Stigma on Helping

Katherine C. Lafreniere, University of Alberta, Canada

Robert J. Fisher, University of Alberta, Canada

EXTENDED ABSTRACT

A stigma is an undesirable characteristic, imperfection, or mark of dishonor that leads a person to be rejected by society (Goffman 1986). The stigmatized include the mentally ill, criminals, welfare recipients, undocumented immigrants, the obese, and those who abuse drugs and alcohol (Fiske, Cuddy, and Glick 2006; Overton and Medina 2008). Despite being among the neediest in society, the stigmatized are often the least likely to receive help (Latner and Stunkard 2003; Lundberg, Hansson, and Bjorkman 2007). Consequently, organizations have undertaken various promotional efforts designed to educate others and increase support for the stigmatized. Unfortunately, research suggests these campaigns are often ineffective (Corrigan 2012; Heijnders and van der Meij 2006) or even counterproductive by reinforcing negative attitudes (Korszun et al. 2012; Tolomiczenko, Goering, and Durbin 2001).

We propose that promotional efforts for stigmatized groups are likely to be ineffective if they do not address the group's perceived deficit in moral character. We theorize that the stigmatized receive less help compared to other people in need because they are considered immoral, and therefore aversive, unworthy, and potentially harmful. Consistent with our theory, we find that people are less willing to help a homeless person who carries the stigma of a mental illness, a criminal record, or alcoholism compared to a homeless person who is a military veteran. However, we find that the negative effect of the stigma on helping is fully mitigated when the stigmatized person behaves virtuously. Importantly, we demonstrate that behaving in a virtuous manner is insufficient to redeem the stigmatized. It is only when the virtuous behavior is undertaken voluntarily and for an unselfish reason that it is diagnostic of moral character and consequently has the power to mitigate the negative effects of stigma on helping.

The relevant literature has not yet acknowledged the moral basis for stigmatization. However, previous research has considered how people respond to stigmatized groups (Gay and Whittington 2002; Harris and Fiske 2006). Harris and Fiske (2006), for example, examined how people respond neurologically to the homeless and to drug addicts—two groups identified as stigmatized in other research (Dunlop and Tracy 2013; Phelan et al. 1997). They found that exposure to images of addicts and the homeless evoked not only intense dislike in participants, but also disgust and contempt, which are negative emotions reserved for those who are morally condemned (Haidt 2003; Hutcherson and Gross 2011). Furthermore, participants displayed a lower activation of the medial prefrontal cortex when exposed to images of the stigmatized compared to images of members of societal in-groups. The authors concluded that participants considered the homeless and drug addicts to be “less than human” (p. 847). The foregoing illustrates that stigmatization involves the most essential of all moral judgements—is a person good or bad?

Given the moral basis for stigmatization, we propose that a moral redemption is necessary to mitigate the negative effect of stigma on helping. We find evidence across four studies that a stigmatized person in need is helped significantly less than a non-stigmatized person in need. However, we find that the stigmatized individual is morally redeemed and offered more help when he or she behaves virtuously. Study 1 examined the effect of a virtuous behavior on the willingness to help a homeless person who is either a veteran or a

criminal. We found that the virtuous act of returning a lost wallet to its rightful owner (vs. the control condition) significantly increased the willingness to help the homeless criminal. In contrast, the same virtuous act had no effect on the willingness to help the homeless veteran.

Study 2 examined the stigma of alcoholism and modified the virtuous behaviour manipulation. We used the same behavior across conditions and manipulated the motive to be either selfish or unselfish. We found that participants were more likely to help the homeless alcoholic when he returned the lost wallet for an unselfish reason (vs. selfish reason). However, there was no effect on the willingness to help the homeless veteran across levels of virtuous behavior; he was already perceived to be moral. This study demonstrates the importance of motive, even when the behavior is socially desirable.

Study 3 examined the stigma of mental illness and introduced a measure of moral character to directly test its hypothesized role. We found the expected pattern of results on moral character and willingness to help. Specifically, returning a lost wallet (vs. control) had a significant effect on helping responses, but only when the homeless person was mentally ill. We found that the moral character of the homeless person was a significant moderated mediator—it fully mediated the negative effect of stigma on helping responses in the virtue-absent condition. However, there was no effect in the virtue-present condition, suggesting that the virtuous act mitigated the negative effect of stigma on helping.

Study 4 replicated the results of study 3 using a new virtue manipulation in which a virtuous behavior (i.e., picking up trash) is carried out voluntarily or involuntarily. Specifically, voluntarily (vs. involuntarily) picking up trash had a significant positive effect on moral character and helping responses only when the homeless person was stigmatized. Again, moral character was a significant moderated mediator. This study also ruled out empathy (Batson et al. 1997; Batson et al. 2005; Fisher and Ma 2014) and Inclusion of Other in the Self (IOS; Aron, Aron, and Smollan 1992) as alternative explanations for the results.

To sum, four experiments provide evidence for the moral basis of stigma and the redeeming effect of moral behavior; the negative effect of stigma on moral character and helping is fully mitigated when the stigmatized person behaves virtuously. By demonstrating this effect, the current research contributes to the literature on stigmatization and non-profit marketing. Prior research has not yet recognized the link between stigmatization and morality. Our research offers theoretical and practical insights into why members of stigmatized groups are unlikely to receive help and how addressing this deficit in moral character in promotional efforts can increase societal acceptance and support for the stigmatized.

REFERENCES

- Aron, Arthur, Elaine N. Aron, and Danny Smollan (1992), “Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness,” *Journal of Personality and Social Psychology*, 63 (4), 596-612.

- Batson, C. Daniel, Marina P. Polycarpou, Eddie Harmon-Jones, Heidi J. Imhoff, Erin C. Mitchener, Lori L. Bednar, Tricia R. Klein, and Lori Highberger (1997), "Empathy and Attitudes: Can Feeling for a Member of a Stigmatized Group Improve Feelings toward the Group?" *Journal of Personality and Social Psychology*, 72 (1), 105-18.
- Batson, C. Daniel, David A. Lishner, Jennifer Cook, and Stacey Sawyer (2005), "Similarity and Nurturance: Two Possible Sources of Empathy for Strangers," *Basic and Applied Social Psychology*, 27 (1), 15-25.
- Corrigan, Patrick W., (2012), "Where Is the Evidence Supporting Public Service Announcements to Eliminate Mental Illness Stigma?," *Psychiatric Services*, 63(1), 79-82.
- Dunlop, William L. and Jessica L. Tracy (2013), "Sobering Stories: Narratives of Self-Redemption Predict Behavioral Change and Improved Health among Recovering Alcoholics," *Journal of Personality & Social Psychology*, 104 (3), 576-90.
- Fiske, Susan T., Amy J. Cuddy, and Peter Glick (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 11 (2), 77-83.
- Gay, Kathlyn and Christine Whittington (2002), *Body Marks: Tattooing, Piercing, and Scarification*, Brookfield, CT: Twenty-First Century Books.
- Goffman, Irving (1986), *Stigma: Notes on the Management of Spoiled Identity*, New York.
- Haidt, Jonathan (2003), "The Moral Emotions," In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of Affective Sciences* (pp. 852-870). Oxford, England: Oxford University Press.
- Harris, Lasana T. and Susan T. Fiske (2006), "Dehumanizing the Lowest of the Low: Neuroimaging Responses to Extreme Out-Groups," *Psychological Science*, 17 (10), 847-53.
- Heijnders, Miriam and Suzanne van der Meij (2006), "The Fight against Stigma: An Overview of Stigma-Reduction Strategies and Interventions," *Psychology, Health & Medicine*, 11 (3), 353-63.
- Hutcherson, Cendri A. and James J. Gross (2011), "The Moral Emotions: A Social-Functionalist Account of Anger, Disgust and Contempt," *Journal of Personality and Social Psychology*, 100 (4), 719-37.
- Latner, Janet D. and Albert J. Stunkard (2003), "Getting Worse: The Stigmatization of Obese Children," *Obesity Research*, 11 (3), 452-56.
- Lundberg, Bertil, Lars Hansson, Elisabeth Wentz, and Tommy Björkman (2007), "Sociodemographic and Clinical Factors Related to Devaluation/Discrimination and Rejection Experiences among Users of Mental Health Services," *Social Psychiatry and Psychiatric Epidemiology*, 42 (4), 295-300.
- Korszun, Ania, Sokratis Dinos, Kamran Ahmed, and Kamaldeep Bhui (2012), "Medical Student Attitudes About Mental Illness: Does Medical-School Education Reduce Stigma?" *Academic Psychiatry*, 36 (3), 197-204.
- Overton, Stacy L. and Sondra L. Medina (2008), "The Stigma of Mental Illness," *Journal of Counseling & Development*, 86 (2), 143-51.
- Phelan, Jo, Bruce G. Link, Robert E. Moore and Ann Steve, (1997), "The Stigma of Homelessness: The Impact of the Label "Homeless" on Attitudes Toward Poor Persons," *Social Psychology Quarterly*, 60 (4), 323-37.
- Tolomiczenko, George S., Paula N. Goering, and Janet F. Durbin (2001), "Educating the Public About Mental Illness and Homelessness: A Cautionary Note," *Canadian Journal of Psychiatry*, 46 (3), 253-57.

Regret-Free Trials: Asymmetric Effects of Price Promotions on New Product Trial

Chang-Yuan Lee, Boston University, USA
Carey K. Morewedge, Boston University, USA
Dan Ariely, Duke University, USA

EXTENDED ABSTRACT

Getting consumers to try and adopt new products is one of the fundamental challenges of marketing. Once consumers are happy with what they have, anticipated regret becomes a major barrier to the trial and adoption of new, even much better things (e.g., Kahneman, Knetsch, and Thaler, 1991; Ritov and Baron, 1995; Simonson, 1992). Once consumers find products they like, they anticipate regret forgoing what works for what may not, leading them to stick to the familiar and avoid the new. When deciding to try a new detergent or even a new way of preparing coffee, for instance, consumers worry that they may not like the new product and worry that they will feel regret for having forgone the chance to use or consume something they would have enjoyed for certain.

We suggest that price promotions may reduce the barrier to trial incurred by anticipated regret, if a discount is applied to both familiar and new products. A few points merit clarification. First, while prior research has examined the pricing strategy for new products (e.g., Krishnan, Bass, and Jain, 1999), none of this work examined consumers' choices when they were offered a discount on both familiar and new products (e.g., "50% off any one regular price item"). Second, different from previous research examining the pricing strategy for durable goods and innovation adoption, we focus on consumers' daily purchase decisions, such as the beverage purchased at a coffee shop.

In a pilot study, managers with an average of 6.4 years experience predicted the percentage of customers who would order an unfamiliar beverage at Starbucks, if the firm offered five levels of price promotion to any one beverage on the menu: 0% off, 33% off, 50% off, 67% off, or 100% off. In line with common theories of pricing and new product adoption, the results revealed that the managers predicted a linear uptake in trial of new products as the magnitude of price promotion increases.

Contrary to these predictions, in five experiments, we find that price promotions have asymmetric effects on new product adoption. Moreover, we find that this effect is mediated by consumers' anticipated feelings of regret toward negative outcomes. In a field experiment in Boston, MA, we asked 300 Starbucks customers to name their usual order and a new beverage they considered trying. We then randomly assigned them to receive one of three price promotions for any one beverage ordered: 0% off (full price), 50% off, or 100% off (free). In the full price condition, the price of each beverage was its original price. In the 50% off condition, the price of each beverage was half of its original price. In the 100% off condition, the price of each beverage was \$0. All participants then chose which beverage they would order: their usual beverage, the new beverage, or neither beverage. Results revealed no increase in choice share of new beverages from the full price to 50% off promotion conditions. Only in the 100% off condition was choice share of new beverages significantly higher in than the full price (and the 50% off) condition.

Our next four experiments tested the robustness and generalizability of the effect with regard to different promotion levels and products, and tested our proposed mechanism in online vignettes. Experiment 2A ($N = 400$) examined the asymmetric price effect on new product trial for Starbucks beverages at four different price promotion levels (full price, 33% off, 67% off, and 100% off). We found

a significantly greater choice share for new beverages when beverages were free, but no difference of choice share for new beverages between the full price condition, the 33% off condition and the 67% off condition. In Experiment 2B, participants ($N = 300$) choose between usual and unusual toothpastes from Target at one of three price promotion levels: 0% off, 50% off and 100% off. Again, choice share of new toothpaste was significantly greater only when all toothpastes were free. There was no difference in demand for new toothpaste between the full price and 50% off promotion conditions.

In Experiment 3 ($N = 298$), participants indicated their usual Starbucks beverage order, a new beverage in which they were interested, and made a choice of beverage after assignment to one of the three price promotion levels in Experiment 1. Participants then reported the extent to which anticipated feeling regret if they did not enjoy their chosen beverage. The results replicated those of Experiment 1, such that choice share was only increased in the free promotion condition, and was no greater in the 50% off condition than the full price condition. Moreover, we found that price promotions only reduced anticipated regret in the free promotion condition, and this difference in anticipated regret mediated (explained) the increase in demand for new beverages when all beverages were free.

In Experiment 4 ($N = 300$), we tested our process account with moderation. In addition to full and zero price conditions, we included a full price condition with a money-back-guarantee (MBG). If anticipated regret indeed underlies the resistance to choose a new beverage, offering a MBG should eliminate anticipated regret and moderate the effect of the promotion on new product adoption. Consistent with our prediction, consumers in the 100% refund condition were significantly more likely to choose a new beverage than participants in the full price condition, and were just as likely to choose a new beverage as participants in the 100% off condition.

Taken together, findings from five experiments demonstrate an asymmetric effect of price promotions on new product trial. More important, we find that such consumer choice is driven by the asymmetry of reduction in anticipated regret. The results elucidate an actionable and important way to align marketing strategy with consumer psychology.

REFERENCES

- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias," *Journal of Economic Perspectives*, 5(1), 193–206.
- Krishnan, Trichy V., Frank M. Bass, and Dipak C. Jain (1999), "Optimal Pricing Strategy for New Products," *Management Science*, 45(12), 1650–1663.
- Ritov, Ilana and Jonathon Baron (1995), "Outcome Knowledge, Regret, and Omission Bias," *Organizational Behavior and Human Decision Processes*, 64(2), 119–127.
- Simonson, Itamar (1992), "The Influence of Anticipating Regret and Responsibility on Purchase Decisions," *Journal of Consumer Research*, 19(1), 105–118.

Does the Organic Label Increase Consumption? How Food Type and Health Locus of Control Turn the Label Into a Double-Edged Sword

Hsiao-Ching Lee, National Kaohsiung University of Applied Sciences, Taiwan

Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

Zhao-Hong Cheng, Chang Jung Christian University, Taiwan

Yen-Ting Chen, Taichung Commercial Bank Co., Ltd., Taiwan

EXTENDED ABSTRACT

Organic labels serve as a heuristic cue in food shopping decisions (Vega-Zamora, Torres-Ruiz, Murgado-Armenteros, and Parras-Rosa, 2014). Food companies desiring to encourage consumers to consume their products will be interested in understanding how an organic label can increase consumers' food consumption. However, overconsumption can lead not only to weight gain but also to rapid satiation and delayed repurchasing (Inman, 2001). Given the susceptibility of consumption to contextual factors, we expect an organic label to affect consumers' food consumption. Our questions of interest are as follows. Does an organic label always enhance consumers' food consumption? Under what circumstances does an organic label actually *reduce* consumers' food consumption? What is the underlying mechanism involved?

We are interested in boundary conditions that could amplify or dampen the effects of the organic label on food consumption. The extant literature has recognized two types of motivations that induce consumers to purchase organic food: contextual differences (e.g., food type) (van Doorn and Verhoef, 2011) and individual differences (e.g., consumers' sociodemographics, health consciousness, ideology, and environmental concerns) (Grunert and Juhl, 1995; Hjelm, 2011; Honkanen, Verplanken, and Ottar, 2006; Hughner, McDonagh, Prothero, Shultz, and Stanton, 2007; McEachern and McClean, 2002; Michaelidou and Hassan, 2008; Padel and Foster, 2005; Schifferstein and Oude Ophuis, 1998; Tarkiainen and Sundqvist, 2009). This article contributes to these evolving research streams by proposing that food type (virtue vs. vice) and individual differences in health locus-of-control (HLOC) simultaneously affect the impact of the organic label on food perceptions and food consumption.

Study 1 examined whether the effects of an organic label on food consumption were moderated by different food types and, if so, whether food consumption is based on the perceived healthiness of the food. We conducted a 2 (organic label: with organic label vs. without organic label) x 2 (food type: vice vs. virtue) between-subjects experiment to test the three hypotheses. However, a major limitation to this study was the self-reported measure for the dependent variable (i.e., intended food consumption). In Study 2, we adopted an objective measurement of the food intake amount to indicate the influence of the food consumption. Besides food type as a moderator, individual differences are recognized as influential in food perceptions. Study 2 examined whether and how the joint effects of organic label and food type on the food consumption may differ for people with an external vs. an internal HLOC. Thus, we conducted Study 2, a 2 (organic label: with organic label vs. without organic label) x 2 (food type: vice vs. virtue) x 2 (HLOC: externals vs. internals) between-subjects design.

Our results suggest that, first, an organic label increases externals' consumption of vice food. Second, an organic label decreases food consumption in the following two conditions: 1) when externals are exposed to virtue food, and when internals are exposed to vice food. Although an organic label provides a heuristic cue regarding the healthiness of the food, it does not increase the food consumption of health externals. 2) For health internals, vice food with an organic label induces a certain skepticism which leads to reluctance

regarding its consumption. These results show different reasons why health externals and internals decrease their consumption of that has an organic label. Third, the presence or absence of an organic label makes no difference to internals facing virtue food. As discussed earlier, an organic label may not have a positive effect on health internals since such people take various factors into consideration in their food choices. Therefore, the organic label may not effectively induce health internals to increase their consumption of virtue food.

This research contributes to the literature streams regarding organic food in marketing, health perceptions, and food consumption. First, we examine how organic labels may serve as a heuristic cue to increase or decrease food consumption, subject to food type and individual differences in HLOC. Previous research has analyzed the meaning and interpretations placed on the term "organic," and how those interpretations influence consumption behavior (Janssen and Hamm, 2012; van Doorn and Verhoef, 2011; Vega-Zamora et al., 2014). Food consumption behavior with individual difference variables remains unexplored. Although perceived healthiness is strongly associated with organic food—and this important feature makes it superior to conventional food (Janssen and Hamm, 2012; Vega-Zamora et al., 2014)—this heuristic cue does not necessarily induce people to increase their consumption of such food. Results of Study 2 show that organic labels can be a double-edged sword on food consumption.

Second, previous research on organic food focused on self-reported data as dependent measures (e.g., WTP, attitudes toward the food, or purchase intentions) (Aschemann-Witzel, Maroscheck, and Hamm, 2013; D'Amato and Falzon, 2015; Janssen and Hamm, 2012; van Doorn and Verhoef, 2011). The current research contributes to this evolving research stream by adopting both objective and attitudinal measures in its examination of food consumption behavior.

Third, it is interesting to compare our Study 1 with van Doorn and Verhoef (2011), since both studies examined the interaction between organic label and food type. However, the patterns of our results in regards to intended consumption are somewhat in opposition to those found by van Doorn and Verhoef (2011) regarding WTP. Van Doorn and Verhoef (2011) did not find differences between vice and virtue food in regards to WTP, but they did observe that an organic label negatively affects quality perceptions regarding vice food. In our study, an organic label actually enhances participants' intended consumption. When interpreting this inconsistency, it is important to recognize that food consumption behavior may not necessarily mean the same thing as quality perception (especially based on perceived monetary value). In our study, participants' evaluations of their intention to eat were based entirely on their psychological feelings toward the product, thus making this an affect-driven decision. The cognition-based items used in van Doorn and Verhoef (2011) caused their participants to evaluate perceived food healthiness based on cognitive information processing. On the other hand, the affect-based items used in our study might prime participants to perceive food healthiness based on affective information processing. Future validation will be needed.

REFERENCES

- Aschemann-Witzel, J., Maroscheck, N., and Hamm, U. (2013). Are organic consumers preferring or avoiding foods with nutrition and health claims? *Food Quality and Preference*, 30(1), 68-76.
- D'Amato, P. M., and Falzon, J. (2015). Why do some consumers prefer organic food? A discourse analytical perspective. *Journal of Food Products Marketing*, 21(3), 255-273.
- Grunert, S. C., and Juhl, H. J. (1995). Values, environmental attitudes, and buying of organic foods. *Journal of Economic Psychology*, 16(1), 39-62.
- Hjelmar, U. (2011). Consumers' purchase of organic food products. A matter of convenience and reflexive practices. *Appetite*, 56(2), 336-344.
- Honkanen, P., Verplanken, B., and Olsen, S. O. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour*, 5(5), 420-430.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., and Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2-3), 94-110.
- Inman, J. J. (2001). The role of sensory-specific satiety in attribute-level variety seeking. *Journal of Consumer Research*, 28(1), 105-120.
- Janssen, M., and Hamm, U. (2012). The mandatory EU logo for organic food: Consumer perceptions. *British Food Journal*, 114(3), 335-352.
- McEachern, M. G., and McClean, P. (2002). Organic purchasing motivations and attitudes: Are they ethical? *International Journal of Consumer Studies*, 26(2), 85-92.
- Michaelidou, N., and Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32(2), 163-170.
- Padel, S., and Foster, C. (2005). Exploring the gap between attitudes and behaviour. *British Food Journal*, 107(8), 606-625.
- Schifferstein, H. N. J., and Oude Ophuis, P. A. M. (1998). Health-related determinants of organic food consumption in the Netherlands. *Food Quality and Preference*, 9(3), 119-133.
- Tarkiainen, A., and Sundqvist, S. (2009). Product involvement in organic food consumption: Does ideology meet practice? *Psychology and Marketing*, 26(9), 844-863.
- van Doorn, J., and Verhoef, P. C. (2011). Willingness to pay for organic products: Differences between virtue and vice foods. *International Journal of Research in Marketing*, 28(3), 167-180.
- Vega-Zamora, M., Torres-Ruiz, F. J., Murgado-Armenteros, E. M., and Parras-Rosa, M. (2014). Organic as a heuristic cue: What Spanish consumers mean by organic foods. *Psychology and Marketing*, 31(5), 349-359.

Close the Deal Now or Later?: The Impact of Power Distance Belief on Choice Deferral

Hyejin Lee, Indiana University, USA
Ashok Lalwani, Indiana University, USA

EXTENDED ABSTRACT

The current research examines the link between power distance belief (PDB)—the extent to which people accept and endorse hierarchy and inequalities in society (Hofstede 2001; Zhang, Winterich, and Mittal 2010) and consumers' tendency to postpone purchase (choice deferral). Previous research (Briley, Morris, and Simonson 2005) may suggest a positive association between PDB and choice deferral. However, the impact of PDB on choice deferral has not been explicitly examined so far. In contrast, we show in a series of three studies that high (vs. low) PDB individuals are less likely to defer choices for symbolic products—products which convey the user's identity to other people such as watches or sunglasses (White and Dahl 2007)—and this is because of their lower tendency to engage in impression management, defined as people's attempt to control others' impressions of them (Leary and Kowalski 1990; Schlenker 1980).

Specifically, high (vs. low) PDB cultures tend to be rigid, inflexible, and discourage social mobility (Carl, Javidan, and Gupta 2004), and tend to be less generous and charitable toward others (Winterich and Zhang 2014). Moreover, the rigid nature of PDB may imply that people may be fixated, have firm opinions, and be less likely to change their opinion of others (Carl et al. 2004), which may reduce their perceived ability of changing others' view of themselves. Because a primary reason people engage in impression management is to obtain rewards and benefits (Schlenker 1980), we suggest that people are less likely to engage in impression management when PDB is high (vs. low) because of the lower possibility of obtaining rewards and benefits in such contexts. In turn, the lower tendency to engage in impression management should reduce choice deferral for symbolic products. This is because people with higher impression management concerns consider more number of attributes (for example, they may not only consider utilitarian and functional attributes, but also symbolic and identity-enhancing attributes; Schlosser and Shavitt 2002; Shavitt 1990, 1992), have a higher threshold for accepting products, and prefer alternatives that can be easily justifiable to others especially when the products have the potential to signal their identity (i.e., symbolic products), which can lead to higher choice deferral for such products. Formally,

Hypothesis 1: High (vs. low) PDB individuals are less likely to defer choice and this effect is stronger for symbolic (vs. non-symbolic) products.

Hypothesis 2: The relationship between PDB and choice deferral for symbolic products is mediated by impression management.

We have argued that low (vs. high) PDB individuals are more likely to defer choice for symbolic products because they consider a greater number of product attributes, including symbolic and social identity related attributes as well as functional and utilitarian attributes. Because people often have minimum threshold expectations for each attribute considered (e.g., 25 miles per gallon; 8 GB RAM; Johnson, Meyer, and Ghose 1989; West, Brockett, and Golden 1997) the more the number of attributes considered, the greater is the likelihood that the brands under consideration will fall short of expectations on at least some attributes (Brandt 1988). In effect, the greater number of attributes increases the uncertainty that the brands will

perform satisfactorily on key attributes, leading to a greater choice deferral for symbolic products among people low (vs. high) in PDB. We reasoned that when people are made to believe that products in the marketplace perform satisfactorily on key attributes (compared to when this belief is not induced), the tendency of low PDB individuals to defer choice will be significantly mitigated, but that of high PDB individuals (who are less likely to defer choice to start with) will be unchanged.

Hypothesis 3: When people believe that products in the marketplace perform satisfactorily on important attributes, low PDB individuals' tendency to defer choice will be significantly mitigated, but that of high PDB individuals will be unchanged, compared to that in a control condition.

In study 1, we demonstrated that the effect of PDB on choice deferral is stronger for symbolic (briefcase, shoes, and sunglasses) versus non-symbolic (blender, detergent, and hand soap) products. We found a significant interaction between measured PDB and product type ($F(1, 203) = 4.371, p < .04$). For symbolic products, the slope of PDB was negative ($\beta = -.212, SE = .090, t(102) = -2.347, p < .03$), but, for non-symbolic products, the slope of PDB was not significant ($\beta = .013, SE = .06, t(101) = .211, p = .833$), suggesting that PDB decreases choice deferral for symbolic, but not non-symbolic products.

In study 2, we employed a bootstrapping procedure with 10,000 iterations (Model 4, Hayes 2012) and showed that the effect of PDB on a choice deferral is mediated by impression management ($\beta = .022, SE = .016, CI_{95} = .001, .067$).

In study 3, we demonstrated one important boundary condition.

Study 3: We predicted that when participants are explicitly told that most products in the marketplace meet the requisite standards on symbolic and social identity related attributes (manipulated belief condition) low (but not high) PDB individuals would be less likely to defer choice compared to the control condition. Floodlight analysis (Spiller et al. 2013) suggested that a significant negative effect of manipulated belief (vs. control condition) on choice deferral likelihood for participants whose PDB score were less than 3.304 ($\beta = -.261, SE = .133, p = .05$).

Collectively, these findings supported our prediction that high (vs. low) PDB individuals are less likely to defer choice for symbolic (vs. non-symbolic) products. Also, we found the evidence that these differences are attributed to high (vs. low) PDB individuals' lower tendency to engage in impression management. This research contributes to impression management literature by showing the negative relationship between PDB and impression management and it also contributes to choice deferral literature by identifying an important but less explored factor related to cultural variables: power distance belief. We confirmed this effect by using various products across studies. Moreover, we demonstrated one important boundary condition that strengthens our proposed mechanism of impression management.

REFERENCES

- Brandt, Randall D. (1988), "How Service Marketers Can Identify Value-Enhancing Service Elements," *Journal of Services Marketing*, 2 (3), 35-41.

- Briley, Donnel A., Michael W. Morris, and Itamar Simonson (2005), "Cultural Chameleons: Biculturals, Conformity Motives, and Decision Making," *Journal of Consumer Psychology*, 15 (4), 351-62.
- Carl, Dale, Mansour Javidan, and Vipin Gupta (2004), "Power Distance," in *Culture, Leadership, and Organizations: The Globe Study of 62 Societies*, ed. Robert J. House, Paul J. Hanges, Mansour Javidan, Peter W. Dorfman, and Vipin Gupta, Thousand Oaks, CA: Sage, 513-59.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," [White Paper], Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hofstede, Geert (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd ed., Thousand Oaks, CA: Sage.
- Johnson, Eric J., Robert J. Meyer, and Sanjoy Ghose (1989), "When Choice Models Fail: Compensatory Models in Negatively Correlated Environments," *Journal of Marketing Research*, 26 (3), 255-70.
- Leary, Mark R. and Robin M. Kowalski (1990), "Impression Management: A Literature Review and Two-Component Model," *Psychological Bulletin*, 107 (1), 34-47.
- Schlenker, Barry R. (1980), *Impression Management: The Self-Concept, Social Identity, and Interpersonal Relations*, Monterey, CA: Brooks/Cole.
- Schlosser, Ann E. and Sharon Shavitt (2002), "Anticipating Discussion about a Product: Rehearsing What to Say Can Affect Your Judgments," *Journal of Consumer Research*, 29 (1), 101-15.
- Shavitt, Sharon (1990), "The Role of Attitude Objects in Attitude Functions," *Journal of Experimental Social Psychology*, 26 (2), 124-48.
- ____ (1992), "Evidence for Predicting the Effectiveness of Value-Expressive Versus Utilitarian Appeals: A Reply to Johar and Sirgy," *Journal of Advertising*, 21 (2), 47-51.
- West, Patricia M., Patrick L. Brockett, and Linda L. Golden (1997), "A Comparative Analysis of Neural Networks and Statistical Methods for Predicting Consumer Choice," *Marketing Science*, 16 (4), 370-91.
- White, Katherine and Darren W. Dahl (2007), "Are All out-Groups Created Equal? Consumer Identity and Dissociative Influence," *Journal of Consumer Research*, 34 (4), 525-36.
- Winterich, Karen P. and Yinlong Zhang (2014), "Accepting Inequality Deters Responsibility: How Power Distance Decreases Charitable Behavior," *Journal of Consumer Research*, 41 (2), 274-93.
- Zhang, Yinlong, Karen P. Winterich, and Vikas Mittal (2010), "Power Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47 (5), 945-54.

I Can Find a Better Deal: The Effect of Power Distance Belief on Price Sensitivity

Hyejin Lee, Indiana University, USA
Ashok Lalwani, Indiana University, USA

EXTENDED ABSTRACT

The current research investigates the effect of the cultural dimension of power distance belief (PDB)—the degree to which people endorse and expect inequality in society (Hofstede 2001; Zhang, Winterich, and Mittal 2010) on consumer's price sensitivity—the tendency to expend effort in looking for better priced options. In this paper, we propose that high (vs. low) PDB individuals are less price sensitive because they have lower perceptions of self-efficacy, which reduces their perceived ability to obtain better deals.

Specifically, when PDB is high, people endorse social hierarchy and accept inequality (Carl, Javidan, and Gupta 2004; Hofstede 2001). These societies, such as the caste system in India, have a more fixed and immutable structure and discourage mobility across social classes. In contrast, low PDB societies value equality and tend to have a more flexible societal structure (Carl et al. 2004). They also encourage and promote mobility across social classes (e.g., "Pursue the American dream").

We propose that the above-noted limitations in high (vs. low) PDB cultures reduce people's perceptions of self-efficacy—an overall confidence in one's ability to complete challenging or novel tasks (Schwarzer and Jerusalem 1995). Indeed, several studies suggest that Asians perceive themselves to be lower on self-efficacy than do Westerners (Cianni 1994; Eaton and Dembo 1997; Lam, Schaubroeck, and Aryee 2002; Mau 2000; Schaubroeck, Lam, and Xie 2000), suggesting that PDB may reduce perceptions of self-efficacy. Because high PDB societies are rigid and discourage social mobility, they may give lesser hope for upliftment to its members. Research also suggests that individuals in high PDB societies experience more constraints and restrictions (Hofstede 2001; Zhang et al. 2010) and tend to be more self-critical (Heine et al. 1999). Moreover, self-efficacy is determined by each individual's past experiences in various contexts (Sherer et al. 1982). Therefore, people in high PDB societies may be more skeptical about their ability to get things done. Similarly, people differ in terms of how to respond to authority in family and school life depending on PDB and these determine people's self-efficacy (Oettingen 1995). Accordingly, high (vs. low) PDB individuals may have lower perceived self-efficacy.

We further expect the lower perceived self-efficacy among high (vs. low) PDB individuals to demotivate them from searching for lower prices, showing lower price sensitivity. There is always uncertainty (i.e., risk) associated with searching for lower prices because people may or may not be able to find lower prices even after trying. Therefore, people with greater confidence in their ability to conduct a challenging task (i.e., those high, versus low, in self-efficacy) may be more likely to search for lower prices. Formally,

Hypothesis 1: When PDB is high (vs. low), people are less likely to expend the time and energy in order to find the lowest prices (i.e., are less price sensitive).

Hypothesis 2: Perceived self-efficacy mediates the effect of PDB on price sensitivity.

We also test a boundary condition for the effects posited above. Processing fluency increases self-efficacy (White, MacDonnell, and Dahl 2011). Hence, we expect that when people are given products or services that have a hierarchical (vs. equal) structure (e.g., dividing customers into different classes and providing different benefits

based on the class vs. treating all customers equally regardless of the customer class), high (vs. low) PDB individuals will experience higher processing fluency stem from the match between the product structure and their belief, and hence, perceive higher self-efficacy, leading to higher price sensitivity.

Hypothesis 3: When PDB is high (vs. low), people are more likely to expend the time and energy in order to find the lowest prices for hierarchically (vs. equally) structured products or services.

In study 1a, participants were randomly assigned to the high ($N = 46$) or low ($N = 45$) PDB condition. We used the PDB manipulation from Zhang et al. (2010). Price sensitivity was measured via a 5-item, 7-point scale ($\alpha = .80$) developed and validated by Lichtenstein, Ridgway, and Netemeyer (1993). A sample item is "I will grocery shop at more than one store to take advantage of low prices." An ANOVA on price sensitivity revealed that low (vs. high) PDB individuals were more price sensitive ($M_{\text{lowPDB}} = 4.64$, $SD = 1.21$, $M_{\text{highPDB}} = 4.04$, $SD = 1.18$; $F(1, 89) = 5.86$, $p < .02$).

In study 1b, PDB was measured by using Yoo, Donthu, and Lenartowicz (2011)'s scale ($\alpha = .80$). Thereafter, participants were given specific purchasing situations with three different types of products (digital camera, laptop, and designer clothing) in which they found the item to purchase in a store. They were told that they might find a cheaper price if they keep searching at other stores or online. Each participant was asked to indicate his/her intention to try other stores or websites to find a lower price for each product. Results suggested that the effect of PDB on price sensitivity index is significantly negative ($\beta = -.28$, $t(128) = -3.79$, $p < .01$), as predicted.

Study 2: PDB was measured as in study 1b and price sensitivity was measured as in study 1a. Lastly, general self-efficacy was measured via a 10-item, 4-point scale ($\alpha = .89$) developed and validated by Schwarzer and Jerusalem (1995). We replicated the negative impact of PDB on price sensitivity ($\beta = -.24$, $t(146) = -3.16$, $p < .01$). Further, a bootstrapping procedure with 10,000 iterations (Model 4, Hayes 2012) indicated that the indirect effect of self-efficacy on the link between PDB and price sensitivity was significant ($\beta = -.03$, $CI_{95} = -.1037, -.0003$), suggesting the effect of PDB on price sensitivity is mediated by self-efficacy.

Study 3: PDB was manipulated as in study 1b (high PDB condition: $N = 174$ vs. low PDB condition: $N = 173$). Thereafter, participants were randomly assigned to the hierarchically structured airline service ($N = 177$) or equally structured airline service ($N = 170$) condition. They were asked to indicate their price sensitivity about the flight ticket purchases ($\alpha = .86$). A 2 x 2 ANOVA revealed a significant two-way interaction ($F(1, 343) = 7.77$, $p < .01$). Further, when the product structure was equal, low (vs. high) PDB individuals were more likely to search for lower prices ($M_{\text{highPDB}} = 5.68$ vs. $M_{\text{lowPDB}} = 6.05$; $F(1, 343) = 4.44$, $p < .05$). However, when the product structure was hierarchical, high (vs. low) PDB individuals were marginally more likely to search for lower prices ($M_{\text{highPDB}} = 6.11$ vs. $M_{\text{lowPDB}} = 5.80$; $F(1, 343) = 3.36$, $p < .07$).

Taken together, these findings supported our prediction that high (vs. low) PDB individuals are less likely to be price sensitive (i.e., they have a lower tendency to expend effort to search for lower prices), and that this effect is mediated by self-efficacy. We also reveal an important boundary condition, which suggested that self-

efficacy can be enhanced when the product structure matches with consumer's societal values.

REFERENCES

- Carl, Dale, Mansour Javidan, and Vipin Gupta (2004), "Power Distance," in *Culture, Leadership, and Organizations: The Globe Study of 62 Societies*, ed. Robert J. House, Paul J. Hanges, Mansour Javidan, Peter W. Dorfman, and Vipin Gupta, Thousand Oaks, CA: Sage, 513-59.
- Cianni, M. (1994), "Self-Efficacy, Race, and Gender," *Applied HRM Research*, 5 (1), 44-63.
- Eaton, Martin J. and Myron H. Dembo (1997), "Differences in the Motivational Beliefs of Asian American and Non-Asian Students," *Journal of Educational Psychology*, 89 (3), 433-40.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," [White Paper], Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Heine, Steven J., Darrin R. Lehman, Hazel Rose Markus, and Shinobu Kitayama (1999), "Is There a Universal Need for Positive Self-Regard?," *Psychological Review*, 106 (4), 766-94.
- Hofstede, Geert (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. 2d ed. Thousand Oaks, CA: Sage Publications.
- Lam, Simon S. K., John Schaubroeck, and Samuel Aryee (2002), "Relationship between Organizational Justice and Employee Work Outcomes: A Cross-National Study," *Journal of Organizational Behavior*, 23 (1), 1-18.
- Lichtenstein, Donald R., Nancy M. Ridgway, and Richard G. Netemeyer (1993), "Price Perceptions and Consumer Shopping Behavior: A Field Study," *Journal of Marketing Research*, 30 (2), 234-45.
- Mau, Wei-Cheng (2000), "Cultural Differences in Career Decision-Making Styles and Self-Efficacy," *Journal of Vocational Behavior*, 57 (3), 365-78.
- Oettingen, Gabriele (1995), "Cross-Cultural Perspectives on Self-Efficacy," *Self-Efficacy in Changing Societies*, 149-76.
- Schaubroeck, John, Simon S. K. Lam, and Jia Lin Xie (2000), "Collective Efficacy Versus Self-Efficacy in Coping Responses to Stressors and Control: A Cross-Cultural Study," *Journal of Applied Psychology*, 85 (4), 512-25.
- Schwarzer, Ralf and Matthias Jerusalem (1995), Optimistic Self-Beliefs as a Resource Factor in Coping with Stress. *Extreme Stress and Communities: Impact and Intervention*, Springer: 159-77.
- Sherer, Mark, James E. Maddux, Blaise Mercandante, Steven Prentice-Dunn, Beth Jacobs, and Ronald W. Rogers. (1982), "The Self-Efficacy Scale: Construction and Validation," *Psychological Reports*, 51 (2), 663-71.
- White, Katherine, Rhiannon MacDonnell, and Darren W. Dahl (2011), "It's the Mind-Set That Matters: The Role of Construal Level and Message Framing in Influencing Consumer Efficacy and Conservation Behaviors," *Journal of Marketing Research*, 48 (3), 472-85.
- Yoo, Boonghee, Naveen Donthu, and Tomasz Lenartowicz (2011), "Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of CVSCALE," *Journal of International Consumer Marketing*, 23 (3-4), 193-210.
- Zhang, Yinlong, Karen P. Winterich, Vikas Mittal (2010), "Power Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47 (5), 945-54.

A Consumer-Based Model of Physical Activity and Nutrition (PAN) Practices: The Case in a Northeastern U.S. Community

Ada Leung, Pennsylvania State University at Berks, USA

Huimin Xu, The Sage Colleges, USA

Gavin Jiayun Wu, Savannah State University, USA

James Shankweiler, Pennsylvania State University at Berks, USA

Lisa Weaver, AmeriCorps VISTA, USA

EXTENDED ABSTRACT

Various research studies have shown that medication, combined with lifestyle changes, including decreasing caloric intake and increasing physical activities, would delay onset of chronic health problems, such as diabetes (Katula et al. 2013; Knowler et al. 2002). Nevertheless, health disparity still persists and discrepancies in health outcomes, such as life expectancy and incidence of chronic diseases, have enlarged over time in the U.S. (Braveman and Egerter 2013). For many health indicators, people in the poorest or least educated groups, often ethnic minorities living in impoverished neighborhoods, have the worst health, but middle-class people also are less healthy than those who are at the highest social hierarchy (Marmot 2004). Although the adoption of a healthy lifestyle is the most cost-effective way in improving health outcomes, why is it not widely adopted by people of low income and education levels? The purpose of this study is to understand physical activity and nutrition (PAN) practices from the consumers' perspective. Consumer research emphasizes on behaviors as experienced by consumers rather than relying solely on medical experts. Consumer studies adopt a "bottom-up" perspective to investigate the complexities on poverty and health (Hill and Dhanda 1999; Lee, Ozanne, and Hill 1999). This study focuses especially on the lived experiences of consumers who are most affected by this problem, namely low-income ethnic minority. Based on this study, we offer a model of household physical activity and nutrition (PAN) practices, as individual decisions on PAN practices often spill over to all of the members in the same household.

The study was conducted in the City of Reading, PA. Reading City has a population 88,000 in 2016, with about 58% of its population is of Hispanic or Latino origin. We used convenience sampling to purposely recruit ethnic minority informants from a Catholic Church. Bilingual (Spanish-English) moderators and interviewers are trained to conduct the interviews with both English- and Spanish-speaking informants.

Four focus groups (n=29) were conducted to generate consumers' thoughts and vocabulary about their lifestyles and social lives. These informants (and their family members) were then invited to participate in depth interviews (n=25) two weeks afterwards. The participants were asked to bring 10-15 pictures about their lifestyle to the interviews, tell stories about the pictures, and elaborate how various activities fit in their lifestyle. The qualitative data were translated and transcribed in English. The informants were also asked questions about their family situation, neighborhood, health and working conditions.

We drew on Lisa Penaloza's concept of consumer acculturation (1994) and Nakata et al's framework of stressor-resource-behavior (2016) to guide our theoretical interpretation. Consumer acculturation refers to consumer socialization processes, such as modeling, reinforcement, and social interaction, which are central behavioral processes through which consumer skills, knowledge and behaviors were transferred by acculturation agents, including family, friends, and institutions, such as schools and churches (Penaloza 1994). Nakata et al's approach to health-related consumption practices is to take an encompassing view of consumers' lives, such that both their

personal characteristics and their environmental situations determine their practices (Nakata et al. 2016).

Two major findings were identified from the data, interpretation, and theoretical perspectives. The first finding is that physical activity and nutrition (PAN) practices are situated in and dynamically affected by the stressors and resources encountered in consumers' daily life. Stressors could stem from consumers' living, working, family, and medical conditions (Braveman and Egerter 2013). The resources that the consumers could muster to engage in PAN practices are economic capital, cultural capital, interpersonal social capital (Bourdieu 1984), institutional and community social capital (Putnam, Feldstein, and Cohen 2003), and emotional capital (Froyum 2010; Reay 2004).

The second finding is that the adoption of a healthy lifestyle means engaging the in a complex, interwoven, and delicate constellation of practices: maintenance, socialization, assimilation, segregation, and reverse socialization. Therefore, the change agent needs to take residents' stressors/resources into account when devising intervention programs to nudge community residents to engage in PAN practices.

Our investigation of stressors helps explain why it is difficult to adopt a healthy lifestyle, because a disruption in any one practice due to stressor(s) can trigger a disruption in another practice. Adoption of PAN practices is more likely if the driving forces of resources are greater than the constricting forces of stressors. As resources fuel one another in a generative way, consumers' health outcomes are likely to improve significantly if they can wield various forms of capital effectively. For example, consumers' cultural capital of health literacy enable them to learn about nutritious diets and physical activities, which in turn allow them to be change agents in their respective families (social capital) and community (community social capital).

For most of the informants that we interviewed, they are hopeful about the positive changes they can bring to themselves if they are given PAN related knowledge and if their community is offered more resources. Due to interconnections among PAN practices, PAN practices are often most effective when they were carried out in sync with others. Lastly, it should be added that PAN practices needed to carry out indefinitely to realize long-term effects. Research on the effectiveness of potential interventions need to measure the longitudinal effects of interventions plus their habit-forming potential so that the gains in health outcomes can be carried forward open-endedly.

Community advocates and medical professional need to understand their community members' lived context so that they are able to design appropriate community services that encourage the cultivation of various types of capital (e.g. professional clothing drive and job fair to improve residents' economic capital, nutritional workshops to increase cultural capital, emotional intelligence seminar to increase emotional capital), to implement projects that build on existing networks (e.g. churches, chambers of commerce, community food-bank networks), to build alliances among community agencies, and to set up an advisory board that will guide and sustain the healthy lifestyle initiative over time.

Last but not least, we investigated the health disparities among Hispanics in this research. Hispanics have surpassed African Ameri-

cans as the largest U.S. minority group in 2003 (National Research Council 2006). Hispanic segregation from the whites is lower than African American segregation, however, since immigration often reinforces ethnic enclaves, it becomes imperative to study how health disparities play out among the Hispanics (Iceland and Nelson 2008).

REFERENCES

- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*, Cambridge, Massachusetts: Harvard University Press.
- Braveman, Paula and Susan Egerter (2013), *Overcoming Obstacles to Health in 2013 and Beyond*, Princeton, NJ: Robert Wood Johnson Foundation.
- Froyum, Carissa M. (2010), "The Reproduction of Inequalities through Emotional Capital: The Case of Socializing Low-Income Black Girls," *Qualitative Sociology*, 33 (1).
- Hill, Ronald Paul and Kanwalroop Kathy Dhanda (1999), "Gender Inequality and Quality of Life: A Macromarketing Perspective," *Journal of Macromarketing*, 19 (December), 140-52.
- Iceland, John and Kyle Anne Nelson (2008), "Hispanic Segregation in Metropolitan America: Exploring the Multiple Forms of Spatial Assimilation," *American Sociological Review*, 73 (5), 741-65.
- Katula, Jeffrey A., Mara Z. Vitolsins, Timonthy M. Morgan, Michael S. Lawlor, Caroline S. Blackwell, Scott P. Isom, Carolyn F. Pedley, and David C. Goff (2013), "The Healthy Living Partnerships to Prevent Diabetes Study: 2-Year Outcomes of a Randomized Controlled Trial," *American Journal of Preventive Medicine*, 44 (4), S324-S32.
- Knowler, William C., Elizabeth Barrett-Connor, Sarah Fowler, Richard Hamman, John M. Lachin, Elizabeth Walker, and David M. Nathans (2002), "Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin," *The New England Journal of Medicine*, 346 (6), 393-403.
- Lee, Renee Gravois, Julie L. Ozanne, and Ronald Paul Hill (1999), "Improving Service Encounters through Resource Sensitivity: The Case of Health Care Delivery in an Appalachian Community," *Journal of Public Policy & Marketing*, 18 (2), 230-48.
- Marmot, Michael (2004), *The Status Syndrome: How Social Standing Affects Our Health and Longevity*, New York: Times Book, Henry Holt and Company.
- Nakata, Cheryl, Dan Hogan, Lisa Sharp, Jelena Spanjol, and Anna Cui (2016), "A Consumer-Based Model of Medication Adherence in the Lived Context of Chronic Illness," in *American Marketing Association Winter Educators' Conference* Vol. 27, ed. Thorsten Hennig-Thurau and Charles F. Hofacker, Las Vegas, NV: American Marketing Association, C69-C70.
- National Research Council (2006), "Multiple Origins, Uncertain Destinies: Hispanics and the American Future," ed. M. Tienda and F. Mitchell, Washington, DC: The National Academics Press.
- Penaloza, Lisa (1994), "Atravesando Fronteras/Border Crossings: A Critical Ethnographic Exploration of the Consumer Acculturation of Mexican Immigrants," *Journal of Consumer Research*, 21 (June), 32-54.
- Putnam, Robert D., Lewis M. Feldstein, and Don Cohen (2003), *Better Together: Restoring the American Community*, New York: Simon & Schuster.
- Reay, Diane (2004), "Gendering Bourdieu's Concepts of Capitals? Emotional Capital, Women and Social Class," *The Sociological Review*, 52 (2), 57-74.

The Diverging Effects of Cuteness on Risk Preference: Moderating Role of Gender

Yuan Li, University of Texas at San Antonio, USA
Dengfeng Yan, University of Texas at San Antonio, USA

EXTENDED ABSTRACT

This research examines how exposure to cuteness influences consumer risk preference. Intriguingly, extant work implies seemingly contradicting predictions. One line suggests that cuteness may increase risk-seeking tendency through display of aggression (Aragon, Clark, Dyer and Bargh 2015; Figueredo and Jacobs 2011). The other line implies that exposure to cuteness should lead individuals to be more risk averse (Nittono et al. 2012; Sherman, Haidt, and Coan 2009). In this work, we reconcile these possibilities by suggesting gender as a moderator. Specifically, we propose that exposure to cuteness decreases men's risk perception, which in turn increases their risk-seeking tendency. In contrast, exposure to cute stimuli increases women's risk perception, which leads them to be more risk-averse.

The present conceptualization stems from the notion that cuteness is often associated with vulnerability. For example, the word cute is often used to describe small living entities such as babies and baby animals, which usually are physically weak. In addition, past research also suggests that cuteness is linked to cognitive vulnerability. Cuteness has a cognitive connotation of weak, vulnerable, submissive, and powerless (Goldhill 2015; Hellen and Sääksjärvi 2013). These properties of cuteness are related to affects such as helplessness, pitifulness, and despondency (Goldhill 2015).

We then turn to the question of how the vulnerability of cuteness can affect consumer risk preference. On one hand, exposure to vulnerable cute objects creates an illusory sense of control, which in turn leads to lower perceived risk and greater risk-seeking propensity. People's self-perception is malleable, depending on the context or reference point (Aaker 1999; Mandel 2003). For example, Kim and McGill (2011) found people were more willing to play the slot game when their sense of control changed at the anthropomorphized slot machine. By the same logic, we suggest that cuteness, via the vulnerability connotation, will enhance individuals' sense of control and make them more risk-seeking. On the other hand, exposure to cuteness has also been found in prior literature to trigger protective, caretaking, attentive and careful behavior (Lorenz 1943; Nittono et al. 2012; Sherman, Haidt, and Coan 2009; Sherman et al. 2013). The effect of cuteness on careful behavior is proposed to stem from evolution. Drawn from motivated cognition that individuals inflate their perception to better perform the task (Nicholls 1984), we suggest people may inflate their risk perception in the environment to increase the infant's chance of survival. For example, in one study, participants performed tasks more attentively after viewing unrelated cute images (Nittono et al. 2012). In line with this, we propose this evolutionary tendency would lead people to be more risk averse in general.

The most critical question then becomes under which condition each of these opposing predictions is more likely to manifest. To this end, we draw on prior work on gender difference to suggest gender as a moderator. The most relevant finding is the distinction between agency and communion (Bakan 1966). Agency goals are related to male characteristics such as self-focused, active, decisive, self-confident, and competitive; while communion goals are related to female characteristics such as caring for others. These differences imply that males are more likely to treat vulnerable cute objects as a reference point, leading to lower perceived risk and stronger risk-

taking propensity. In contrast, females are more likely to feel empathy for the cute objects, leading to higher perceived risk and less risk-taking tendency.

Four studies were designed to test our proposition. Study 1A was a between subject design with 192 undergraduate students. They were presented with images of puppy and kitten (cute condition) or images of adult dog, lion, and tiger (control condition) (Sherman, Haidt, and Coan 2009). Then they were asked to indicate their preference between two options following previous literature (Duclos, Wan, and Jiang 2013). In line with our prediction, male participants in the cute condition indicated stronger preference for the riskier option than those in the control condition. The pattern was reversed for female participants.

Study 1B was to test the robustness of Study 1A by using different kinds of cuteness manipulation and different option choices. 237 mTurkers participated in a between-subject repeated measure online experiment. Option choices were presented either in a cute or neutral font. Consistent with our prediction, male participants in the cute condition demonstrated stronger preference for the riskier option than their counterparts in the control condition. In contrast, female participants' risk-seeking tendency was lowered in the cute than that in the control condition.

The aim of Study 2 was to explore the underlying process. 271 undergraduate students participated in an experiment. They were randomly assigned to view either a cute computer or a normal computer. Later they were asked to indicate their perceived risk of computer without warranty. As predicted, male's risk perception was lower in the cute condition than that in the control condition. For females, their risk perception was higher in the cute condition than that in the control condition though it didn't reach significance.

The main objective of Study 3 was to test the mediation role of risk perception. 251 participants were randomly assigned to view either a cute or neutral slot game webpage and asked about their risk perception and willingness to play the game. The results replicated the same pattern as previous studies. More importantly, we found support for our proposed underlying process that risk perception mediated the effect of gender and cuteness on people's risk preference.

The present research contributes to our understanding of consumer behavior along a few directions. Foremost, this research introduces gender into the cuteness theoretical framework and offers a nuanced understating of how cuteness influences perception and decisions. It also adds to the increasing literature on how gender affects consumers' preference and behavior by showing that cuteness amplifies risk preference between men and women. Furthermore, this research contributes to the risk taking literature by adding one potential antecedent.

REFERENCES

- Aaker, Jennifer (1999), "The Malleable Self: The Role of Self-Expression in Persuasion," *Journal of Marketing Research*, 36(1), 45-57.
- Aragon, Oriana R., Margaret S. Clark, Rebecca L. Dyer, and John A. Bargh (2015), "Dimorphous Expressions of Positive Emotion: Displays of Both Care and Aggression in Response to Cute Stimuli," *Psychological Science*, 26(3), 259-73.

- Bakan, David (1966), *The Duality of Human Existence*, Chicago: Rand McNally.
- Duclos Rod, Echo Wen Wan, and Yuwei Jiang (2013), "Show Me the Honey! Effects of Social Exclusion on Financial Risk-Taking," *Journal of Consumer Research*, 40(June), 122-35.
- Figueredo, A. J. and Jacobs, W.J. (2011), "Aggression, Risk-Taking and Alternative Life History Strategies: The Behavioral Ecology of Social Deviance," in *Bio-Psychosocial Perspectives on Interpersonal Violence*. Nova Science Publishers, Inc., 3-27.
- Goldhill, Olivia (2015), "The 'awww!' Response to Cuteness isn't Just Biological, It's Philosophical," <http://qz.com/544098/the-awww-response-to-cuteness-isnt-just-biological-its-philosophical>
- Hellen, Katarina and Maria Sääksjärvi (2013), "Development of a Scale Measuring Childlike Anthropomorphism in Products," *Journal of Marketing Management*, 29(1-2), 141-57.
- Kim, Sara and Ann L. McGill (2011), "Gaming with Mr. Slot or Gaming the Slot Machine? Power, Anthropomorphism, and Risk Perception," *Journal of Consumer Research*, 38(June), 94-107.
- Lorenz, Konrad (1943), "Die angeborenen Formen möglicher Erfahrung" [The innate forms of potential experience], *Zeitschrift für Tierpsychologie*, 5, 233-519.
- Mandel, Naomi (2003), "Shifting Selves and Decision Making: The Effects of Self-Construal Priming on Consumer Risk-Taking," *Journal of Consumer Research*, 30(June), 30-40.
- Nicholls, John G. (1984), "Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance," *Psychological Review*, 91(3), 328-46.
- Nittono, Hiroshi, Michiko Fukushima, Akihiro Yano, and Hiroki Moriya (2012), "The Power of Kawaii: Viewing Cute Images Promotes a Careful Behavior and Narrows Attentional Focus," *PLOS ONE*, 7(9), e46362.
- Sherman, Gary D., Jonathan Haidt, and James A. Coan (2009), "Viewing Cute Images Increases Behavioral Carefulness," *Emotion*, 9 (2), 282-6.
- _____, Jonathan Haidt, Ravi Iyer, and James A. Coan (2013), "Individual Differences in the Physical Embodiment of Care: Prosocially Oriented Women Respond to Cuteness by Becoming More Physically Careful," *Emotion*, 13(1), 151-8.

Interpersonal Prosocial Incentives

Ye Li, University of California Riverside, USA

Margaret Lee, London Business School, UK

EXTENDED ABSTRACT

Classical economic theories model people as perfectly selfish and lazy. *Homo economicus* (Thaler 2000) should never anonymously give money to strangers or do any unpleasant work when they are not being paid to it. This assumed self-interest is why organizations generally offer their workers explicit incentives to motivate them. However, many behaviors seem to be motivated by more than self-interest, both in laboratory experiments and in everyday life. These prosocial behaviors reflect people's willingness to utilize their own resources—including many of significant value—for the benefit of others. This apparent selflessness raises questions about the potential motivating influence of others and the possibility that organizations are missing out on a potentially powerful source of motivation. This research directly examines the possibility that prosocial motivation can be used to motivate workers, using real-effort experiments that isolate and compare prosocial sources of motivation with other more traditional forms of motivation such as fixed salary and pay-for-performance.

Most of the existing research on work motivation has focused primarily on self-interested motivators, including extrinsic ones, such as monetary rewards and punishments, and intrinsic ones, such as job satisfaction and worker autonomy. We go beyond these traditional motivators and posit that prosocial motivations are important in the workplace for two reasons: First, as organizations turn away from hierarchical structures and towards flatter, more group-based structures, workers have increased interpersonal interaction and must rely more on their coworkers (Kanter 1989). Prosocial motivations may therefore be a significant source of motivation and play a big role in group productivity. Second, prosocial motivators may cost less than self-interested motivators such as additional salary and provide additional organizational benefits. By examining *if* and *why* workers are willing to exert effort to explicitly benefit their co-workers, we hope to better understand the psychology behind prosocial behavior and introduce prosocial motivation as an additional source of work motivation.

In addition, although the prediction that prosocial motivation can elicit *some* effort is hardly controversial, we are also interested in *how much* effort can be elicited. Although work motivation researchers have recently started to explore others as a source of motivation (e.g., Batson 1987; Grant 2007), none have directly compared the potential strengths of such "prosocial" motivations with self-interested motivations. This research fills that gap by directly comparing prosocial motivations to more standard types of work motivation such as fixed salary and pay-for-performance incentives. To do so, we implemented a simple operationalization of using others as a source of work motivation: In what we call the "pay-for-others" (P4O) incentive scheme, each worker's output directly affects *another* worker's payment rather than affecting their own payment. This novel incentive scheme allows for direct comparison to more standard pay-for-performance (P4P) incentives.

We hypothesized that, 1) workers in the P4O conditions will exert effort even when that effort only benefits others, and 2) under certain conditions, prosocial motivation (P4O) can be more motivating than traditional financial motivation (P4P) because direct financial incentives can "crowd out" intrinsic motivations (Deci, Koestner, and Ryan 1999). *We test these hypotheses in two real-effort experiments that asked P4O participants to work for the benefit of another participant without receiving payment based on their own performance.*

In Experiment 1, participants completed an anagram task similar to TextTwist in which they were given 4 minutes to generate as many three to seven letter anagrams as possible from a set of letters, "a d e r s t w." Their performance determined their own pay (P4P), determined the next participant's pay (P4O), or was irrelevant (fixed pay). We found evidence that P4O incentives were indeed motivating, and that they *can* be even more motivating than traditional P4P incentives. However, we found that fixed pay participants also generated more anagrams than P4P participants, suggesting that at least part of the performance difference between P4O and P4P was due to relatively small levels of P4P incentives "crowding out" intrinsic motivation for the relatively enjoyable anagram task.

We designed Experiment 2 to replicate these results while eliminating the "crowding out" effect by switching to a mindless number-counting task. Participants counted the numbers of 1's in randomly-generated 15x10 grids of 0's and 1's. Participants were shown one grid at a time, and after each grid, the participant was given the option to either continue onto the next grid or end the task. This task has previously been used by economists as a "tedious and repetitive task" that has no dependency on prior skill, little possibility for learning, and a clearly positive cost of effort (Abeler et al. 2011). To further disentangle the many possible motivators of prosocial behavior, we created seven conditions in a fractional factorial design that varied the source of the participant's payment, the target of the participant's effort, and the audience for the participant's effort.

The results of Experiment 2 showed that when the task is sufficiently boring, P4O incentives were at best equally motivating as P4P incentives, and only when there was a possibility for "conditional indirect reciprocity." That is, P4O incentives were only effective when the previous participant's effort determined the current participant's payment and the current participant's performance would determine the next participant's payment, and so on. In other words, participants were motivated to "pay it forward" only if they thought past others had acted prosocially and future others could continue to act prosocially. Experiment 2 also allowed us to rule out many other potential sources of prosocial motivation as main drivers behind P4O incentives, including self-signaling, self-presentation, guilt and shame aversion, altruism, observation effects, and competition effects.

REFERENCES

- Abeler, Johannes, Armin Falk, Lorenz Goette, and David Huffman (2011), "Reference Points and Effort Provision," *American Economic Review*, 101 (2), 470-92.
- Batson, C.D. (1987), "Prosocial Motivation: Is It Ever Truly Altruistic," *Advances in experimental social psychology*, 20, 65-122.
- Deci, E.L., R. Koestner, and R.M. Ryan (1999), "A Meta-Analytic Review of Experiments Examining the Effect of Extrinsic Rewards on Intrinsic Motivation," *Psychological Bulletin*, 125, 627-68.
- Grant, A.M. (2007), "Relational Job Design and the Motivation to Make a Prosocial Difference," *The Academy of Management Review ARCHIVE*, 32 (2), 393-417.
- Kanter, Rosabeth Moss (1989), "The New Managerial Work," *Harvard Business Review*, 67 (6), 85-92.
- Thaler, Richard H. (2000), "From Homo Economicus to Homo Sapiens," *Journal of Economic Perspectives*, 14 (1), 133-41.

The Influence of Virtual versus Actual Identity on Impulsive Consumption

Chia-Wei Joy Lin, University of Tennessee at Chattanooga, USA

Yinlong Zhang, University of Texas at San Antonio, USA

Lawrence Feick, University of Pittsburgh, USA

EXTENDED ABSTRACT

The ubiquity of the Internet has dramatically changed how consumers define their identities in recent years (Rosen 2012). For example, Palfrey and Gasser (20016) showed that generations grown up with the Internet have started to form a new identity (i.e., virtual identity) in this virtual environment. Virtual identity is the self the individual construes on the Internet (e.g., Bargh, McKenna, and Fitzsimons 2002). Recent research has found that virtual identity does exist (e.g., Turkle 1995), is different from actual identity (e.g., Bargh and McKenna 2004), the identity people display in offline life, and will influence how people see themselves and interact with others (e.g., McKenna and Bargh 1998). Thus, it is necessary for researchers to further understand the consumption consequences of virtual identity. Surprisingly, no theoretical-based research has been conducted to investigate these consequences. This research aims to fulfill this gap by examining the effect of virtual identity on impulsive consumption, which is associated with critical consumer issues, such as obesity (Nederkoorn et al. 2006) and credit card debts (Norvilitis et al. 2006). To provide a solid understanding on the connection between virtual identity and impulsive consumption, we developed theoretical arguments based on possible-self, self-determination, identity conflict, and self-regulation theories.

First, the virtual environment opens the restrictions of social norm and allows people to explore possibilities of themselves beyond the expectation of the social background (Nagy 2010; Suler 2002). Therefore, it is conducive to people developing new possible identities (Bargh et al. 2002). This stream of literature suggests that conceptually people's virtual identity is a reflection of their possible selves, the selves people think they cannot realize in their daily life but may become in the future (Markus and Nurius 1986).

According to the self-determination theory, people are driven to realize the self-goals associated with their possible selves (e.g., Higgins and Kruglanski 2000; James 1890; Oyserman 2007). People typically want to achieve as many self-goals as possible. However, people's resource is limited (Vohs and Faber 2007), and it is nearly impossible to realize all possible selves. In short, sensing the multiple possible selves can make consumers aware of the competing pressure on their limited self-control resource to realize these possible selves. Accordingly, the potential conflicts among multiple possible selves can lead to self-control resources depletion (Oyserman, Gant, and Ager 1995). Finally, the self-regulation literature has extensively shown that when individuals have depleted self-control resources, they are less likely to regulate themselves; in other words, they behave in an impulsive manner (e.g., Hofmann, Rauch, Gawronski 2007).

In summary, we propose that a virtual identity will tend to be associated with reduced self-control resources and these reduced self-control resources will lead to greater consumer impulsiveness (see figure 1). More formally, we hypothesize:

Hypothesis 1: Individuals will consume more impulsively when their virtual identity is accessible than when their actual identity is accessible.

Hypothesis 2: The effect of salient virtual identity on impulsive consumption is mediated by self-control resources.

Furthermore, to test our theoretical explanation for the virtual identity effect, we investigated a theory-driven moderator: self-construal. Prior works have demonstrated that independent individuals are more likely to consume impulsively than interdependent individuals due to low control resources (Zhang and Shrum 2009). Hence, we predict that self-construal will moderate the effect of virtual identity on impulsive consumption. Specifically, independent individuals will be more likely subjected to the influences of virtual identity than interdependent individuals. Formally, we hypothesize:

Hypothesis 3: Self-construal moderates the effect of virtual identity on impulsive consumption. Specifically, the effect of virtual identity on impulsive consumption will be stronger for individuals with an independent self-construal than those with an interdependent self-construal.

We conducted four studies to test these hypotheses. Study 1 confirms the existence of a relationship using multiple measures and methods. Studies 2 and 3 test our process hypothesis. Using different methods, both studies support the mediating effect of self-control resources -- individuals who have lower self-control resources exhibit a greater impact of virtual identity on impulsive consumption. Finally, study 4 supports the hypothesized moderating impact of self-construal, i.e., we observe the effect for individuals with an independent but not interdependent self-construal.

Study 1A

Method

Study 1a is a survey in which we develop and validate a measure of virtual identity and then examine its correlation with impulsive consumption. We asked participants to complete a series of scales that included measures of virtual identity and impulsive consumption. Then they reported basic demographics and their usual patterns of using the Internet. The chronic virtual versus actual identity was measured via items adapted from Luhtanen and Crocker (1992), Phinney (1992), and Tu, Khare, and Zhang (2012) whereas impulsive consumption was measured via the impulsive consumption scale (Rook and Fisher 1995).

Result and Discussion

To test H1 we ran a regression on impulsive consumption with the chronic virtual identity score as a predictor. The overall model was significant ($F(1, 221) = 11.32, p = .001, \eta^2 = .05$) as was the coefficient of the predictor ($\beta = .22, t = 3.36, p = .001$): individuals with greater virtual identity scores are more likely to report greater impulsive consumption. Study 1a provides the initial support for hypothesis 1; individuals whose virtual identity is chronically more accessible have a greater tendency toward impulsive consumption. Because 1a use correlation analysis from survey data, we designed study 1b, an experiment, to begin to address causation.

Study 1B

Method

Study 1b is a lab experiment in which we primed virtual identity and then measured the impact on impulsive consumption. Ninety

undergraduates from a large US university participated in this study in exchange for course credit. Participants were randomly assigned to one of the two conditions and told that they would be taking part in two unrelated studies. In the first study, participants worked on a short writing task within which we primed virtual or actual identity (modified the paragraph-writing task from Trafimow, Triandis, and Goto 1991). In the virtual condition the description read: The writing task concluded with questions regarding the task. We captured the main dependent variables when participants completed a series of measures, which we framed as a prescreening session for another study. Finally participants reported on basic demographics.

Result and Discussion

In line with H1, the ANOVA results comparing the effect of virtual identity versus actual identity on impulsiveness revealed a significant main effect ($F(1, 89) = 4.45, p = .04$); individuals with salient virtual identity showed greater impulsiveness than individuals with salient actual identity ($M_{VI} = 4.51, M_{AI} = 3.78$). To our knowledge, study 1 (a and b) is the first to demonstrate that consumer impulsiveness is affected by virtual identity. In subsequent studies we attempt to explicate and test the mechanism linking virtual identity and consumer impulsiveness, and examine alternative explanations.

Study 2

Method

Studies 2 replicated the effect of virtual identity with a more subtle virtual identity manipulation, scrambled-sentence task (adapted from Srull and Wyer 1980) and a behavioral measure of impulsive consumption, grocery-shopping scenario (Vohs and Faber 2007), to enhance the external validity. Participants were 286 undergraduates from a large U.S. university who participated in the study in exchange for partial course credit. We randomly assigned participants to one of the two conditions: virtual identity and actual identity. In the first task they read the manipulation of virtual-actual identity. In the second task we told them that we were interested in people's everyday choices and we asked them to imagine a grocery-shopping scenario (Vohs and Faber 2007; Zhang, Winterich, and Mittal 2010). In the ostensibly unrelated third task, participants completed a questionnaire that included measures of potential mediators and demographic characteristics. We used the self-control scale (Tangney et al. 2004) to measure self-control resources. In order to test alternative explanations, we also use the seven-item public self-consciousness and six-item private self-consciousness subscales of the self-consciousness scale (Fenigstein, Scheier, and Buss 1975) to measure public or private self-consciousness. The self-consciousness was considered because that a frequently-mentioned feature of the online world is that it is more anonymous than the real world (e.g., Bargh et al. 2002; Nagy 2010). According to the anonymity literature (e.g., Rubin 1974), when individuals perceive the person they are interacting with doesn't know them they will be more likely to express their genuine feelings and act on their urges. Thus, anonymity can serve as a potential alternative mediator.

Result and Discussion

ANOVA conducted on impulsive consumption revealed a significant main effect of virtual versus actual identity ($F(1, 284) = 3.87, p = .05$). Individuals with a salient virtual identity indicated greater impulsiveness than did those with a salient actual identity ($M_{VI} = 4.89, M_{AI} = 4.07$; see figure 3). This result provides additional support for hypothesis 1.

The results from PROCESS (Hayes 2013) revealed a significant indirect effect via self-control that did not include zero (95% CI:

0.235 to .2136). In addition, we ruled out private and public self-consciousness as alternative mediators. Using the same analysis, the results showed that when private self-consciousness (95% CI of -.1555 to .0684) or public self-consciousness (95% CI of -.1318 to .0082) were included as mediators, the CIs included zero. In sum, we found support for self-control resources as a mediator between virtual identity and impulsive consumption and evidence that allowed us to rule out self-consciousness as a mediator.

Study 3

Method

In study 3, we used the moderation-of-process method by manipulating self-control resource via the white bear task (Wegner et al. 1987). Participants were 154 U.S. respondents to a request posted on Amazon Mechanical Turk (MTurk) who participated and received a small cash incentive. This was a 2 (identity: virtual identity vs. actual identity) X 2 (self-control resources: high vs. low) between-subjects design and participants were randomly assigned to one of the four conditions. Participants were told they were responding to two different studies. They completed two written exercises: our virtual identity/actual identity prime and then the manipulation of self-control resources. In the ostensibly unrelated second study, participants first completed the grocery-shopping scenario from study 2 and then the manipulation check and demographics.

Result and Discussion

The 2 (virtual vs. actual identity) X 2 (high vs. low self-control resource) ANOVA on impulsive consumption showed a significant two-way interaction ($F(1, 150) = 8.12, p = .005$). Specifically, the effect of virtual identity on impulsive consumption was only significant for the high self-control resource condition ($M_{VI} = 4.86, M_{AI} = 3.96, p = .02$), but not the depleted self-control resource condition ($p = .12$). This supports H2. Study 3 provides additional support for hypothesis 2. We showed that if we independently reduce self-control resources through our manipulation, we are able to eliminate the impact of virtual vs. actual identity on impulsiveness. Individuals whose self-control resources were not depleted, however, showed the expected connection between identity and impulsiveness.

Study 4

Method

Study 4 tested the moderator, self-construal. It is a 2 (identity: virtual identity vs. actual identity) X 2 (self-construal: independent vs. interdependent) between-subjects experiment in which 250 undergraduates from a large US university participated for course credit. Participants completed two written exercises: the first manipulated virtual/actual identity (same as study 1a) and the second manipulated independent/interdependent self-construal (Hamilton and Biehal 2005). In the "second study," we measured impulsive consumption (same as 1b) and self-control resources (same as study 2). Participants were thanked and dismissed after they completed demographic questions.

Result and Discussion

The ANOVA result showed a significant two-way interaction ($F(1, 246) = 4.52, p = .03$): for independent self-construal, participants were more impulsive when their virtual identity was activated than when their actual identity was activated ($M_{VI} = 4.53, M_{AI} = 3.74, p = .03$). For interdependent self-construal, however, virtual identity effect on impulsive consumption was not significant ($p = .32$). This study supports H3.

In our theorizing, the impact of our independent variable (Virtual/actual identity) on the mediator (self-control resources) should be moderated by self-construal. We ran PROCESS model 7 (Hayes 2013) to test this moderated mediation. The results are supportive. When self-control resources was examined as the mediating factor, the mediating pathway from the virtual identity by self-construal interaction to impulsive tendency was significant. In particular, in neither the indirect effect of an independent self-construal (-.2016 to -.0051) nor an interdependent self-construal (-.0839 to -.0444) did the confidence interval include zero.

General Discussion

The central idea of this research is that consumer impulsiveness is more likely when individuals' virtual identity is salient. We first demonstrate the relationship between virtual identity and impulsive consumption by both measuring (in study 1a) and manipulating (in study 1b) virtual identity. The results showed that participants with a more salient virtual identity indicated higher levels of impulsiveness than if it were less salient. Studies 2 and 3 provide further support for the main effect of virtual identity by using a different virtual identity manipulation and a choice scenario measure of consumer impulsiveness. The use of different measures supports the robustness of the results. In addition, studies 2 and 3 provide direct support for our proposed mechanism in which the link between identity and consumer impulsiveness is mediated by self-control resources. Finally, study 4 tested one theoretically related moderator: self-construal. Compared to individuals with an interdependent self-construal, participants with an independent self-construal were more likely to have their virtual identity result in impulsive consumption. In addition to showing that we can turn on and off the effect of virtual identity by manipulating a conceptually related variable, study 4 also reinforces our conclusion from studies 2 and 3 about mediation. That is, we found that the interaction of virtual identity and self-construal on impulsive consumption operates through self-control resources.

The current research makes these contributions. Ours is among the first papers to study the impact of virtual identity on consumer decisions. It is surprising that little academic research has investigated the effects of this important consumer identity, given the central role of identity in consumer decision-making (Berger and Heath 2008; Reed et al. 2012). Recently, Hershfield et al. (2011) examined the impact of interaction with online self-avatars on consumers' savings in real life. Our research is related in that it also examines the impact of the virtual world on real life decisions. In addition, our research contributes to the literature on impulsive consumption. We find that social identity can serve as a driver for impulsiveness. Typically research linking impulsiveness and self-control resources has focused on the depletion of this resource by engaging in other energy-draining tasks (e.g., the suppression of emotion (Vohs and Heatherton 2000)). Our research suggests that a focus on a virtual identity can also cause a decrease in self-control and thereby an increase in consumer impulsiveness.

REFERENCES

- Bargh, John A., and Katelyn YA McKenna (2004). "The Internet and Social Life," *Annual Review Psychology*, 55, 573-590.
- Bargh, John A., Katelyn YA McKenna, and Grainne M. Fitzsimons (2002). "Can You See the Real Me? Activation and Expression of the "True Self" on the Internet," *Journal of Social Issues*, 58(1), 33-48.
- Berger, Jonah, and Chip Heath (2008). "Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes," *Journal of Personality and Social Psychology*, 95(3), 593-607.
- Fenigstein, Allan, Michael F. Scheier, and Arnold H. Buss (1975). "Public and Private Self-Consciousness: Assessment and Theory," *Journal of Consulting and Clinical Psychology*, 43(4), 522-27.
- Hamilton, Rebecca W., and Gabriel J. Biehal (2005). "Achieving Your Goals or Protecting Their Future? The Effects of Self-View on Goals and Choices," *Journal of Consumer Research*, 32(2), 277-283.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, NY: Guilford Press.
- Hershfield, Hal E., Daniel G. Goldstein, William F. Sharpe, Jesse Fox, Leo Yeykelis, Laura L Carstensen, and Jeremy N. Bailenson, (2011), "Increasing Saving Behavior Through Age-Progressed Renderings of the Future Self," *Journal of Marketing Research*, 48 (November), S23-S37.
- Higgins, Edward Tory, and Arie W. Kruglanski (2000), *Motivational Science: Social and Personality Perspectives*. PA: Psychology Press.
- Hofmann, Wilhelm, Wolfgang Rauch, and Bertram Gawronski (2007), "And Deplete Us Not into Temptation: Automatic Attitudes, Dietary Restraint, and Self-Regulatory Resources as Determinants of Eating Behavior," *Journal of Experimental Social Psychology*, 43(3), 497-504.
- James, William (1890), *The Principles of Psychology*, 2, NY: Henry Holt & Co.
- Luhtanen, Riia, and Jennifer Crocker (1992), "A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity," *Personality and Social Psychology Bulletin*, 18(3), 302-318.
- Markus, Hazel, and Paula Nurius (1986), "Possible Selves," *American Psychologist*, 41(9), 954-969.
- McKenna, Katelyn YA, and John A. Bargh (1998), "Coming out in the Age of the Internet: Identity "Demarginalization" through Virtual Group Participation," *Journal of Personality and Social Psychology*, 75(3), 681-694.
- Nagy, Péter (2010), "Second Life, Second Choice? The Effects of Virtual Identity on Consumer Behaviour. A Conceptual Framework," *Proceedings of FIKUSZ'10 Symposium for Young Researchers*.
- Nederkoorn, Chantal, Caroline Braet, Yvonne Van Eijs, Ann Tanghe, and Anita Jansen (2006), "Why Obese Children Cannot Resist Food: the Role of Impulsivity," *Eating Behaviors*, 7(4), 315-322.
- Norvilitis, Jill M., Michelle M. Merwin, Timothy M. Osberg, Patricia V. Roehling, Paul Young, and Michele M. Kamas (2006), "Personality Factors, Money Attitudes, Financial Knowledge, and Credit-Card Debt in College Students," *Journal of Applied Social Psychology*, 36(6), 1395-1413.
- Oyserman, Daphna (2007), "Social Identity and Self-Regulation," *Social Psychology: Handbook of Basic Principles 2*, NY: Guilford Press, 432-453.
- Oyserman, Daphna, Larry Gant, and Joel Ager (1995), "A Socially Contextualized Model of African American Identity: Possible Selves and School Persistence," *Journal of Personality and Social Psychology*, 69(6), 1216-1232.
- Palfrey, John, and Urs Gasser (2016), *Born Digital: How Children Grow Up in a Digital Age*, NY: Basic Books.

- Phinney, Jean S. (1992), "The Multigroup Ethnic Identity Measure: A New Scale for Use with Diverse Groups," *Journal of Adolescent Research*, 7(2), 156-176.
- Reed, Americus, Mark R. Forehand, Stefano Puntoni, and Luk Warlop (2012), "Identity-Based Consumer Behavior," *International Journal of Research in Marketing*, 29(4), 310-21.
- Rook, Dennis W., and Robert J. Fisher (1995), "Normative Influences on Impulsive Buying Behavior," *Journal of Consumer Research*, 22(3), 305-313.
- Rosen, Rebecca J. (2012), "59% Of Young People Say the Internet Is Shaping Who They Are," *The Atlantic* June 27, <http://www.theatlantic.com/technology/archive/2012/06/59-of-young-people-say-the-internet-is-shaping-who-they-are/259022/>
- Srull, Thomas K., and Robert S. Wyer (1980), "Category Accessibility and Social Perception: Some Implications for the Study of Person Memory and Interpersonal Judgments," *Journal of Personality and Social Psychology*, 38(6), 841-856.
- Suler, John R. (2002), "Identity Management in Cyberspace," *Journal of Applied Psychoanalytic Studies*, 4(4), 455-459.
- Tangney, June P., Roy F. Baumeister, and Angie Luzio Boone (2004), "High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success," *Journal of Personality*, 72(2), 271-324.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-655.
- Tu, Lingjiang, Adwait Khare, and Yinlong Zhang (2012), "A Short 8-Item Scale for Measuring Consumers' Local-Global Identity," *International Journal of Research in Marketing*, 29(1), 35-42.
- Turkle, Sherry (1995), *Life on the Screen: Identity in the Age of the Internet*. NY: Simon & Schuster.
- Vohs, Kathleen D., and Ronald J. Faber (2007), "Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying," *Journal of Consumer Research*, 33(4), 537-547.
- Wegner, Daniel M., David J. Schneider, Samuel R. Carter, and Teri L. White (1987), "Paradoxical Effects of Thought Suppression," *Journal of Personality and Social Psychology*, 53(1), 5-11.
- Zhang, Yinlong, and L. J. Shrum (2009), "The Influence of Self-Constraint on Impulsive Consumption," *Journal of Consumer Research*, 35(5), 838-850.
- Zhang, Yinlong, Karen Page Winterich, and Vikas Mittal (2010). "Power Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47(5), 945-54.

Work with Me or for Me: The Effect of Implicit Self-theories and Role of Brands on Product Preference

Chien-Wei (Wilson) Lin, State University of New York at Oneonta, USA

Dipankar Rai, Le Moyne College, USA

EXTENDED ABSTRACT

Consumers assign specific roles to brands, perceiving them as either partners or servants (Fournier 1998) which influence their relationship with the brands (Aggarwal 2004). Additionally, marketers use these roles to communicate the value their brands provide to consumers. For instance, some brands serve as partners where they work with consumers (e.g., Allianz describes itself as a “trusted partner”) whereas others assist as servants where they work for consumers (e.g., Scrubbing Bubbles says, “we work hard so you don’t have to”) to provide benefits. Understanding the impact of brand roles is important because they can influence consumer responses (Aggarwal and McGill 2012). Our research adds a critical contribution to understanding this relationship by investigating the influence of a significant consumer based difference-- implicit self-theories-- on consumers’ perception of brand roles.

Research in psychology shows that people have an implicit conception about the malleability of their personality traits (Elliott and Dweck 1988). People believe that personality consists of either malleable traits that can be grown (i.e., incremental theorists) or fixed traits that cannot be changed (i.e., entity theorists). Since incremental theorists consider their attributes to be malleable, they focus more on cultivating their attributes and less on demonstrating them. Since they consider negative performance to be an outcome of not putting in sufficient effort, incremental theorists tend to focus on investing effort to increase their ability (Hong et al. 1999). As such, incremental theorists adopt learning goals and become mastery oriented looking for ways to improve their ability and performance (Hong et al. 1999). Thus, incremental theorists would prefer partner brand relationships where they can work hard with partners to achieve better outcomes.

Since entity theorists consider their personal attributes to be fixed, they focus on demonstrating that they have a sufficient amount of the required attributes to achieve a goal. Since they consider negative performance to be an outcome of not having a sufficient amount of attributes (i.e., a lack of ability), entity theorists tend to avoid demonstrating deficiencies. Therefore, entity theorists adopt performance goals by focusing on gaining favorable judgments of their attributes and avoiding negative ones (Hong et al. 1999). Thus, entity theorists would prefer servant brand relationships where they receive assurances of success from the brand and it will work for them as servants to achieve their desirable goals.

Research shows that people’s motivation to complete a goal is influenced by the difficulty of goals (Bandura 1997). When facing an easy (vs. challenging) task, entity theorists know they can do well and rely less on the brand to gain confidence in their abilities (Park and John 2014). When incremental theorists face an easy (vs. difficult) task, they are able to learn and master the task easily without relying on partner products. Therefore, incremental (*entity*) theorists should prefer partner (*servant*) product for difficult (vs. easy) tasks.

Study 1 (102 undergraduate students) employs a 2 (implicit theory: entity, incremental) × 2 (brand role: partner, servant) design. Implicit theory was measured in this study. Participants first completed the implicit theory scale and then viewed an ad for a shirt from Nike Trainer One. The partner (*servant*) ad emphasized how the shirt will “partner (*serve*) and work with (*for*)” the user. We measured participants’ Material Value Scale as a control variable. The two-way interaction between brand role and implicit theory was significant.

The Johnson-Neyman technique showed that for consumers with incremental theory belief higher than 4.51, the partner role (vs. servant role) increased brand preference, whereas for consumers with incremental theory belief lower than 3.03, the partner (vs. servant) role decreased brand preference providing support for our prediction.

Study 2 was conducted to i) examine the underlying mechanism, ii) test if our proposed effect occurs independent of the brand being anthropomorphized or objectified and iii) rule out self-brand connection as an alternative explanation. 450 MTurk participants were assigned to a 2 (implicit theory) × 2 (brand role) × 2 (anthropomorphism: anthropomorphized vs. objectified) between-subjects design. We manipulated implicit self-theories and brand role. We manipulated anthropomorphism and objectification by asking participants were asked to describe what kind of person versus what kind of product the brands are respectively (Aggarwal and McGill 2012). The three-way interaction effect was not significant. As expected, we replicated the two-way interaction of implicit theory and brand role on purchase intention. Mediation analyses revealed that learning goal mediated the effect of incremental theory on purchase intention; performance goal mediated that effect of entity theory on purchase intention.

Study 3 was conducted to i) test the moderating role of goal difficulty on observed effects; and ii) to replicate our findings by using a more utilitarian oriented product (i.e., Excel study kit). Study 3 employed a 2 (implicit theory) × 2 (brand role) × 2 (task difficulty) design in which the first two variables were manipulated between subjects and the third one was measured. Floodlight analyses revealed that incremental theorists preferred the partner (vs. servant) study kit when perceived difficulty was high but not low. Entity theorists preferred the servant (vs. partner) study kit when perceived difficulty was high but not low. Mediation results were consistent with Study 2 only for participants who believed Excel was difficult.

Study 4 tested the robustness of Study 3 results by manipulating the perceived difficulty of the task (Bosmans, Pieters, and Baumgartner 2010). We used the same procedure and measures as before. As expected, incremental theorists preferred the partner (vs. servant) study kit and entity theorists preferred the servant (vs. partner) study kit in the high (vs. low) task difficulty condition. Mediation results were consistent with Study 3. All effects were significant at $p < .05$.

In sum, this research provides the first systematic investigation of consumers’ preference for brand roles as a function of their implicit self-theories and motivation to achieve their desirable goals. We argue that implicit self-theories need to be taken into consideration in the promotion of “brand-as-servant” role. Brand roles can be a valuable asset in advertising and ad-appeals can be tailored to consumers based on their implicit self-theories.

REFERENCES

- Aggarwal, Pankaj (2004), “The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior,” *Journal of Consumer Research*, 31 (June), 87-101.
- Aggarwal, Pankaj and Ann L. McGill (2012), “When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism,” *Journal of Consumer Research*, 39 (August), 307-323.

- Bandura, Albert (1997) *Self-efficacy: The exercise of control*. Macmillan.
- Bosmans, Anick, Rik Pieters, and Hans Baumgartner (2010), "The Get Ready Mind-Set: How Gearing up for Later Impacts Effort Allocation Now," *Journal of Consumer Research*, 37 (June), 98-107.
- Elliott, Elaine S. and Carol S. Dweck (1988), "Goals: An Approach to Motivation and Achievement," *Journal of Personality and Social Psychology*, 54 (January), 5-12.
- Fournier, Susan. (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343-373.
- Hong, Ying-yi, Chi-yue Chiu, Carol S. Dweck, Derrick M-S. Lin, and Wendy Wan (1999), "Implicit Theories, Attributions, and Coping: A Meaning System Approach," *Journal of Personality and Social Psychology*, 77 (September), 588-599.
- Park, Ji Kyung and Deborah Roedder John (2014), "I Think I Can, I Think I Can: Brand Use, Self-Efficacy, and Performance," *Journal of Marketing Research*, 51 (April), 233-247.

When and With Whom to Ally? The Influence of CM Strategic Alliances on Consumer Purchase Behavior

Chien-Wei (Wilson) Lin, State University of New York at Oneonta, USA

Qi Wang, State University of New York at Binghamton, USA

EXTENDED ABSTRACT

According to the IEG Sponsorship Report (2016), U.S. cause-related marketing (CM) spending reached \$1.92 billion in 2015, representing a 135 percent increase from 2002. Recently, it is increasingly common to find firms involved the strategic alliances with others firms to execute the CM program—CM alliance (Varadarajan and Menon 1988). For example, General Mills teamed up with the other food companies (e.g., ConAgra Foods, Kraft Foods, and Kellogg) to donate meals to Feeding America. Likewise, the Product (RED) campaign engaged companies such as Apple, Gap, and Belvedere Vodka to contribute 50% of profits from designated products to provide medicine to AIDS patients in Africa.

We refer to the former type of CM alliance as *within-industry alliance* (General Milles), the latter as *cross-industry alliance* (RED). While solo CM campaign remains dominant in the marketplace (138 campaigns, 41 percent), both within- (83 campaigns, 25 percent) and cross- (113 campaigns, 34 percent) industry alliances are viewed as important strategic alternatives for many firms (Engage for Good 2015). The above raises important questions that have not yet been fully investigated: With whom should firms ally to make CM more effective? Furthermore, the impact of within- and cross-industry alliances may depend upon firm and consumer characteristics. When firms should ally to make CM more effective?

A CM alliance can play a role in how a firm's commitment to a cause is perceived, which can affect acceptance of the good deed (Van den Brink et al. 2004). According to attribution theory (Heider 1958), when consumers perceive that a company is making a significant effort to a cause, they are more likely to infer altruistic motives on the part of the sponsor, and thoughts of corporate profits associated with the sponsorship act can be minimized (Rifon et al. 2004). We predict that a within-industry alliance may elicit perceptions of high entitativity group with strong commitment to the cause and thus increase customer preferences to a firm's products. Entitativity has been defined as "the perception that an aggregate of individuals is bonded together in some way to constitute a group" (Hamilton, Sherman, and Castelli 2002, p. 141). High entitativity groups share properties such as similarity, common movement, and common goals (Campbell 1958; Lickel et al. 2000) and their members are perceived as active participants in carrying out plans to achieve collective objectives (Brewer et al. 2004). These characteristics are related to the factors of greater perceived commitment: the amount of input, the durability of the association, and the consistency (stability) of input (Dwyer, Schurr, and Oh 1987).

The present work further examines firm and consumer characteristics that moderate the CM alliance effect. For a well-known company, the degree of liking for the brand is established (Bettman and Sujan 1987) so forming a CM alliance will not benefit brand attitude much. However, for an unknown company, consumers will heavily scrutinize its motive to make a judgment due to a lack of trust (Ellen et al. 2006). Thus, we predict that a within-industry alliance can enhance consumers' confidence in the unknown firm's intrinsic motive, thereby increasing CM product preference. Further, Grau and Folse (2007) find that compared with high-cause involvement individuals, low-cause involvement individuals rely more on CM message cues to produce favorable attitudes and participation intentions.

Therefore, within-industry alliance message can be more desirable for low- (vs. high-) cause involvement individuals.

Results from four studies and an empirical data support our hypotheses. Study 1 employs a 3 (alliance: within, cross, no) x 2 (familiarity: well-known, unknown) between-subjects design. Participants were first asked to examine a recent company announcement, named "The Fighting Hunger Project": During the next three months the firm(s) will donate 5% of the proceeds from the sales of the participating products to help fight hunger. We chose General Mills as the well-known target company and a fictitious food company named popp as the unknown target company. In the within-industry alliance condition, the company worked together with the other three companies from the same food industry (e.g., Kraft foods, Kellogg's, and Nestle) and in the cross-industry alliance condition, the company worked together with the other companies across different industries (e.g., Ford, Motorola, and Gap). In the no alliance condition, the company worked exclusively with the cause. As expected, participants were more likely to buy the products for within- than cross-industry alliance when the company is unknown, but not when the company is well-known.

Study 2 tested the moderating effect of cause involvement on consumers' preference toward cross-industry alliance products. The between-subjects design and stimuli were the same as before. Participants indicated their cause involvement in the end (Grau and Folse 2007). Results replicate the finding in study 1 and this effect is diminished for high cause-involvement individuals, supporting the moderating role of cause involvement.

Study 3 ruled out company-cause fit as an alternative account (i.e., lower fit between fighting hunger and partners from different industries than from the same food industry). Study 3 employed a 2 (alliance: within, cross) x 2 (fit: high, low) x 3 (product: food, detergent, calculators) mixed design with alliance and fit as the between-subjects factors and product as the within-subjects factor. We generated the high- and low-fit conditions for each product category (confirmed by a pretest). As expected, within- (vs. cross-) industry alliance leads to greater purchase intentions, regardless of high (or low) cause fit with the company.

Study 4 examined the underlying mechanism in a 2 (alliance) x 2 (product) between-subjects design. We measured participants' willingness-to-pay (WTP) and purchase intentions. To test the underlying mechanism, participants responded to items including the perceptions of corporate commitment to the cause and entitativity regarding the alliance. As expected, within- (vs. cross-) industry alliance leads to stronger perceptions of entitativity, which leads to greater perceptions of corporate commitment to the cause. The greater perceived corporate commitment in turn leads to a greater WTP. Having observed the commitment issue of cross-industry alliance, we verified it using an empirical data. Using data from an online CM news website, we found that firms are less likely to continue cross- (vs. within-) industry alliance. All effects were significant at $p < .05$.

In sum, this research demonstrates novel effects of using CM alliance by showing when and what types of CM alliance are effective in influencing consumer response. By showing that entitativity affects perceived cause commitment, we demonstrate a novel process through which emotional and charitable responses can be increased.

REFERENCES

- Bettman, James R., and Mita Sujan (1987), "Effects of Framing on Evaluation of Comparable and Noncomparable Alternatives by Expert and Novice Consumers," *Journal of Consumer Research*, 14 (September), 141-154.
- Brewer, Marilyn B., Ying-Yi Hong, and Qiong Li (2004), *Dynamic Entitativity: Perceiving Groups as Actors*. In V. Yzerbyt, C. M. Judd, & O. Corneille (Eds.), *The psychology of group perception: Perceived variability, entitativity, and essentialism* (pp. 25-38). New York: Psychology Press.
- Campbell, Donald T. (1958), "Common Fate, Similarity, and Other Indices of The Status of Aggregates of Persons as Social Entities," *Behavioral Science*, 3 (1), 14-25.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Ellen, Pam Scholder, Deborah J. Webb, and Lois A. Mohr (2006), "Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs," *Journal of the Academy of Marketing Science*, 34 (April), 147-157.
- Engage for Good (2015), News and Articles, Retrieved March 08, 2016, from <http://engageforgood.com/resources/articles/>.
- Grau, Stacy Landreth, and Judith Anne Garretson Folse (2007), "Cause-Related Marketing (CRM): The Influence of Donation Proximity and Message-Framing Cues on the Less-Involved Consumer," *Journal of Advertising*, 36 (March), 19-33.
- Hamilton, David L., Steven J. Sherman, and Luigi Castelli (2002), "A Group by any Other Name—The Role of Entitativity in Group Perception," *European Review of Social Psychology*, 12 (April), 139-166.
- Heider, Fritz (1958), *The Psychology of Interpersonal Relations*, New York: Wiley.
- International Event Group (IEG) (2016), *Sponsorship spending in North America*, Chicago: IEG Sponsorship Report.
- Lickel, Brian, David L. Hamilton, Grazyna Wierzchowska, Amy Lewis, Steven J. Sherman, and A. Neville Uhles (2000), "Varieties of Groups and the Perception of Group Entitativity," *Journal of Personality and Social Psychology*, 78 (February), 223-46.
- Rifon, Nora J., Sejung Marina Choi, Carrie S. Trimble, and Hairong Li (2004), "Congruence Effects in Sponsorship: The Mediating Role of Sponsor Credibility and Consumer Attributions of Sponsor Motive," *Journal of Advertising*, 33 (March), 30-42.
- Varadarajan, P. Rajan, and Anil Menon (1988), "Cause-Related Marketing: A Coalignment of Marketing Strategy and Corporate Philanthropy," *Journal of Marketing*, 53 (July), 58-74.
- Van den Brink, Douwe, Gaby Odekerken-Schröder, and Pieter Pauwels (2006), "The Effect of Strategic and Tactical Cause-Related Marketing on Consumers' Brand Loyalty," *Journal of Consumer Marketing*, 23 (1), 15-25.

The Effect of Social Exclusion on Consumer Shoplifting

Christopher Ling, University of South Carolina, USA
Thomas Kramer, University of California, Riverside, USA

EXTENDED ABSTRACT

Consumer shoplifting, the theft of merchandise from retail establishments, is a serious problem for retailers, representing more than \$16 billion worth of lost sales each year (Allen 2014; National Learning & Resource Center 2014). Surprisingly, shoplifting is quite a ubiquitous phenomenon: an astounding 60% of consumers admit to having shoplifted at some point in their lifetime (Baumer and Rosenbaum 1984). Most shoplifters are “non-professionals” without prior criminal record, who steal not because of financial need but because of social influences (National Learning & Resource Center 2014). It is these social influences on which we focus in this research to advance our understanding of shoplifting. That is, we investigate under which conditions, shoplifting intentions and actual shoplifting behavior may ensue from social exclusion – experiencing a lack of social connection because of being alone, isolated, or rejected (Baumeister et al. 2005; Twenge et al. 2001).

Shoplifting behavior usually begins when social influence has a particularly strong effect on consumers – in adolescence (Cox, Cox, and Moschis 1990; Mangleburg, Doney, and Bristol 2004), and adolescents frequently cite social influences to justify their shoplifting behavior (Cox et al. 1990; Forney, Crutsinger, and Forney 2006). Further, because social exclusion engenders negative affect, we expect that a driving reason for the effect of social exclusion on shoplifting is that socially-excluded consumers are motivated to engage in behavior to repair and escape their negative mood through the theft of merchandise. Lastly, social exclusion is unlikely to have a uniform impact on the shoplifting intentions of all consumers alike. Instead, although socially-excluded (vs. included) consumers generally are likely to experience greater negative affect, it is only those socially-excluded consumers who have experienced shoplifting’s mood-enhancing properties (i.e., shoplifters - those who have shoplifted before) that should seek to repair their mood by shoplifting.

In this research, we argue that one way to cope with negative affect triggered by social exclusion is through shoplifting because of its perceived mood repair properties. The theft of merchandise has been linked with excitement and experiential properties (Kallis and Vanier 1985; Sarasalo, Bergman, and Toth 1997), with shoplifting providing both the pleasure from consumption and also from the acquisition of the product. Some shoplifters, for example, have self-reported experiencing hedonic pleasure from the act of successfully shoplifting (Fullerton and Punj 1993). When in a negative mood, socially-excluded (vs. included) consumers may be motivated to engage in deviant thrill-seeking in an effort to feel better, and shoplifting constitutes such a means (Fullerton and Punj 1998).

Study 1 was a one-factor, two level (shoplifting history: shoplifter versus non-shoplifter) between-subjects design. Participants arrived to the lab and were socially excluded using Cyberball (Williams and Jarvis 2006). Once the session was over, lab assistants counted the number of chocolates left in the bowl and the amount of money in the jar, so that we could examine if any chocolates had been taken without payment.

Participants who indicated that they had shoplifted before were defined as shoplifters, whereas those who had not previously shoplifted were defined as non-shoplifters. A single-factor (shoplifting history: shoplifter vs. non-shoplifter) ANCOVA, controlling for age and gender, found that socially-excluded shoplifters ($M = .64$) shop-

lifted more pieces of chocolate than did non-shoplifters ($M = .21$; $F(1, 80) = 3.99, p < .05$).

Study 2 was a 2 (social acceptance: inclusion versus exclusion) x 2 (shoplifting history: shoplifter versus non-shoplifter) between-subjects design with social acceptance manipulated and with shoplifting history measured. Social acceptance was manipulated using the Cyberball game as in study 1. Next in an ostensibly unrelated study, all participants were instructed to imagine that they were alone in a department store with an opportunity to steal a pair of jeans worth about \$150.

A 2 (Social Acceptance: Social Inclusion vs. Social Exclusion) x 2 (Shoplift) ANCOVA on shoplifting intention, controlling for age, was significant ($F(1,69) = 4.41, p < .05$). We also found a main effect of shoplifting history ($F(1,69) = 13.03, p < .001$), such that those individuals who had shoplifted before reported significantly higher intention to shoplift the pair of jeans ($M_s = 2.26$ vs. 1.16). More importantly, planned contrasts revealed that the socially-excluded shoplifters expressed greater intentions to shoplift the jeans than did the socially-excluded non-shoplifters (3.08 vs. .99; $F(1, 69) = 13.32, p = .001$). However, shoplifting history did not impact shoplifting intentions among socially-included participants (1.85 vs. 1.30 for shoplifters vs. non-shoplifters; $F(1, 69) = 1.45, p > .20$).

The objective of study 3 was to test for the moderating role of product type on our previously found effect in study 2. Participants first completed the same social acceptance manipulation from study 2. Next, we presented participants with the same shoplifting scenario previously used which asked them to indicate their intention to shoplift; however, we manipulated whether the target option was a hedonic (6 pack of energy drinks) or a utilitarian (pack of pain relievers) product. After participants had indicated their intention to shoplift, we measured the extent to which shoplifting was perceived as a mood repair mechanism

A 3 (social acceptance: exclusion vs. inclusion vs. control) x 2 (shoplifting history: shoplifter vs. non-shoplifter) x 2 (product type: hedonic vs. utilitarian) ANCOVA, controlling for age, on shoplifting intention was significant; $F(2, 595) = 5.08, p < .01$. Planned contrasts revealed that socially-excluded shoplifters (vs. non-shoplifters) expressed greater intentions to shoplift the hedonic energy drinks (2.16 vs. 1.19; $F(1, 595) = 10.94, p = .001$).

Next, we tested for moderated mediation with the mediator of shoplifting as perceived mood repair using model 12 from the PROCESS macro (Hayes 2013). The index of moderated mediation was significant (95% CI: .17, 2.01) providing evidence for moderated mediation (Hayes 2015).

REFERENCES

- Allen, Kath Granni (2014), “Retailers Estimate Shoplifting, Incidents of Fraud Cost \$44 Billion in 2014,” *National Retail Federation*, 2014–15, <https://nrf.com/media/press-releases/retailers-estimate-shoplifting-incidents-of-fraud-cost-44-billion-2014>.
- Baumeister, Roy F., C. N. DeWall, Natalie J. Ciarocco, and Jean M. Twenge (2005), “Social Exclusion Impairs Self-Regulation.,” *Journal of Personality and Social Psychology*, 88(4), 589–604.
- Baumer, Terry L and Dennis P Rosenbaum (1984), *Combating Retail Theft: Programs and Strategies*, Butterworth Boston.

- Cox, Dena, Anthony D. Cox, and George P. Moschis (1990), "When Consumer Behavior Goes Bad: An Investigation of Adolescent Shoplifting," *Journal of Consumer Research*, 17(2), 149–59.
- Forney, William S., Christy Crutsinger, and Judith C. Forney (2006), "Self-Concepts and Self-Worth as Predictors of Self-Perception of Morality: Implications for Delinquent Risk Behavior Associated With Shoplifting," *Family and Consumer Sciences Research Journal*, 35(1), 24–43.
- Fullerton, Ronald A. and Girish Punj (1993), "Choosing to Misbehave: A Structural Model of Aberrant Consumer Behavior," in *Advances in Consumer Research*, 570–74.
- (1998), "The Unintended Consequences of the Culture of Consumption: An Historical-Theoretical Analysis of Consumer Misbehavior," *Consumption Markets & Culture*, 1(4), 393–423.
- Hayes, Andrew F. (2015), "An Index and Test of Linear Moderated Mediation," *Multivariate Behavioral Research*, 50(1), 1–22.
- (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis A Regression-Based Approach*, Guilford Press.
- Kallis, M J. and Dinoo J. Vanier (1985), "Consumer Shoplifting: Orientations and Deterrents," *Journal of Criminal Justice*, 13(5), 459–73.
- Mangleburg, Tamara F., Patricia M. Doney, and Terry Bristol (2004), "Shopping with Friends and Teens' Susceptibility to Peer Influence," *Journal of Retailing*, 80(2), 101–16.
- National Learning & Resource Center (2014), "Shoplifting Statistics," <http://www.shopliftingprevention.org/whatnaspoffers/nrc/publiceducstats.htm>.
- Sarasalo, Elina, Bo Bergman, and James Toth (1997), "Theft Behaviour and Its Consequences among Kelptomaniacs and Shoplifters - a Comparative Study," *Forensic Science International*, 86, 193–205.
- Twenge, Jean M., Roy F. Baumeister, Dianne M. Tice, and Tanja S. Stucke (2001), "If You Can't Join Them, Beat Them: Effects of Social Exclusion on Aggressive Behavior.," *Journal of Personality and Social Psychology*, 81(6), 1058–69.
- Williams, Kipling D. and Blair Jarvis (2006), "Cyberball: A Program for Use in Research on Interpersonal Ostracism and Acceptance.," *Behavior Research Methods*, 38(1), 174–80.

The Effect of Facial Resemblance on Product Purchase: The Moderating Role of Mental Construal

Fan Liu, Adelphi University, USA
Xin He, University of Central Florida, USA
Ze Wang, University of Central Florida, USA

EXTENDED ABSTRACT

The significance of human facial resemblance has emerged as an important driver of both psychology theories (Zebrowitz, Kikuchi, and Fellous 2010) and consumer research (e.g. Tanner and Maeng 2012), which include mate choice, kin selection, and social interaction (DeBruine 2004; Hinsz 1989; Kraus and Chen 2010; Platek et al. 2003, 2004). Although it is well established that people draw inferences about others based on the way they look (e.g. facial morphology), the current literature has mostly focused on perception of, and behavior towards, individual faces that resemble oneself or one's familiar others. There is a dearth of research that explores the inferences derived from the faces of groups (of individuals) presented together. In this paper, groups formed by pairs of individual faces were shown to resemble each other. In particular, we aim to address three research questions: does collective facial appearance of a group matter? Will facial resemblance among team members bias consumers' group-level perception and subsequent decision-making? Which type of consumers may be susceptible to face-based biases in judging groups?

Theoretical Development

Adding to the literature on face-based perception, this paper examines the impact of participants' drawing inference about group facial resemblance on participants' evaluation of the presented groups along with the product presented by the groups. This relationship depends on the perceivers' construal level and springs from inferences made based on a group's faces. As construal level theory illustrates, when perceiving several objects within a big picture, perceivers can either have a focus more intently on higher-order goals or on contextualized, lower-order details (Liberman, Trope, and Wakslak 2007; Trope and Liberman 2003). Similarly, based upon Schwarz and Bless's (1992, 2007) model of exclusion/inclusion as well as Förster and his coauthors (2008) global local model of social judgment (GLOMO), high-level construals in a global processing are more inclusive than in a local processing; such perceivers tend to group the stimulus objects in the same category. Hence, when a high-level construal is induced, participants process faces globally and have a tendency to make inferences about group traits based on faces of the presented group (Liberman, Trope, and Wakslak 2007; Trope and Liberman 2003). Accordingly, facial resemblance enhances consumers' perception of how group members work well with each other. Increasing group facial resemblance leads to greater mental inferences about perceived group entitativity (i.e. groupness, homogeneity, cohesiveness). Specifically, facial resemblance at a group level signals a higher level of intragroup similarity or entitativity, which is often associated with increased cooperative intent (Wang, He, and Liu 2016) or higher likelihood to work toward a common goal (Ip, Chiu, and Wan 2006). While there is adequate evidence showing that entitative groups benefit from positive team traits that lead to better team performance (e.g. Hollingshead 1998; Mulvey and Klein 1998), consumers then consistently transfer perceptual group entitativity, inferred from the evaluation of represented groups of faces, to the associated presented products (Beckwith and Lehmann 1975; Wirtz and Bateson 1995). On the contrary, when a low-level construal is activated, perceivers tend to conduct local processing and

focus on each individual face rather than a group of faces (Trope and Liberman 2003). In summary, we predict that (a) construal level moderates the effect of facial resemblance on product purchase likelihood, such that facial resemblance enhances purchase likelihood only among consumers with high-level construals; and (b) the interactive effect of facial resemblance and construal level is mediated by perceived group entitativity.

Methodology

The hypotheses were tested in a series of three experiments. To prepare for the experimental stimuli, we followed digital morphing to manipulate facial resemblance, also adopted by recent face research (e.g. Verosky and Todorov 2010). This technique digitally combines the facial photographs of two (or more) different individuals to produce a composite face that represents a weighted average of the features of all the input faces. By controlling how much each input face contributes to the morph output (anywhere from 0% to 100% of the total contribution) we are able to precisely (and objectively) vary the degree of facial resemblance among team members in this study's stimuli samples. In such case, two pairs of faces were created as experimental stimuli as either the low resemblance group (10% morphing) or the high resemblance group (30% morphing).

In experiments 1, evidence was provided indicating that subtle changes in facial resemblance among team members influence product purchase likelihood, depending on construal level. One hundred and seventy-three undergraduate participants were randomly assigned to either the low-resemblance condition or the high-resemblance condition. Participants were asked to report their intent in purchasing the product and complete the Behavior Identification Form measuring their chronic construal level (Vallacher and Wegner 1989). Among participants with high-level construals, the spotlight analysis revealed a significant and positive effect on purchase likelihood ($b_{abstract} = .68, t = 2.53, p = .01$). However, for participants with low-level construals, there is no significant effect of facial resemblance on purchase likelihood ($b_{concrete} = -.06, t = -.24, ns$).

The purpose of experiment 2 is to confirm the results using a different operationalization of construal level. In the high-level construal conditions the headline emphasized the end outcomes of participation. By contrast, in the low-level construal conditions, the headline pinpointed the means to achieve the end results. The study has a 2 (facial resemblance: high versus low) \times 2 (construal level: high versus low) between-subjects design. One hundred thirty-three participants from mTurk crowdsourcing services were recruited and asked to report product purchase likelihood. A two-way ANOVA conducted on purchase likelihood indicated a significant interaction effect ($F(1, 130) = 4.26, p < .05$). Planned contrasts analyses revealed that consumers at high-level construals tended to buy the product presented by the high-resemblance versus low-resemblance artists ($M_{low} = 2.30, M_{high} = 3.08; F(1, 130) = 4.97, p < .05$). Among consumers at low-level construals, there was no significant difference in purchase likelihood between the facial resemblance conditions ($F < 1$).

In experiment 3, we operationalized construal level as the desirability (high-construal) or feasibility (low-construal) of the product and replicated the findings. In addition, we tested the underlying mechanism of perceived group entitativity. Similarly, One hundred

and seventy participants were randomly assigned to one of the four experimental conditions. They then reported product purchase intent and perceived group entitativity. Consistently, a 2×2 ANOVA analysis on purchase likelihood was performed to show a significant interaction effect ($F(1, 166) = 4.17, p < .05$). Moreover, the mediated moderation model revealed a significant indirect effect through perceived group entitativity (95% confidence interval: .001, .380), which fully mediated the interactive effects of facial resemblance and construal level on purchase likelihood.

Discussion

This study contributes to the literature on facial resemblance and by and large to face-based inference research. While it is well established that how individuals appear to be (e.g., facial morphology) can affect how they are judged by others, little research concerns perception of groups (of individuals) purely based on facial cues. This research extends the scope of this line of research from individual-level perception to group-level perception in the context of facial resemblance. We demonstrate in three experiments that increasing facial resemblance only enhances product purchase likelihood for consumers at high-level construals. These findings are robust across different operationalizations on construal level (self-measured vs. message-framed vs. desirability/feasibility featured), contexts (fundraising event vs. shopping for furniture), and sample characteristics (undergraduate students vs. non-student sample from mTurk). In practice, marketers can improve purchase behavior by morphing facial features of a group of salespeople and altering the advertising message at an abstract high-level framing. Given the widespread usage of team photos or multi-face imageries in visual media, our findings provide managerial implications for a wide range of audiences, including firm advertising, employee team promotion, collaborative consumption, political campaign and academic collaboration.

REFERENCES

- Beckwith, Neil E., and Donald R. Lehmann (1975), "The Importance of Halo Effects in Multi-Attribute Attitude Models," *Journal of Marketing Research*, 12 (3), 265-75.
- DeBruine, Lisa M. (2004) "Resemblance to Self Increases the Appeal of Child Faces to Both Men and Women," *Evolution and Human Behavior*, 25 (3), 142-54.
- Förster, Jens, Nira Liberman, and Stefanie Kuschel (2008), "The Effect of Global versus Local Processing Styles on Assimilation versus Contrast in Social Judgment," *Journal of Personality and Social Psychology*, 94 (4), 579-99.
- Hollingshead, Andrea B. (1998), "Retrieval Processes in Transactive Memory Systems," *Journal of Personality and Social Psychology*, 74 (3), 659-71.
- Ip, Wai-man, Chi-yue Chiu, and Ching Wan (2006). Birds of a feather and birds flocking together: Physical versus behavioral cues may lead to trait versus goal-based group perception. *Journal of Personality and Social Psychology*, 90, 368-81.
- Kraus, Michael W., and Serena Chen (2010), "Facial-Feature Resemblance Elicits the Transference Effect," *Psychological Science*, 21 (4), 518-22.
- Liberman, Nira, Yaacov Trope, and Cheryl Wakslak (2007), "Construal Level Theory and Consumer Behavior," *Journal of Consumer Psychology*, 17 (2), 113-17.
- Mulvey, Paul W., and Howard J. Klein (1998), "The Impact of Perceived Loafing and Collective Efficacy on Group Goal Processes and Group Performance," *Organizational Behavior and Human Decision Processes*, 74 (1), 62-87.
- Platek, Steven M., Danielle M. Raines, Gordon G. Gallup Jr, Feroze B. Mohamed, Jaime W. Thomson, Thomas E. Myers, Ivan S. Panyavin, Sarah L. Levin, Jennifer A. Davis, Ludivine C. M. Fonteyn, and Danielle R. Arigo (2004), "Reactions to Children's Faces: Males are More Affected by Resemblance than Females are, and So are Their Brains," *Evolution and Human Behavior*, 25 (6), 394-405.
- Platek, Steven M., Samuel R. Critton, Rebecca L. Burch, David A. Frederick, Thomas E. Myers, and Gordon G. Gallup Jr. (2003), "How Much Paternal Resemblance is Enough? Sex Differences in Hypothetical Investment Decisions but Not in the Detection of Resemblance," *Evolution and Human Behavior*, 24 (2), 81-7.
- Schwarz, Norbert, and Herbert Bless (1992), "Scandals and the Public's Trust in Politicians: Assimilation and Contrast Effects," *Personality and Social Psychology Bulletin*, 18 (5), 574-79.
- Schwarz, Norbert, and Herbert Bless (2007), "Mental Construal Processes: The Inclusion/Exclusion Model," in *Assimilation and Contrast in Social Psychology*, ed. D. A. Stapel and J. Suls, Philadelphia, PA: Psychology Press, 119-41.
- Tanner, Robin J., and Ahreum Maeng (2012), "A Tiger and a President: Imperceptible Celebrity Facial Cues Influence Trust and Preference," *Journal of Consumer Research*, 39 (4), 769-83.
- Trope, Yaacov, and Nira Liberman (2003), "Temporal Construal," *Psychological Review*, 110 (3), 403-21.
- Vallacher, Robin R., and Daniel M. Wegner (1989), "Levels of Personal Agency: Individual Variation in Action Identification," *Journal of Personality and Social Psychology*, 57 (4), 660-71.
- Verosky, Sara C., and Alexander Todorov (2010), "Generalization of Affective Learning about Faces to Perceptually Similar Faces," *Psychological Science*, 21 (6), 779-85.
- Wang, Ze, Xin He, and Fan Liu (2016), "From Similitude to Success: The Effects of Facial Resemblance on Perceptions of Team Effectiveness," *Journal of Experimental Psychology: Applied*, 22 (1), 48-58.
- Wirtz, Jochen, and John EG Bateson (1995), "An Experimental Investigation of Halo Effects in Satisfaction Measures of Service Attributes," *International Journal of Service Industry Management*, 6 (3), 84-102.
- Zebrowitz, Leslie A., Masako Kikuchi, and Jean-Marc Fellous (2010), "Facial Resemblance to Emotions: Group Differences, Impression Effects, and Race Stereotypes," *Journal of Personality and Social Psychology*, 98 (2), 175-89.

Fevered Pitch: Anxiety and Risk Avoidance in Response to Low-Pitch Ambient Sounds

Michael Lowe, Georgia Institute of Technology, USA

Katherine E. Loveland, Xavier University, USA

Aradhna Krishna, University of Michigan, USA

EXTENDED ABSTRACT

The consumer experience is comprised of a complex and multilayered soundscape that includes both scripted (e.g. spokesperson voice, background music) and unscripted (e.g. crowd noise, the hum of appliances) elements. Despite the omnipresent nature of sound, relatively little research has explored how the most basic structural properties of sound can impact emotional and behavioral responses among consumers. We explore how the pitch of ambient sound impacts consumer anxiety and subsequent willingness to engage in potentially risky behaviors. Specifically, we propose that, compared to moderate-pitched ambient sounds, low-pitched ambient sounds signal a possible environmental threat resulting in an anxious response causing heightened risk appraisal and subsequently increased risk avoidance. We test these relationships across six studies.

In study 1, we test whether the presence of a relatively low-pitched vs. moderately-pitched ambient sound impacts the selection of “safe” or “risky” products in a retail environment. While hidden speakers played either a 60Hz or 720Hz sine wave, shoppers at a grocery store were presented with the option of trying a free sample of either Texas BBQ (low risk) or Bombay Curry (high risk) flavored kale chips. As expected, pitch impacted risk aversion ($\text{Chi-Square} = 4.05, p < .05$; PROC FREQ in SAS). When the low-pitch sound was playing, only 21% selected the “riskier” flavor; when the higher-pitched sound was playing, 44% did.

In study 2, we replicated the results from study 1 in a more controlled lab environment and with the addition of a control condition. Participants made a series of dichotomous choices between a certain cash payoff and an unguaranteed chance at a larger payoff (Griskevicius et al. 2011) while speakers in the ceiling played either a relatively low-pitched (80hz), a relatively higher-pitched (720hz) sine wave sound, or no sound at all (control condition). Again, pitch of the ambient sound had a significant impact on risk aversion ($F(2,228)=4.68, p < .01$). Participants in the low pitch condition took fewer risks ($M_{\text{Low-Pitch}}=11.5$) than those in both the moderate pitch ($M_{\text{HighPitch}}=14.3$) and control conditions ($M_{\text{Control}}=14.5$).

In study 3, participants listened to 1 of 2 versions of anti-smoking ad for which we varied the pitch of the background music. Participants in the low pitch condition ($M_{\text{LowPitch}}=1.55$) reported significantly lower intentions of smoking in the future relative to those in the more moderately-pitched condition ($M_{\text{ModeratePitch}}=2.06$; $F(1,128)=4.57, p < .05$). Furthermore, this effect was mediated by the perceived risk associated with smoking ($a_1 \times b_1 = -.2093, 95\% \text{ C.I. } 95\% = -.5236 \text{ to } -.0098$).

In study 4, we find initial evidence that our effects are driven by anxiety. Using a word search as our D.V. we found that participants in the low-pitch condition found significantly more anxiety related words than participants in the moderate-pitch condition ($M_{\text{LowPitch}}=1.26, M_{\text{ModeratePitch}}=.922$; $F(1,178)=4.88, p < .05$) suggesting a greater sensitivity to anxiety related terms.

In study 5, we provide more direct evidence that anxiety drives the relationship between the pitch of ambient sound and risk aversion and introduce a potential moderator of our effect: sound source. To this end we used a 2 (ambient sound: low pitch vs. moderate pitch) x 2 (sound source: strangers vs. friends) between subjects design. Participants imagined visiting an Asian restaurant in a neighborhood that historically had rather high crime rates, but that the food at the

restaurant was typically well reviewed. We found a significant interaction between the sound source and pitch ($F(1,135)=4.87, p < .05$) on risk aversion. When the ambient sound was ascribed to strangers, participants indicated a lower willingness to try a potentially risky food if the pitch of the ambient sound was low ($M_{\text{Low}}=3.84, M_{\text{Moderate}}=4.80$; $F(1,132)=6.72, p=.01$), replicating the results of previous studies. However, when the ambient sound was attributed to friends our effect was attenuated ($F(1,132)=.311, \text{NS}$). We also found a significant interaction between the sound source conditions and pitch conditions on anxiety ($F(1,135)=4.29, p < .05$) such that in the “strangers” condition participants felt less safe (more anxious) when the ambient sound was low-pitched ($M_{\text{Low}}=3.59, M_{\text{Moderate}}=4.09$; $F(1,132)=3.56, p=.06$). However, this effect was again attenuated in the friends condition ($F(1,132)=1.11, \text{NS}$). Finally, a bootstrap ($N = 1000$) analysis shows that feelings of anxiety mediated the interaction of pitch and sound source on risk avoidance, specifically the willingness to consume a risky product ($a_1 \times b_1 = .2325, 95\% \text{ C.I.} = .0107 \text{ to } .6292$).

Finally, in study 6, we test our full serial mediation model. To this end participants listened to an ad for a risk reducing product, car insurance, in which we manipulated the pitch of background traffic noise (low-pitch vs. moderate-pitch vs. control). Replicating our earlier findings, pitch had a significant impact on risk averse behavior ($F(1,168) = 5.33, p < .01$). Participant were willing to pay more for the advertised insurance in the low-pitch condition ($M=\$79.27$) compared to both the moderate-pitch ($M=\$70.10, p < .05$) and the control conditions ($M=\$66.33, p < .01$). Risk appraisal ($a_1 \times b_1 = -.4929$; 90% C.I. = $-1.350 \text{ to } -.0597$) weakly mediated the relationship between pitch condition and risk avoidance (willingness to pay for insurance) while anxiety alone did not ($a_1 \times b_1 = -.3544$; 90% C.I. = $-1.502 \text{ to } .0689$). Anxiety did, however, mediate the relationship between pitch condition and risk appraisal ($a_1 \times b_1 = -.0429$; 90% C.I. = $-1.374 \text{ to } -.0006$) and risk appraisal mediated the relationship between anxiety and risk avoidance ($a_1 \times b_1 = -.5435$; 95% C.I. = $.1173 \text{ to } 1.458$). Finally, taking these steps together, there was significant serial mediation between pitch condition, anxiety, risk appraisal, and risk avoidance ($a_1 \times d_{21} \times b_2 = -.1090$; 95% C.I. = $-.4609 \text{ to } -.0047$).

Taken together, these results suggest that subtle differences in the pitch of ambient sound can have a strong influence on both emotional and behavioral responses. Specifically, compared to moderate-pitch ambient sound, low-pitch ambient sound leads to risk aversion through anxiety and situational risk appraisal.

REFERENCES

- Griskevicius, Vladas, Joshua M. Tybur, Andrew W. Delton and Theresa E. Robertson (2011), “The Influence of Mortality and Socioeconomic Status on Risk and Delayed Rewards: A Life History Theory Approach,” *Journal of Personality and Social Psychology*, 100 (June), 1015-1026.

Increasing Incentive Effectiveness by Linking the Incentive to a Source the Consumer Paid Into

Zoe Y. Lu, University of Wisconsin - Madison, USA
Robin Tanner, University of Wisconsin - Madison, USA
Kurt Carlson, College of William and Mary, USA

EXTENDED ABSTRACT

Government, employers, and marketers often use incentives to motivate certain behaviors (e.g., Shapiro and Slemrod, 2003; Volpp, Asch, Galvin and Loewenstein, 2011). However, their effectiveness varies considerably. Insight as to why this might be can be found in multiple streams of research. Of particular relevance to our work, Epley and his collaborators (Epley and Gneezy, 2006; Epley, Mak and Idson, 2006) demonstrates that consumers are more likely to spend windfall framed as a bonus (other's money) than as a rebate (one's own money). Potentially at odds with these findings is research on savings and decumulation decisions (Shu and Payne, 2015) which finds that the more strongly people feel that Social Security benefits come from money they contributed through their working life, the sooner they want to claim (and presumably spend) it.

To reconcile these findings, we note that windfalls require no action to be taken in order to be received, while claiming Social Security benefits early requires a volitional decision by the retiree. Building on these streams of research, we predict that consumers will react to incentives differently depending on whether the incentive is linked to their own money or other people's money, and whether the incentive is conditional on their behavior, or is in the form of an unconditional windfall. Specifically, we hypothesize the following:

Hypothesis 1: When receiving an incentive is contingent upon making a purchase, a consumer is more likely to make the purchase if the incentive is framed as being funded from a source she/he has paid into.

Hypothesis 2: When receiving an incentive is not contingent upon making a purchase, a consumer is less likely to make the purchase if the incentive is framed as being funded from a source she/he has paid into.

In Study 1, participants imagined they were in the market for a house with some flexibility on the issue of when to buy. While they would prefer to buy next year rather than this year, there was a factor that might expedite their decision, namely, a \$10,000 first time home buyer incentive. The experiment manipulated the source of the incentive: individual income taxes / corporate income taxes / seller concession. The dependent variable was the likelihood of purchasing a new house now, elicited on a 9-point scale. A one-way ANOVA indicated a main effect of the source of the incentive on the likelihood to expedite the purchase ($F(2, 201) = 4.14, p < .05$). Pairwise comparisons showed that participants in the individual income tax condition were more likely to expedite the purchase ($M=7.49$) than participants in either the corporate tax condition ($M = 6.95; t(201) = 2.16, p < .05$) or the seller concession condition ($M = 6.82; t(201) = 2.71, p < .01$).

Study 2 generalized the investigation to a car incentive, and measured participants' psychological ownership of the incentive with three items adapted from Shu and Peck (2011). Participants imagined that they were in the market for a new car with some flexibility on when to buy. However, a \$2,000 incentive would expire within a month. Again, the experiment manipulated the source of the

incentive: individual income taxes / corporate income taxes / manufacturer concession. The dependent variable was the likelihood of purchasing a new car now, elicited on a 9-point scale. Results indicated that participants were more likely to expedite their purchase in the "individual income tax" condition ($M = 6.94$) than in the "corporate income tax" condition ($M = 6.11; t(192) = 2.28, p < .05$) or the "car manufacturer" condition ($M = 6.03; t(192) = 2.43, p < .05$). A bootstrapping analysis demonstrated that that psychological ownership of the incentive fully mediated the effect of the source of incentive on early purchase ($\beta = .34, SE = .10; 95\%$ confidence interval = [.16, .56]).

Study 3 examined the effectiveness of an incentive in encouraging healthier diets and explored the issue of contingent vs. windfall incentives. The study adopted a 2 by 2 factorial design. A scenario described a \$200 discount of a CSA membership offered by a health insurance company. The incentive was either contingent on subscription or paid up front (in which case it could be spent elsewhere), and was either funded by insurance premiums or donations. The dependent variable was the likelihood of CSA subscription, elicited on a 5-point scale. An ANOVA revealed no main effect of the source of the incentive ($F(1, 118) = .06, p = .81$), a main effect of the contingency of the incentive ($F(1, 118) = 3.77, p = .05$), and the predicted interaction between contingency and source of the incentive ($F(1, 118) = 11.67, p < .01$). Specifically, when the incentive was contingent upon CSA subscription, students were more likely to subscribe when the incentive was funded by insurance premiums than by donations ($M_{\text{premiums}} = 3.62, M_{\text{donations}} = 2.81; t(59) = 2.65, p = .01$); when the incentive was not contingent upon CSA subscription, students were less likely to subscribe in the "premiums" condition than in the "donations" condition ($M_{\text{premiums}} = 2.44, M_{\text{donations}} = 3.14; t(59) = 2.20, p < .05$).

In summary, framing purchase-contingent incentives as being funded by money consumers have contributed to increases consumer's perceived ownership over that incentive, which in turn increases their motivation to claim it. However, this effect reverses for non-purchase-contingent (windfall) incentives. These findings have potentially significant implications for a wide range of public policy oriented incentives that aim to motivate society-improving behaviors. For example, consider the cash-for-clunkers program, or incentives to buy solar power systems, both would potentially be made more effective by simply framing the source of the subsidies/incentives as being paid into by the target market. Similarly, in the consumer realm, we have preliminary data that grocery store promotions are more likely to be successful if framed as being store profit funded (i.e. shoppers contributed to) than a manufacturer concession.

REFERENCES

- Epley, Nicholas, Dennis Mak and Lorraine Chen Idson (2006), "Bonus or Rebate?: The Impact of Income Framing on Spending and Saving," *Journal of Behavioral Decision Making*, 19(3), 213-27.
- and Ayelet Gneezy (2007), "The Framing of Financial Windfalls and Implications for Public Policy," *The Journal of Socio-Economics*, 36(1), 36-47.

Shapiro, Matthew D. and Joel Slemrod (2003), "Consumer Response to Tax Rebates," *The American Economic Review*, 93(1), 381-96.

Shu, Suzanne and John Payne (2015), "Psychological Factors in Savings and Decumulation Decisions," *NA-Advances in Consumer Research*, 43, 136-41.

——— and Joann Peck (2011), "Psychological Ownership and Affective Reaction: Emotional Attachment Process Variables and the Endowment Effect," *Journal of Consumer Psychology*, 21(4), 439-52.

Volpp, Kevin G., David A. Asch, Robert Galvin and George Loewenstein (2011), "Redesigning Employee Health Incentives—Lessons from Behavioral Economics," *New England Journal of Medicine*, 365(5), 388-90.

The Risk of Autonomy: A Dual-Process Model of How Autonomy Makes the Experience Pleasurable Depending on Risk Perception

Renaud Lunardo, KEDGE Business School, France
Camille Saintives, INSEEC Business School, France

EXTENDED ABSTRACT

Many of our daily activities are not freely chosen, and our freedom to choose how to behave is often constrained by rules and norms. However, being autonomous – in other words being choiceful in one's actions (deCharms 1976; Deci and Ryan 1985) – represents a critical condition for well-being (Ryan and Deci 2000). In this context, and unsurprisingly, research has established that consumers are eager for autonomy (Zheng, Van Osselaer and Alba 2016), whether it refers to freedom of choice (Markus and Schwartz 2010) or freedom in behavior (Levav and Zhu 2009), and exhibit reactance where their autonomy is threatened (Brehm 1966).

However, the assumption that being autonomous may always be beneficial for consumers may be challenged. Drawing below on the literature on self-determination (Deci and Ryan 1985b) and the theory of psychological stress and coping (Lazarus and Folkman 1984), we propose that the pleasure derived from the experience of autonomy varies as a function of whether consumers perceive the situation in which they have autonomy as risky. Specifically, we propose and test a model where autonomy leads either to stress or personal control depending on the level of risk that they perceive in the situation in which they exert their autonomy.

Theoretical Background

Autonomy

Autonomy refers to the belief that one can freely choose how to behave in a specific situation (Deci and Ryan 1985a), or the extent to which people feel free to initiate their own actions (deCharms 1976; Deci and Ryan 1985, 2000). Autonomy is at the heart of the self-determination theory (hereafter, SDT; Deci and Ryan, 1985a, b, 2000), which posits that autonomous actions are accompanied by a sense of freedom and volition (Butzel and Ryan 1997). Extant research consistently provided support for the beneficial effects of autonomy, mainly in the academic (Grolnick and Ryan 1987; Vallerand, Fortier, and Guay 1997) and work domains (Kirkman and Rosen, 1999, 2000). This notion of autonomy has driving positive outcomes has also been observed in consumption settings. For instance, Zhang et al. (2011) found that consumers value more their goals when they perceive that they autonomously decided to reach that goal. In the domain of computer games, Kim, Chen and Zhang (2016) identified autonomy as an important condition for enjoyment.

However, this notion of autonomy as being always beneficial has recently been challenged by Chen and Sengupta (2014), who observed that because 'vice products' are intrinsically enjoyable and therefore induce guilt, consuming a vice product leads to lower vitality when consumers are autonomous in their decision of eating that vice product. Their results hence challenge self-determination research, which finds that increased decision autonomy usually heightens vitality. What we propose is in line with this latter notion that autonomy may not always be beneficial for consumers. We develop our rationale for this notion below.

Autonomy under risk

Previous research in a wide array of areas have brought evidence for positive effects of autonomy. For instance, among teachers (Pearson and Moomaw 2005) and workers (Kalleberg, Nesheim, and Olsen 2009), autonomy is positively related to job satisfaction

and negatively related to stress. However, the relationship between autonomy and well-being can be complex, and the question arises if the positive effects of autonomy always hold, or, said differently, if being autonomous can lead to negative outcomes under specific circumstances. We posit that perceiving risk in the situation one has autonomy over can be such a circumstance. Perceived risk refers to the perception of variances in the possible gains and losses that could result from that particular choice (Kahneman and Tversky 1979; March and Shapira 1987). Hence, people perceive a specific option less risky when, controlling for expected outcomes, this option is more certain than another more probabilistic option. In this regard, what could be argued is that when people have autonomy in a given situation, the perception of risk makes salient the probabilistic negative outcomes that can occur from the experience of autonomy, making the experience less pleasurable. Hence, we propose that risk moderates the effect of autonomy on pleasure such that when autonomy is high, a high (versus low) level of risk makes the experience less (versus more) pleasurable (Hypothesis 1).

According to the theory of a theory of psychological stress and coping (Lazarus and Folkman, 1984), stress arises when people evaluate a particular encounter with the environment as irrelevant to their well-being. Relying on the notion that risky situations are those that are associated with uncertainty (Kahneman and Tversky 1979; March and Shapira 1987), consumers who face risk might also encounter a situation that is less certain to make them achieve their goals as compared to a non-risky situation. In such environments that are risky, autonomy can reveal immobilizing or even detrimental to people (Markus and Kitayama 1991) and lead to experience the situation as stressful (Hypothesis 2a). On the contrary, non-risky situation might make the outcome more certain and lead autonomous people to perceive more contingencies between their behavioral choices and the outcomes. As such contingencies are a core component of control beliefs (Seligman 1975; Skinner 1995, 1996), it may be argued that when risk is low, autonomy leads to a stronger perception of personal control (Hypothesis 2b). Given the literature on stress and control seeing these affective reactions as mediators of the effects of the environment on pleasure (Folkman et al. 1986; Hui and Bateson 1991), both stress (Hypothesis 3a) and personal control (Hypothesis 3b) should mediate the effects of autonomy on pleasure. Further, people who face risk might perceive the situation as threatening, and low autonomy might in this context promote defensive reactions. Because defensiveness has been shown to be less likely to occur when a person has greater autonomy (Knee and Zuckerman 1998), people who have autonomy may react more strongly to risk, leading to an increase in stress. On the contrary, when risk is low, autonomy may be here beneficial to psychological well-being and leads to more personal control. Therefore, when risk is high, autonomy may lead to an increase in stress and consequently on pleasure (Hypothesis 4a), while when risk is low, autonomy may increase personal control and pleasure (Hypothesis 4b).

Study 1

Procedure. A 2×2 between-subjects experiment manipulated autonomy and perceived risk. Participants (N=206 students, 50% male) were asked to imagine themselves with a friend on vacation in Macao, where they had to rent a scooter. Pictures of the streets

of Macao and the scooter were provided on a screen to facilitate projection in the scenario. Autonomy was manipulated following the definition of autonomy as the ability to initiate behaviors (Deci and Ryan 200). In the low autonomy condition, participants were told that they could not drive the scooter because their friend was willing to drive the scooter himself. In the high autonomy condition participants were told that they could choose to drive the scooter themselves. Perceived risk was then manipulated. In the high risk condition, participants were informed that more than 25% (versus 1% in the low risk condition) of tourists who rented a scooter over the last 5 years had been involved in a crash. Then, participants rated how much pleasure they would have riding the scooter in the city, their stress (Durante and Laran 2016, $\alpha=.89$) and their personal control (Cutright, Bettman, and Fitzsimons 2013; $\alpha=.83$). For manipulation check purposes, participants rated their perceived autonomy (Chen and Sengupta 2014; $\alpha=.94$) and how much driving the scooter in Macao was risky (one item). All scales were 7-point Likert scales.

Results. Manipulations of autonomy ($M_{High}=5.13$, $M_{Low}=2.44$, $F(1, 204)=275.67$, $p < .001$) and risk ($M_{High}=4.60$, $M_{Low}=2.19$, $F(1, 204)=105.31$, $p < .001$) were successful, and the manipulation of autonomy did not affect personal control ($F(1, 204)=3.67$, $p > .05$).

A 2-way ANOVA revealed no effects of autonomy ($p > .05$) on pleasure, but a negative effect of perceived risk ($F(1, 204)=4.68$, $p < .01$; $M_{Low}=3.93$; $M_{High}=3.51$). Supporting Hypothesis 1, a significant interaction was observed ($F(1, 204)=22.01$, $p < .001$). Precisely, in the low risk condition, autonomy had a positive effect on pleasure ($M_{LR}=3.53$; $M_{HR}=4.31$, $p < .01$), while a negative effect was observed in the high risk condition ($M_{LR}=3.98$; $M_{HR}=3.09$, $p < .001$). Supporting Hypothesis 2a, results revealed positive effects of autonomy ($F(1, 204)=6.89$, $p < .05$; $M_{Low}=3.92$; $M_{High}=4.37$) and risk ($F(1, 204)=20.41$, $p < .001$; $M_{Low}=3.78$; $M_{High}=4.57$) and, interestingly, their interacting effect ($F(1, 204)=3.90$, $p=.05$), whereby in the low risk condition autonomy had no effect on stress ($p > .05$) but had a positive one in the high risk condition ($t=-2.97$, $p < .01$; $M_{Low\ Auton.}=4.15$; $M_{High\ Auton.}=4.92$). Turning to Hypothesis 2b, results revealed a significant positive effect of autonomy ($F(1, 204)=4.71$, $p < .05$; $M_{Low}=3.08$; $M_{High}=3.41$) and a negative effect of risk ($F(1, 204)=38.87$, $p < .001$; $M_{Low}=3.69$; $M_{High}=2.78$) on personal control. Supporting Hypothesis 2b, a significant interaction was observed ($F(1, 204)=4.25$, $p < .05$) whereby autonomy had a positive effect on personal control when risk was low ($M_{Low\ Auton.}=3.35$; $M_{High\ Auton.}=4.03$, $p < .05$) but had no effect when risk was high ($p > .05$).

Then, a mediation analysis revealed significant indirect effects of autonomy on pleasure through stress ($CI=-.25$; $-.02$) and personal control ($CI=.01$; $.22$), supporting H3. Results from a moderated-mediation analysis where stress and personal control were included as mediators and risk as a moderator revealed that the mediating effects of stress ($CI=-.35$; $-.01$) and personal control ($CI=-.37$; $-.01$) were moderated by risk, but differently. Specifically and supporting Hypothesis 4, stress negatively mediated the effects of autonomy on pleasure when risk was high ($CI=-.34$; $-.03$) but not when risk was low ($CI=-.11$; $.05$), while the mediating effect of personal control was positive in the low risk condition and ($CI=.03$; $.37$), and non-significant in the high risk condition ($CI=-.06$; $.09$).

Study 2

To examine if the effects observed in study 1 replicate on the field, we interviewed 122 participants (66.4% men, $M_{Age}=35.23$, $S.D.=11.21$) of car racing in the West of France during two weekends in July and August 2015. We waited on the parking lot of the circuit for people who had just finished driving a car. Because the cars that people could drive vary in their power, perceived risk was likely to

vary across cars. Also, although people were supervised by a professional instructor, some instructors were supposedly more lax than others, making autonomy subject to variation. Hence, every third person who arrived on the parking lot after having driven a sports car was systematically approached and asked if they would answer some brief questions about their experience of driving the car. The same measures as in study 1 were used and adapted to the context of the study. In addition, participants rated their general risk-taking tendency (Kim and McGill 2011).

Results. A moderated-mediation analysis was performed with autonomy as the independent variable, stress and personal control as the mediators, pleasure as the dependent variable, perceived risk as the moderator and general risk-taking tendency as a covariate. The analysis yielded significant positive effects of both autonomy ($\beta=.91$, $p < .001$) and risk ($\beta=.73$, $p < .01$) on pleasure, as well as their significant interaction ($\beta=-.15$, $p < .01$) showing that when autonomy increases, a low level of risk leads to higher pleasure. Supporting Hypotheses 2a-b, results also revealed that neither autonomy ($\beta=-.17$, $p > .10$) nor risk ($\beta=.03$, $p > .05$) had an effect on stress, but their interaction was observed ($\beta=.10$, $p < .01$), such that when risk is high, being autonomous makes the experience more stressful. Personal control was not affected by risk ($p > .05$) but by autonomy ($\beta=.98$, $p < .001$) and their interaction ($\beta=-.15$, $p < .01$) such that when risk is high, autonomy has no effect on personal control but has a positive effect when risk is low. Hypotheses 3-4 were also supported, with mediating effects of both stress ($CI=-.19$; $-.03$) and personal control ($CI=.01$; $.17$) and similar significant indexes of moderated mediation for stress ($CI=-.084$; $-.003$) and personal control ($CI=-.082$; $-.001$) were also observed, with the same pattern of results as in study 1. For all analyses, general risk-taking tendency had no effects ($p > .05$).

Hence, study 2 replicates previous results. However, some differences pertaining to the effects of autonomy and risk on stress were observed. To address these differences, we hypothesize that self-efficacy, or the belief that one is able to mobilize the skills that are necessary to attain a given goal (Bandura 1982, 1997), moderates the effects of autonomy on stress, such that when autonomy increases, self-efficacy makes the experience of autonomy less stressful (Hypothesis 5).

Study 3

Procedure and sample. A 2×2 between-subjects design was conducted with autonomy (low vs. high) and risk (low vs. high) as fixed factors. Participants ($n=240$, 54% female, $M_{Age}=28.28$) were asked to read a scenario where they had to imagine cooking a meal for an evening with friends and to choose one dish to cook from a list of five dishes (the dishes did not significantly differ on indulgence). In the condition of high autonomy, respondents were advised that they had the option of following a recipe or doing as they wished, while in the low autonomy condition they were specified that they had to follow a recipe scrupulously and that no room was left for imagination. Then, in the low-risk condition, it was indicated that on Internet forums consumers reported feeling that the recipe had a nice 80% chance to please. In the high risk condition, it was indicated that consumers on the forums pointed out that the recipe had only a 40% chance to please. Respondents then completed the same measures of pleasure, stress, personal control, autonomy and risk as in previous studies, as well as one of self-efficacy (Keller 2006; $\alpha=.75$).

Results. The manipulation of autonomy and risk were successful, and self-efficacy was not affected by the manipulation of risk ($p > .10$). As studies 1-2, the same patterns of interacting effects of autonomy and risk on pleasure ($F(1, 236)=8.66$, $p < .01$), stress ($F(1, 236)=8.01$, $p < .01$) and personal control ($F(1, 236)=7.59$, $p < .01$) were observed.

.01) were observed. Also, results yielded the same mediating effects of stress ($CI = -.51; -.19$) and personal control ($CI = .01; .14$), that were again moderated by risk perception ($CI_{\text{Stress}} = -.80; -.16$; $CI_{\text{Control}} = -.37; -.02$). Finally, a regression revealed that when risk is high, stress is marginally affected by efficacy ($\beta = -.17$, $p = .10$) and its interaction with autonomy ($\beta = -.31$, $p < .05$), whereby for all values of self-efficacy below 5.57, having autonomy results in significantly higher levels of stress than not having autonomy. Age and gender had no effects on self-efficacy (p 's $> .05$).

Conclusion

The three studies reported here support our hypothesis that the pleasure derived from being autonomous can vary as a function of risk perception. The extent to which a consumption experience is pleasurable varies according to the degrees of stress and personal control that consumers may feel in response to their autonomy and risk. Hence, marketers should reduce perceived risk so that autonomy leads to an increase in personal control and pleasure.

REFERENCES

- Bandura, Albert (1982), "Self-Efficacy Mechanism in Human Agency," *American Psychologist*, 37, 122–147.
- Bandura, Albert (1997), *Self-efficacy: The exercise of control*, New York: Freeman.
- Brehm, Jack W. (1966), *A Theory of Psychological Reactance*, New York: Academic.
- Butzel, Jessica S. and Richard M. Ryan (1997), "The Dynamics of Volitional Reliance: A Motivational Perspective on Dependence, Independence, and Social Support," In Pierce, Gregory R., Brian Lakey, Irwin G. Sarason, and Barbara R. Sarason (Eds.), *Sourcebook of Social Support and Personality*, New York: Plenum Press, 49–67.
- Chen, Fangyuan and Jaideep Sengupta (2014), "Forced to Be Bad: The Positive Impact of Low-Autonomy Vice Consumption on Consumer Vitality," *Journal of Consumer Research*, 41 (4), 1089–1107
- Cutright, Keisha, James R. Bettman, and Gavan J. Fitzsimons (2013), "Putting Brands in Their Place: How a Lack of Control Keeps Brands Contained," *Journal of Marketing Research*, 50 (June), 365–77.
- DeCharms, Richard (1976), *Enhancing Motivation: Change in the Classroom*, New York: Irvington.
- Deci, Edward L. and Richard M. Ryan (1985a), *Intrinsic Motivation and Self-Determination in Human Behavior*, New York: Plenum Press.
- Deci, Edward L. and Richard M. Ryan (1985b), "The General Causality Orientations Scale: Self-Determination in Personality," *Journal of Research in Personality*, 19, 109–134.
- Deci, Edward L. and Richard M. Ryan. (2000), "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior," *Psychological Inquiry*, 11, 227–268.
- Durante, Kristina M. and Juliano Laran (2016), "The Effect of Stress on Consumer Saving and Spending," *Journal of Marketing Research*, 53 (October), 814–828.
- Folkman, Susan, Rochard S. Lazarus, Christine Dunkel-Schetter, Anita DeLongis, and Rand J. Gruen (1986), "Dynamics of a Stressful Encounter: Cognitive Appraisal, Coping, and Encounter Outcomes," *Journal of Personality and Social Psychology*, 50 (5), 992–1003.
- Grolnick, Wendy S. and Richard M. Ryan (1987), "Autonomy in Children's Learning: An Experimental and Individual Difference Investigation," *Journal of Personality and Social Psychology*, 52, 890–898.
- Hui, Michael K. and John E.G. Bateson (1991), "Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience," *Journal of Consumer Research*, 18 (2), 174–84.
- Kahneman, Daniel and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, 47 (March), 263–291.
- Kalleberg, Arne L., Torstein Nesheim, and Karen M. Olsen (2009), "Is Participation Good or Bad for Workers? Effects of Autonomy, Consultation and Teamwork on Stress among Workers in Norway," *Acta Sociologica*, 52 (2), 99–116.
- Keller, Punam (2006), "Regulatory Focus and Efficacy of Health Messages," *Journal of Consumer Research*, 33 (June), 109–14.
- Kim, Sara, and Ann L. McGill (2011), "Gaming with Mr. Slot or Gaming the Slot Machine? Power, Anthropomorphism, and Risk Perception," *Journal of Consumer Research*, 38 (June), 94–107.
- Kim, Sara, Rocky Peng Chen, Ke Zhang (2016), "Anthropomorphized Helpers Undermine Autonomy and Enjoyment in Computer Games," *Journal of Consumer Research*, 43 (2), 282–302.
- Kirkman, Bradley L. and Benson Rosen (1999), "Beyond Self-Management: Antecedents and Consequences of Team Empowerment," *Academy of Management Journal*, 42, 58–74.
- Kirkman, Bradley L. and Benson Rosen (2000), "Powering Up Teams," *Organizational Dynamics*, 28, 48–66.
- Knee, C. Raymond and Miron Zuckerman (1998), "A Nondefensive Personality: Autonomy and Control as Moderators of Defensive Coping and Self-Handicapping," *Journal of Research in Personality*, 32, 115–130.
- Lazarus, Richard S. and Susan Folkman (1984), *Stress, Appraisal and Coping*, New York: Springer.
- Levav, Jonathan and Rui (Juliet) Zhu (2009), "Seeking Freedom Through Variety," *Journal of Consumer Research*, 36 (4), 600–610.
- March, James G. and Zur Shapira (1987), "Perspectives on Risk and Risk Taking," *Management Science*, 33 (11), 1404–1418.
- Markus, Hazel Rose and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological review*, 98 (2), 224–253.
- Markus, Hazel Rose and Barry Schwartz (2010), "Does Choice Mean Freedom and Well-Being?," *Journal of Consumer Research*, 37 (2), 344–355.
- Pearson, Carolyn L. and William Moomaw (2005), "The Relationship between Teacher Autonomy and Stress, Work Satisfaction, Empowerment, and Professionalism," *Educational Research Quarterly*, 29 (1), 38–54.
- Ryan, Richard M. and Edward L. Deci (2000), "SDT and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," *American Psychologist*, 55, 68–78.
- Seligman, Martin E. P. (1975). *Helplessness: On Depression, Development, and Death*, San Francisco: Freeman.
- Skinner, Ellen A. (1995), *Perceived Control, Motivation, and Coping*, London: Sage Publication.
- Skinner, Ellen A. (1996), "A Guide to Constructs of Control," *Journal of Personality and Social Psychology*, 71 (3), 549–71.

- Vallerand, Robert J., Michelle S. Fortier, and Frederic Guay (1997), "Self-Determination and Persistence in a Real-Life Setting: Toward a Motivational Model of High school Drop Out," *Journal of Personality and Social Psychology*, 72, 1161–1176.
- Zhang, Ying, Jing Xu, Zixi Jiang and Szu-chi Huang (2011) "Been There, Done That: The Impact of Effort Investment on Goal Value and Consumer Motivation," *Journal of Consumer Research*, 38, 78–93.
- Zheng, Yanmei, Stijn M.J. Van Osselaer, and Joseph W. Alba (2016), "Belief in Free Will: Implications for Practice and Policy," *Journal of Marketing Research*, 53 (6), 1050–1064.

I Speak Starbucks, do You? Distinction and Inclusion on Linguistic Brand Codes

Ignacio Luri, University of Arizona, USA

Hope Schau, University of Arizona, USA

EXTENDED ABSTRACT

Successful brands are active producers of cultural objects, rather than mere parasites that appropriate popular culture. Indeed, brands create symbols, myths, and even prescriptive models for the way we think and the way we behave – our goals, ideals, and values. Eavesdropping on someone ordering a drink at Starbucks or talking about a sci-fi narrative brand will make obvious that brands also change the way consumers talk. Despite the widely-accepted centrality of language to culture (Crawford & Valsiner 1999), brand-specific linguistic codes have been largely overlooked in cultural approaches to consumer research.

Despite the lack of deliberate examination, the existence of linguistic codes shared and used within consumption communities and brand communities is widely recognized. Thomsen, Straubhaar and Bolyard (1998) use the words “jargon or group speak” to describe the insider code used within cyber-communities. Schau and Muñiz (2002) find a “community jargon” shared in brand-related personal websites. Langerak et al. (2003) use the term “specialized language” for the jargon spoken within an e-brand’s virtual community. In their ethnography of the new bikers, Schouten and McAlexander (1995) define subcultures of consumption as having unique jargons, and their data illustrates several examples of “biker vernacular.” One of the Trekker sub-communities described by Kozinets (2001) revolves around the constructed language Klingon. Muñiz and Schau (2005) describe a characteristic “formulaic language” within users of the discontinued Apple Newton. Whereas the presence of brand codes has been repeatedly acknowledged, their relevance to consumer researcher theory and marketing implications have yet to be explored. This study aims to fill this gap in the literature by putting the spotlight on this particular brand cultural object.

We bring together Bourdieu’s cultural capital theories (e.g. Bourdieu 1986, Bourdieu & Passeron 1990), a brand culture approach (Schroeder 2009), and a consumer research reading of sociolinguistics to study the practices and discourses created by branded jargon and dialects. Starbucks is our context for studying brand codes. Brand-specific linguistic codes were studied using an netnographic (Kozinets 2002) approach complemented with in-store observation. Brand related conversations were extracted from official and fan-created websites, Twitter messages and YouTube videos. Findings were further informed by naturalistic observation in Starbucks coffeehouses.

Findings confirm the appropriateness of the “brand language” metaphor, revealing the ubiquity of its use among consumers and illustrating the many ways in which linguistic brand codes mirror natural languages. Specifically, this study sheds light on the largely unexplored topic of how “brand literacy” (Bengtsson & Firat 2006) is acquired. Careful examination of Starbucks’ linguistic brand code reveals “jargon” to be an insufficient term to refer to a code with grammar-like properties in which issues of syntax (e.g. word order), pragmatics (e.g. tacitness and sub-textuality), and style (e.g. redundancy) matter. Linguistic competence in “Starbuckese” is revealed as a continuum ranging from complete lack of fluency to “native-like” competence. Two main opposing discourses co-exist around Starbucks’ ordering script. A wide range of oppositional and skeptical consumers see the brand code as unnecessarily cryptic, putatively designed to pretentiously sound “vaguely European” or simply exert Starbucks cultural hegemony. A second discourse (as voiced by

baristas, and endorsed by most fans) is to discount the need for the code and the barriers to learning it without denying its complexity.

Among the most brand loyal customers endorsing the latter discourse, competence in Starbucks linguistic code signals commitment to the brand (and hence, status within the fan community). These fans often police the brand discourse and community in such a way that lack of fluency is tolerated, if looked down upon, but oppositional discourse is attacked and silenced.

On the other ideological end, oppositional customers, in their own words, “make a point” of not learning or using the linguistic brand code while ridiculing those who do and sharing with like-minded users their successes in defying Starbucks cultural dominance. Interestingly, they do so while still being Starbucks customers (many of them declared frequent customers).

Amid this dialectical war, occasional and unaligned Starbucks customers must still manage to navigate the brand code. Lacking fluency, they do so using a variety of compensatory strategies that typically result in negative feelings or suboptimal outcomes.

Fans use brand codes as a field-specific cultural capital and a source of identity, belonging, and group status. In the case of a highly accessible brand like Starbucks, cultural capital is more tied to how to consume and less to what is consumed (Holt 1998). Whereas less-than-expert customers are needed if code competence is to be a signal of high status, deniers of the value of “speaking the brand” are a menace to status-seeking fans who have learned the code. Lack of fluency is described by consumers as a source of rejection and anxiety. Consistent with previous theory (Bourdieu and Passeron 1990, Lamont and Lareau’s 1988), cultural and social exclusion prove to be a central component of the status game. On the other hand, and deviating from previous literature on consumer resistance, we find oppositional consumers who are “anti-Starbuckese” rather than anti-Starbucks. Consumers can be polarized not only for and against a brand (as in Thompson & Arsel 2004, Kozinets & Handelman 2004) but for and against a brand’s cultural objects while still consuming the brand. Etic interpretation of this form of consumer cultural resistance is that consumers are inverting the sign of marketer-imposed codes (Ozanne & Murray 1995) while still using them for status-seeking purposes. As Holt (2002) points out, opposition does not liberate from the market, but instead drives consumers to build their resistance identity through the market. We extend Holt’s findings by adding that even opposition to a brand’s cultural objects does not emancipate from the brand: knowing and denying brand cultural objects can be two fields within the same context; two strategies in the same status-seeking game of cultural capital.

REFERENCES

- Bengtsson, A., & Firat, F. (2006). Brand literacy: Consumers’ sense-making of brand management. *Advances in Consumer Research Volume 33*, 375-380.
- Bourdieu, P. (1986). The forms of capital. In Richardson, J. G. (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood
- Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society and culture* (Vol. 4). Sage.
- Crawford, V.M., & Valsiner, J. (1999). Varieties of discursive experience in psychology: Culture understood through the language used. *Culture & Psychology*, 5, 259–269.

- Holt, D. B. (1998). Does cultural capital structure American consumption? *Journal of consumer research*, 25(1), 1-25.
- Holt, D. B. (2002). Why do brands cause trouble? A dialectical theory of consumer culture and branding. *Journal of consumer research*, 29(1), 70-90.
- Kozinets, R. V. (2001). Utopian enterprise: Articulating the meanings of Star Trek's culture of consumption. *Journal of consumer research*, 28(1), 67-88.
- Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of marketing research*, 39(1), 61-72.
- Kozinets, R. V., & Handelman, J. M. (2004). Adversaries of consumption: Consumer movements, activism, and ideology. *Journal of consumer research*, 31(3), 691-704.
- Lamont, M., & Lareau, A. (1988). Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological theory*, 153-168.
- Langerak, Fred, Peter C. Verhoef, Peeter W. Verlegh, and Kristine de Valck (2003), "The Effect of Members' Satisfaction with a Virtual Community on Member Participation," *ERIM Report Series Research in Management*, 2003-004-MKT, Erasmus Research Institute of Management, Erasmus University Rotterdam.
- Muñiz, A. M., & Schau, H. J. (2005). Religiosity in the abandoned Apple Newton brand community. *Journal of consumer research*, 31(4), 737-747.
- Ozanne, J. L., & Murray, J. B. (1995). Uniting critical theory and public policy to create the reflexively defiant consumer. *American Behavioral Scientist*, 38(4), 516-525.
- Schau, H. J., & Muñiz, A. M. (2002). Brand communities and personal identities: Negotiations in cyberspace. *Advances in consumer research*, 29(1), 344-349.
- Schouten, J. W., & McAlexander, J. H. (1995). Subcultures of consumption: An ethnography of the new bikers. *Journal of consumer research*, 22(1), 43-61.
- Schroeder, J. E. (2009). The cultural codes of branding. *Marketing Theory*, 9(1), 123-126.
- Thompson, C. J., & Arsel, Z. (2004). The Starbucks brandscape and consumers' (anticorporate) experiences of glocalization. *Journal of Consumer Research*, 31(3), 631-642.
- Thomsen, S. R., Straubhaar, J. D., & Bolyard, D. M. (1998). Ethnomethodology and the study of online communities: exploring the cyber streets. *Information research*, 4(1), 4-1.

Increasing PSA Effectiveness: Two Routes from Self-Threat to Message Acceptance

Jingjing Ma, Peking University, China
Kent Grayson, Northwestern University, USA
David Gal, University of Illinois at Chicago, USA

EXTENDED ABSTRACT

The typical goal of a public service announcement (PSA) is to prompt viewers to behave in a more socially responsible way. Interestingly, many PSAs use shocking stories or visuals to illustrate the irresponsibility of viewers' current behaviors. However, by illustrating how a viewer may be acting in a socially irresponsible way, such messages are likely to create an identity threat and thus may lead to defensive reactions rather than to more responsible behaviors.

To increase acceptance of threatening messages, past research has attempted either (1) to reduce individuals' experience of threat through self-affirmation (Sherman and Cohen 2006; Sherman, Nelson, and Steele 2000; Steele 1988) or (2) to elevate individuals' mood (Ragunathan and Trope 2002). In this research, we highlight the relationship between these two solutions, we identify conditions under which each is more or less effective at reducing resistance to counterattitudinal messages, and we explore the mechanism for their influence on message acceptance. More specifically, we propose that the more important a threatened identity domain is to an individual, the more seriously a person's identity will feel threatened, and the less effective cross-domain self-affirmations are therefore likely to be. As suggested by Tetlock et al. (2000), sacred or important values are harder to compensate or trade-off (Tetlock et al. 2000). If and when a self-affirmation does not reduce an identity threat, any effect on message acceptance might be credited to mood.

In study 1, participants were randomly assigned to one of three conditions: threat-only, threat-compensation, and no-threat. Participants in both the threat-only and threat-compensation conditions engaged in a procedure that threatened their moral identity (i.e., admitting to online piracy behavior). Later, participants in the threat-compensation condition were asked to write an essay to self-affirm their competence. Lastly, all participants evaluated advertisements and expressed their agreement to anti-piracy messages. Results showed that participants in the threat-only condition showed greater preference for moral advertisements than those in the no-threat condition ($p < 0.05$), which was consistent with past research on within-domain compensation. Contrary to what previous self-affirmation research might predict, the preference for moral advertisements for those in the threat-compensation condition was not significantly different from that in the threat-only condition ($p = 0.81$). This result indicated that participants' threatened moral identity was not effectively compensated by cross-domain self-affirmation. However, relative to participants in the threat-only condition, participants were more willing to accept threatening messages in the no-threat condition (5.6 vs. 4.57; $t(92) = 3.02, p < .005$), and in the threat-compensation condition (5.56 vs. 4.57; $t(87) = 2.67, p < .01$). This result raises a paradox that why individuals become more accepting of threatening messages when they still have discrepancy in their threatened identity.

Study 2 investigated the underlying mechanism for this increased message acceptance. In this study, we replicated our finding that cross-domain compensation increased willingness to accept threatening messages, but did not reduce self-discrepancy. We also showed that cross-domain compensation improved respondents' mood, which mediated the effect of cross-domain compensation on message acceptance. Further supporting our claim that improved mood can enhance message acceptance, we showed in this study that

simply thinking about a sunny day (which is not related to self-affirmation or compensation) also enhanced message acceptance.

In Study 3, we demonstrated conditions under which cross-domain compensation was effective vs. ineffective in reducing self-discrepancy. Moreover, we showed that even when cross-domain compensation was ineffective, it could still increase message acceptance. Specifically, participants received a threat to one of five life values (family, honesty/kindness, competency, spontaneity, and physical attractiveness), then they received an essay writing task designed to self-affirm one of those five life values. We found that the cross-domain compensation effectively reduced self-discrepancy only when the threat was to the least important value and the compensation was to the most important value. However, even when the cross-domain compensation did not effectively reduce discrepancy, it still increased participants' mood which, in turn increased their message acceptance.

Last study, we applied our findings in a field study to show the role of mood in improving the effectiveness of PSA. 70 male workers (generally heavy smokers) working at a construction site in China were randomly assigned to one of three conditions by receiving three different types of PSA messages in print: control condition (no PSA), threat condition (a threatening PSA featuring pictures of the deadly consequences of smoking), and mood elevation condition (a PSA featuring pictures of healthy looking families living happily). Then they were asked to answer five questions regarding anti-smoking messages, gender (70 males), age (mean=38), and how many cigarettes they smoke each day (mean=19).

Results showed message acceptance in the mood elevation condition was significantly higher than that in the control condition (4.08 vs. 3.49; $t(44) = 3.24, p < .005$) and the threat condition (4.08 vs. 3.39; $t(47) = 2.47, p < .05$); mood in the mood elevation condition was significantly higher than that in the control condition (4.80 vs. 3.10; $t(44) = 7.83, p < .001$) and the threat condition (4.80 vs. 1.83; $t(47) = 12.33, p < .001$). A mediation analysis showed that mood mediates the influence of different PSAs on message acceptance, the mean indirect effect from the bootstrap analysis is also significant ($a \times b = .18$), with a 95% confidence interval excluding zero (.0384 to .3765).

This research contributes to literature on self-affirmation and persuasion and have practical implications in improving the effectiveness of PSAs.

REFERENCE

- Sherman, David K. and Geoffrey L. Cohen (2006), "The Psychology of Self-Defense: Self-Affirmation Theory," *Advances in Experimental Social Psychology*, 38, 183-242.
- Sherman, David K., Leif D. Nelson, and Claude M. Steele (2000), "Do Messages About Health Risks Threaten the Self? Increasing the Acceptance of Threatening Health Messages Via Self-Affirmation," *Personality and Social Psychology Bulletin*, 26 (9), 1046-58.
- Steele, Claude M. (1988), "The Psychology of Self-Affirmation: Sustaining the Integrity of the Self," *Advances in Experimental Social Psychology*, 21, 261-302.

Raghunathan, Rajagopal and Yaacov Trope (2002), "Walking the Tightrope between Feeling Good and Being Accurate: Mood as a Resource in Processing Persuasive Messages," *Journal of Personality and Social Psychology*, 83 (3), 510-25.

Tetlock, Philip E., Orie V. Kristel, S. Beth Elson, Melanie C. Green, and Jennifer S. Lerner (2000), "The Psychology of the Unthinkable: Taboo Trade-Offs, Forbidden Base Rates, and Heretical Counterfactuals," *Journal of Personality and Social Psychology*, 78 (5), 853-70.

Towards a New Framework of Eco-Food Consumption: The Importance of Contextual Drivers

Natalia Maehle, Western Norway University of Applied Sciences, Norway

Cele Otnes, University of Illinois at Urbana-Champaign, USA

Nina M. Iversen, BI Norwegian Business School, Norway

Leif Hem, Norwegian School of Economics, Norway

EXTENDED ABSTRACT

Green consumer trends demonstrate that an influential group of aware and ethical consumers has emerged. However, what consumers say about the importance of ethical and environmental issues often differs from their actual behavior, and the share of eco-friendly food in total consumption has remained low (Rousseau and Vranken 2013). Frequently this gap between consumers' attitudes and their actual buying behavior refers to the so-called attitude-behavior gap (Carrigan, Szmigin, and Wright 2004). The gap can potentially be explained by the multifaceted nature of sustainable consumption. Existing studies mostly focus on individual consumer characteristics, which means that macro and structural causes of sustainable consumption tend to be ignored (Thørgesen 2010). For example, the cultural context needs to be taken into account, as it has a direct influence on social pressure and pro-environmental value orientation (Kumar, Manrai, and Manrai 2017; Strizhakova and Coulter 2013). Thørgesen (2010) argues that both macro factors (e.g., culture) and structural factors (e.g., political regulation, national labelling systems) are more important determinants for sustainable consumption than individual-level attitudinal variables.

This study looks on one particular type of sustainable consumption, namely eco-food (i.e., food encompassing environmental, ethical and health benefits) and addresses the wider social framework and cultural system in which this type of food is consumed. As a result, we suggest a new conceptual framework that contributes a contextual dimension to our understanding of eco-food consumption. In this way, we extend the existing literature by suggesting that consumers' perceptions and attitudes toward eco-food are influenced by five contextual drivers: (1) cultural values; (2) media discourses (which focus on different issues in different societies); (3) governance and law (different food safety regulations, differences in trust in national/stately systems); (4) geographical characteristics (e.g., country size, access to locally, regionally and nationally produced food); and (5) country-of-origin effect/provenance (preference for national vs. local food).

Our aim is to explore how these contextual factors explain the differences in consumers' perceptions and attitudes toward eco-food in the US and Norway. Both countries are developed and industrialized and contain a growing eco-food market. However, they differ on cultural orientations and other dimensions (country size, food regulations, media discourse, and so on). We can therefore expect differences in the importance of eco-food concerns. To collect the data, we conducted 40 in-depth interviews in Norway and the US (twenty in each country). The researcher began by discussing consumers' food habits and their salient concerns pertaining to food purchases. The interviewer then explained the concept of eco-food, probing informants' perceptions of the category and its salience to their purchasing and eating behavior. Moreover, the interviewer probed for contextual factors influencing consumers' perceptions of eco-food. The interview procedure yielded around 520 pages of transcribed single-spaced text. The research team utilized the constant comparative method (Glaser and Strauss 1968) to identify the presence of the contextual drivers discussed in the conceptual framework. In addition, the researchers conducted a media discourse analysis to identify food and eco-food

related topics discussed in the media in the US and Norway. We also compared the food safety regulations in both countries.

We discerned the following patterns when comparing responses from Norway and the US. Like previous research (e.g., Carrigan et al. 2004), the current study shows consumers experience an attitude-behavior gap in both countries. Specifically, informants offer two broad reasons for not purchasing eco-food, or for not buying as much as they would have liked – namely, price and access. Nevertheless, interesting differences emerge between American and Norwegian consumers when they explain the reasons for buying eco-food. While American consumers highlight the health benefits, ethical considerations and animal welfare are the most prevalent among their Norwegian counterparts. Moreover, Norwegian consumers exhibit much stronger preferences for nationally produced food, as they consider Norwegian food to be similar to eco-food along the dimensions of safety and ethicality. We argue these differences can be partly explained by contextual factors such as cultural values, differences in media discourse, food regulations, a nation's geographical characteristics and provenance effects. Norwegian culture emphasizes egalitarianism and harmony and de-emphasizes mastery, which calls for selfless concern for the welfare of others (Schwartz 2006). In contrast, American individualism emphasizes affective autonomy and mastery at the expense of harmony (Schwartz 2006). This combination leads to justifying and encouraging egoistic self-advancement.

This distinction may result in a more functional, self-focused approach to eco-food in the US (with a focus on health and taste benefits), while ethical (and especially animal welfare) issues prevail in Norway. In addition, our analysis reveals that focus on issues in the media differs in the US and Norway. While Norwegian media devotes attention to animal welfare issues, there is still more emphasis on health issues and food safety (e.g., pesticides and hormones) in the US. Our informants confirm the influence of media discourses and refer to recent feature stories in the media while explaining their reasons for buying eco-food. Moreover, Norway has more restrictive food safety regulations (EcoWatch 2014), which can explain consumers' trust to non-eco-food produced in Norway. Geographical differences may also play a role. Norway is much smaller country than the USA and it can explain the different perceptions of provenance. While consumers in the USA exhibit preference for local non-eco-food, Norwegians perceive local food much broader and prefer all the food produced in Norway.

This study contributes to the existing literature by bringing attention to the contextual factors which were earlier neglected in the literature (Thørgesen 2010). The findings are important for both companies and policy makers as we highlight the importance of taking into account contextual dimensions while promoting eco-food in different countries. However, this study has a number of limitations and more research is necessary. We address only two countries and the research can be extended to different types of cultures, e.g. more collectivistic cultures. We also do not focus on the variations between ethnical groups, which can be especially important in the US. Moreover, there is a need to consider how a combination of product-, consumer- and context-level drivers influences eco-food consumption.

REFERENCES

- Carrigan, Marylyn, Isabelle Szmigin, and Joanne Wright (2004), "Shopping for a Better World? An Interpretive Study of the Potential for Ethical Consumption within the Older Market," *Journal of Consumer Marketing*, 21 (6), 401–417.
- EcoWatch (2014), "13 Ways the EU Beats the U.S. on Food Safety," <http://www.ecowatch.com/13-ways-the-eu-beats-the-u-s-on-food-safety-1881850175.html>.
- Glaser, Barney and Anselm Strauss (1968), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago, IL: Aldine.
- Kumar, Bipul, Ajay K. Manrai, and Lalita A. Manrai (2017), "Purchasing Behaviour for Environmentally Sustainable Products: A Conceptual Framework and Empirical Study," *Journal of Retailing and Consumer Services*, 34, 1–9.
- Strizhakova, Yuliya and Robin A. Coulter (2013), "The 'Green' Side of Materialism in Emerging BRIC and Developed Markets: The Moderating Role of Global Cultural Identity," *International Journal of Research in Marketing*, 30 (1), 69–82.
- Rousseau, Sandra and Liesbet Vranken (2013), "Green Market Expansion by Reducing Information Asymmetries: Evidence for Labeled Organic Food Products," *Food Policy*, 40, 31–43.
- Schwartz, Shalom H. (2006), "A Theory of Cultural Value Orientations: Explication and Applications," *Comparative Sociology*, 5 (2), 137–182.
- Thørgesen, John (2010), "Country Differences in Sustainable Consumption: The Case of Organic Food," *Journal of Macromarketing*, 30 (2), 171–185.

The Double-Edged Sword of Social Closeness in Gift Giving

Sam J. Maglio, University of Toronto, Canada
Evan Polman, University of Wisconsin-Madison, USA
Alex Kaju, University of Toronto, Canada

EXTENDED ABSTRACT

Consumers constantly decide what to bring into their lives, from people (who to date) to places (where to live) to products (what to buy). Beyond such *what* questions, any acquisition necessitates a subsequent, unexamined question: How long will I keep it? We examine this concept of *retention*, or the duration over which consumers maintain possession of something. To probe retention, we first present a series of three pilot studies that tests a straightforward prediction relating retention to gift giving. Specifically, people retain gifts for a longer period of time when they come from socially closer others. We then identify a condition (explicit consideration or inclusion of gift quality information) that causes this pattern of retention to reverse (longer retention for gifts from distant others) as a function of gift recipients' shifting expectations for their social connection with gift givers in the future. Practical implications for gift giving as well as theoretical relevance for future research on retention are discussed.

In a set of three pilot studies, we document the obvious conclusion that people keep gifts longer when they receive gifts from socially closer (versus distant) givers. Throughout, we find longer retention for gifts from objectively and subjectively closer others, across a range of retention measures – *viz.* prospective retention (“How long will I keep this new item?”); retroactive retention (“How long did I keep a former possession?”); and a combination of the latter (“How long have I had this, and how much longer should I hold onto it?”).

We then tested whether this pattern would maintain when the price of the gift is revealed. Counterintuitively, we found in a set of four studies that such gifts are retained longer when they originate from distant givers. In all, when price information was present, retention of a high-priced gift was higher when the gift was from a socially distant giver than from a socially close giver (Studies 1-4). This result was shown to be conditionally mediated by the expectation of increased future closeness with a distant (vs. a closer) gift giver (Study 4). That is, unlike gift givers (and others more generally) that are *prima facie* socially close, people who stand at a greater social distance have a greater potential to move through that distance in becoming closer. In turn, these expectations for change in connectedness in the future informs decisions in the present.

Study 1 asked participants about their retention intentions for gifts that were low- or high-priced (\$10 vs. \$75) from a socially distant or close giver. When price information was revealed, the pattern of results was notably different than in our pilot studies: For the low-priced gift, expected retention did not differ between close ($M = 105.80$ days, $SD = 66.26$) and distant ($M = 118.80$ days, $SD = 42.85$) givers, $F < 1$, $p > .8$; but for the high-priced gift, expected retention was significantly higher when it came from a distant giver ($M = 1474.60$ days, $SD = 414.56$) compared with a close giver ($M = 1226.40$ days, $SD = 457.83$), $F(1, 144) = 10.15$, $p = .002$, $\eta_p^2 = .07$.

Study 2 provides evidence that price is used as a proxy for product quality in retention decisions. Study 2 tested two different prices (as in Study 1) across two different levels of gift quality (“rather low in quality – about a 2 on a 10-point scale” vs. “very high in quality – about a 9 on a 10-point scale.”) When quality of the gift was revealed, expected retention was consistently higher when the gift came from a distant friend at both low ($M = 504.40$ days, $SD =$

294.67) and high ($M = 1430.80$ days, $SD = 314.69$) levels of quality, as contrasted with the expected retention from a close friend at low ($M = 368.76$ days, $SD = 215.39$) and high ($M = 1328.60$ days, $SD = 331.19$) quality levels.

Study 3 provides discriminant validity between liking of the gift and retention. Using a high- and low-priced pen methodology similar to Study 1 and including a measure of liking, Study 3 found that among participants asked about liking, only a significant main effect of gift price emerged ($p < .001$), whereas giver distance and the interaction between distance and price two did not prove reliable ($ps > .4$). The general conclusion appears to suggest that expensive gifts are liked more than inexpensive gifts regardless of who is giving them. Thus, it appears that consumers consider and make retention-related decisions in a manner that is conceptually dissociable from mere liking.

Finally, Study 4 examines the mechanism by which the addition of price information seems to provide a boost in retention for gifts from distant givers: An inferred expectation by recipients of increased closeness with givers in the future. Using new gift and price scenarios, we asked participants not only how long they planned to retain the gift but also how, if at all, they anticipated their relationship with the gift giver would change in the future. While more increased closeness was anticipated for a distant ($M = 0.28$, $SD = 0.61$) versus close ($M = -0.08$, $SD = 0.28$) giver in the low-priced gift condition, $F(1, 96) = 6.15$, $p = .015$, $\eta_p^2 = .06$., the high-priced gift showed an even larger difference in anticipated increase in closeness between the distant ($M = 2.72$, $SD = 0.61$) and close ($M = 0.16$, $SD = 0.47$) giver, $F(1, 96) = 311.09$, $p < .001$, $\eta_p^2 = .76$. A reliable indirect pathway emerged for both the close giver ($\beta = 26.23$, $SE = 15.53$; 95% CI = 6.22-73.65) and the distant giver ($\beta = 266.64$, $SE = 82.90$; 95% CI = 97.56-427.98). Crucially, the model estimated the index of moderated mediation at 240.41 ($SE = 75.15$), and a 95% confidence interval for this estimate did not include zero (90.09-389.89). This suggests that, while gift price-evoked expectations of future relationship change predicted retention in both gift-giver conditions, the psychological process relating price to anticipated change and retention was more impactful in evaluating gifts from a distant (versus close) giver.

Taken together, this research emphasizes the relevance of retention as a conceptual variable. It also provides an initial treatment of it as an experimental outcome that allows for novel consumer insights into the relationships between social closeness, price information, and gift retention.

Same Same, But Different: How Refutational Two-sided Messages Steer Ambivalent Attitudes

Anuja Majmundar, University of Southern California, USA

Erlinde Cornelis, San Diego State University, USA

Nico Heuvinck, Lille Catholic University, France

EXTENDED ABSTRACT

The question whether marketers should use one- vs. two-sided messages has received considerable attention in the persuasion literature (e.g., Eisend, 2006), but without straight answers. On the one hand, the inclusion of negative information in a promotional message seems to enhance attitudes and intentions (e.g., Crowley & Hoyer, 1994), whereas, on the other hand, attitudes and intentions can be derogated (Eisend, 2006). We argue that attitude ambivalence could account for these mixed results. Past research demonstrates that attitude ambivalence plays an important (negative) role in influencing attitudes and intentions (e.g., Priester & Petty, 1996). When people are confronted with a two-sided message, this may induce feelings of evaluative conflict (i.e., attitudinal ambivalence) which may lead to lower attitudes and purchase intentions. However, when a two-sided message does not evoke high levels of ambivalence, we expect positive effects on message effectiveness as previously documented in message sidedness literature.

The first objective of this research is to introduce attitude ambivalence as an explanatory factor for prior inconsistent results concerning the effectiveness of one- vs. two-sided messages (study 1). We know that ambivalent attitudes are generally more susceptible to persuasion (van Harreveld et al., 2009). Most research focuses predominantly on the underlying reasons why (e.g., because they are less strong, or because they are a source of psychological discomfort which people want to resolve). Instead, our research focuses on refutation as a tool to get people with highly ambivalent attitudes 'off the fence' (study 2). Next, study 3 introduces refutation on the same vs. different product attributes as a moderator of these effects. This work advances the literature on ambivalence and message sidedness, while also providing hands-on recommendations to practitioners dealing with cases of high ambivalence.

137 undergraduate students were randomly assigned to one of four conditions in a 2 (one- vs. two-sided) by 2 (high vs. low ambivalence) between-subjects factorial design. They were shown a set of equally important attributes that described an MP3 player. Message sidedness was manipulated by providing either only positive or both positive and negative product attributes. Low vs. high ambivalence was manipulated by varying the amount of attributes, in line with prior research (Priester, Petty & Park, 2007). We found significant interaction effects for attitude towards the MP3-player and purchase intention. As expected, two-sided messages only yield more positive attitudes and intentions when ambivalence is low (vs. high). Hence, when designing two-sided messages, marketers should avoid creating ambivalent situations, because ambivalence offsets the positive effects of two-sided messages on message effectiveness.

Study 2 tests whether a refutational statement in a two-sided message increases message effectiveness when ambivalence is high. The intent of two-sided refutational messages is to first introduce an opposing view, and subsequently demonstrate why this opposing view is inferior (Allen, 1991). A non-refutational two-sided message merely offers both views while not refuting the opposing view in the message. We argue that a refutation can uplift message effectiveness in ambivalent individuals. 106 MTurk participants were randomly assigned to one of four conditions in a 2 (two-sided nonrefutational vs. refutational) by 2 (high vs. low ambivalence) between-subjects

factorial design. Study 2 was identical to the previous one except for some modifications: (a) only two-sided messages were used, (b) a different product stimulus was used to generalize across products: a notebook, (c) the attributes were pretested on their importance level, and, finally (d) measures of negative and positive WOM were included. The results show significant interaction effects: in case of high ambivalence, refutational two-sided messages lead to higher attitudes, purchase intentions, and proportionally more (less) positive (negative) WOM (compared to non-refutational two-sided messages). Hence, a refutation may overcome the perverse effects of ambivalence in two-sided messages.

Study 3 examines whether the nature of the refutation matters. Refutational statements can be based on the same or different product attribute levels, for example: "This laptop has a short battery autonomy, but on the other hand the battery charges exceptionally fast" (same attribute) vs. "This laptop has a short battery autonomy, but on the other hand this model has many USB ports" (different attribute). We test whether refutation on the same vs. different attributes in a two-sided message amplifies attitudes, purchase intentions, and WOM. 305 participants of an online respondent panel were randomly assigned to one of six conditions in a 3 (two-sided non-refutational vs. two-sided refutational on the same attribute vs. two-sided refutational on a different attribute) by 2 (high vs. low ambivalence) between-subjects factorial design. Study 3 was similar to study 2 except (a) the same vs. different product attribute level refutational statements were manipulated by tailoring the type of product attribute(s). The results show that among high (vs. low) ambivalent individuals, same-attribute refutations lead to significantly proportionally more (less) positive (negative) WOM and higher purchase intentions (vs. different-attribute refutations or non-refutational two-sided messages). Among individuals with low (vs. high) ambivalence, refutational two-sided messages, irrespective of whether they are based on the same or different product attributes, lead to significantly lower purchase intentions and proportionally less (more) positive (negative) WOM (vs. non-refutational two-sided messages). Hence, a two-sided message with a focus on the same attribute is more persuasive while addressing highly ambivalent people.

This research shows that attitude ambivalence explains previous inconsistent results concerning two-sided messages' effectiveness. That is, two-sided messages only yield more positive attitudes and intentions when ambivalence is low (vs. high) (study 1). However, in study 2, we show that this perverse effect of ambivalence in two-sided messages can be resolved by including a refutation. In other words, a refutation can persuade ambivalent individuals. Study 3 shows this only works if the refutation is on the same product attribute-level. While it is known that ambivalent individuals evaluate relevant stimuli more deeply to resolve their ambivalence, further research can explore whether refutation based on the same (vs. different) product attributes is perceived as more salient, more complete, or more successful in reducing anticipated conflict, allowing ambivalent individuals to form stable attitudes and intentions.

REFERENCES

- Allen, M. (1991). Meta-analysis comparing the persuasiveness of one-sided and two-sided messages. *Western Journal of Speech Communication, 55*, 390-404.
- Crowley, A.E. & Hoyer, W.D. (1994). An integrative framework for understanding two-sided persuasion. *Journal of Consumer Research, 20*, 561-74.
- Eisend, M. (2006). Two-sided advertising: A meta-analysis. *International Journal of Research in Marketing, 23*, 187-98.
- Priester, J.R. & Petty, R.E. (1996). The gradual threshold model of ambivalence: Relating the positive and negative bases of attitudes to subjective ambivalence. *Journal of Personality and Social Psychology, 71*, 431-449.
- Priester, J.R., Petty, R.E. & Park, K. (2007). Whence univalent ambivalence? From the anticipation of conflicting reactions. *Journal of Consumer Research, 34*, 11-21.
- Van Harreveld, F., Rutjens, B.T., Rotteveel, M.R., Nordgren, L.F. & van der Pligt, J. (2009). Ambivalence and decisional conflict as a cause of psychological discomfort: feeling tense before jumping off the fence. *Journal of Experimental Social Psychology, 45*, 167-73.

Can Packaging Color Influence Consumers' Willingness To Pay? Evidences of the *Au Naturel*-Colored Packaging Effect

Veronica Marozzo, University of Calabria, Italy
Maria Antonietta Raimondo, University of Calabria, Italy
Gaetano Miceli, University of Calabria, Italy

EXTENDED ABSTRACT

This paper introduces the concept of *Au Naturel Color* and investigates the relationship between packaging color and consumers' willingness to pay (WTP). Drawing on color theory (Giles 2000), we define *Au Naturel Color* as a color that brings to mind something that comes from the soil, is not dyed or not artificial, untreated or unprocessed, and expresses authenticity, that is something genuine and not altered. We include shades of beige in this color domain.

Consistent with dual process theories (e.g., Elaboration Likelihood Model - Petty and Cacioppo 1981; and Heuristic-Systematic Model - Bohner et al. 1995), packaging color can be considered as a heuristic. We propose that *au naturel*-colored packaging (vs. *non au naturel*-colored packaging) will work as a heuristic and produce positive associations with the product, thus leading to an increase in consumers' WTP (H1). Moreover, the use of feelings falls in the category of heuristic processing (Chen and Chaiken 1999) and may influence consumers' responses based on the feeling-as-information model under peripheral route condition (Schwarz and Clore 1988). We maintain that the relationship between *au naturel*-colored packaging and consumers' WTP is explained by an emotion-based mechanism. We expect that *au naturel*-colored packaging (vs. *non au naturel*-colored packaging) will evoke low arousal emotions, mainly consisting in sensations of tranquillity, serenity and relief, that we call *safety emotions*. In turn, such kind of sensations will produce higher consumers' WTP (H2). We also propose that perceived dangerousness for consumers' health of product category moderates the effect of *au naturel*-colored packaging on consumers' WTP. When facing a product category featuring low dangerousness consumers keep using color packaging as a heuristic. Under such conditions, the positive effect of *au naturel* color on consumers' WTP will hold. Instead, the effect disappears for product categories featuring high dangerousness for which heuristics are no more relevant (H3). Additionally, the effect of *au naturel*-colored packaging on consumers' WTP may depend on cognitive load. Indeed, under conditions of high (vs. low) cognitive load such effect may be stronger because consumers have fewer cognitive resources available which limit their ability to process information and prompt them to use heuristics. (H4).

We first validated the proposed definition of *Au Naturel Color*. Results of two preliminary studies (A and B) suggested that seven items aimed at measuring the characteristics of *au naturel* color converged onto a common latent factor, allowing us to obtain an overall score of *Au Naturel Color Scale* (ANCS). Additionally, findings allowed us to conclude that shades of beige reflect the characteristics of the *au naturel* color better than other colors in a large majority of product categories. Study B also allowed us to select stimuli for the subsequent experimental studies. Then we tested our hypotheses in four experimental studies.

In study 1 (N = 97; 55.1% females; *ModeAge* = 36-55), we found that respondents are more willing to pay for the *au naturel*-colored packaging than for the *non au naturel*-colored packaging, providing support to H1. A mediation analysis (Preacher and Hayes, 2004) allowed us to support the idea that safety emotions mediate the effect of packaging color on willingness to pay (H2).

In study 2 (N = 198; 38.9% females; *Mage* = 34.78; *SDAge* = 10.67), we found a significant main effect of packaging color, sup-

porting again H1. Consistent with H3, we found a significant two-way interaction between packaging color and product category on consumers' WTP. Planned comparisons showed that WTP for butter was not significantly different in the two color conditions, whereas WTP for rice was significantly higher for *au naturel*-colored packaging than for *non au naturel*-colored packaging. Building upon the results of planned comparisons, we conducted the mediation analysis considering only data collected on rice (N = 100; 32% females; *MAGE* = 32.88; *SDAGE* = 9.44) and a moderated mediation analysis on the whole sample (N = 198). Results further support H2.

In study 3 (N = 176; 52.3% females; *MAGE* = 22.35; *SDAGE* = 1.88), we found a significant main effect of packaging color, supporting again H1. Consistent with H4, we found a significant two-way interaction between packaging color and cognitive load. Planned comparisons showed that in the high cognitive load condition, WTP for *au naturel*-colored packaging was higher than WTP for *non au naturel*-colored packaging. A similar pattern was observed in the low cognitive load condition, replicating results of study 1. As predicted, however, the effect of packaging color on consumers' WTP is significantly larger in the high cognitive load condition than in the low cognitive load condition.

In study 4 (N = 212; 50% females; *MAGE* = 35.86; *SDAGE* = 11.56), we expect to find the packaging color effect on WTP irrespective of the fit between product color and packaging color. Results showed a significant main effect of packaging color, supporting again H1. The interaction effect of packaging color and product color was non-significant. Planned comparisons showed that WTP for rice was significantly higher in the *au naturel*-colored packaging condition than in the orange-colored packaging condition. The same pattern holds for carrots. Thus, our results can be explained by the characteristics of *au naturel*-colored packaging, but not by the fit between product color and packaging color.

Our research provides deeper insights on how consumers perceive packaging featuring products featuring *au naturel*-colors, showing that they associate to these hues of colors specific features that positively influence their WTP. Based on our results, public policy makers may favour an "*au naturel color*" (vs. *non au naturel color*) system only for packaging of product categories that really reflect the consumers' associations in terms of genuineness and non-artificial features. If the *au naturel* color system becomes a common practice, adopting an ethical perspective and a social fair conduct, food manufacturers may use the *au naturel* color system (being a heuristic) to communicate the value of their offerings and distinctiveness from the competitors.

REFERENCES

- Bohner, Gerd, Gordon B. Moskowitz, and Shelly Chaiken (1995). "The Interplay of Heuristic and Systematic Processing of Social Information," *European Review of Social Psychology*, 6, 33-68.
- Chen, Serena and Shelly Chaiken (1999). "Motivated Heuristic and Systematic Processing," *Psychological Inquiry*, 10, 44-49.
- Giles, Geoff A. (2000). *Design and technology of packaging decoration for the consumer market* (Vol. 1). Boca Raton, FL: CRC Press.

Petty, Richard E. and John T. Cacioppo (1981). *Attitudes and Persuasion: Classic and Contemporary Approaches*. Dubuque, IA: Wm. C. Brown.

Schwarz, Norbert and Gerald L. Clore (1988). "How do I feel about it? The informative function of affective states," *Affect, cognition, and Social Behavior*, 44-62.

When High Failure, Risky Technology Leads to Market Expansion: The Case of the Fertility Services Market

Laetitia Mimoun, HEC Paris, France

Lez Trujillo Torres, University of Illinois at Chicago, USA

Francesca Sobande, University of Dundee, UK

EXTENDED ABSTRACT

This paper explores how risky innovation in the fertility services market impacts legitimation dynamics and marketing expansion. Taking institutional theory as an enabling theory, we introduce scientific legitimacy as key pillar in the legitimation of risky, biomedical technologies. Prior research identifies several actors who play key roles in the legitimation process of consumption practices. For example, Humphreys (2010) highlights how casino managers achieve a sense of legitimacy by successfully navigating regulatory, socio-cognitive, and normative conventions that underpin the industry. Additionally, Giesler's (2012) analysis of Botox marketplace activity illuminates how brands strategically engage with other stakeholders to facilitate the legitimation of new markets. Three main legitimacy-driving actors emerge in the literature: decentralized groups of consumers (e.g. Martin and Schouten 2014; Scaraboto and Fischer 2013), centralized marketplace actors such as a brand (e.g. Giesler 2008; Humphreys 2010a), and news media (e.g. Humphreys and Thompson 2014).

Whilst the aforementioned research has significantly advanced our understanding of market evolution and legitimating processes, several questions remain. First, Martin and Schouten (2014) emphasize that legitimation efforts include "a process of multiple translations wherein consumers mobilize human and nonhuman actors to co-constitute products, practices, and infrastructure" (p.855). Therefore, our research considers how other types of nonhuman actors can be central in legitimation process, especially ones that originate outside the control of marketplace players (e.g. firms or managers). Studies on role of technological innovation are limited. For instance, Giesler (2012) focuses on a technology-centered brand and emphasizes that market creation and development evolves with consumers' perceptions of technology. We argue that technological innovation itself can substantially affect legitimacy dynamics concerning consumption practices.

Furthermore, previous related studies often focus on empirical contexts in which producers and consumers are relatively clearly defined and the risk of consumption is minimal or predictable. Thus, there is an impetus to examine issues pertaining to the legitimation of consumption processes, in relation to contexts where the subject positions of consumer and producer may shift, and where consumption risks are uncertain or the risk of failure exceed those of success (Fischer, Otnes, and Tuncay 2007).

Existing work which explores the part played by communication technologies as intermediaries of legitimation processes, has focused on the results of centralized industry efforts, such as within one industry, brand, or a set of managerial or expert systems (Humphreys and Thompson 2014). We advance that research is needed to analyze the role of communication technologies, including mass-media, in selecting and disseminating information within decentralized markets to a variety of consumer segments. This is important because in decentralized markets, news media coverage can widely advance technological progress and reflect the type of consumers adopting these innovations. This can help us to distinguish legitimation efforts from centralized industries, versus those stemming from decentralized industries.

Taking a meso-level approach to market expansion driven by high-risk technological innovations, we seek to address the outlined research gaps, by analyzing the marketing of fertility services in the United Kingdom (UK) and the United States (US). Innovations in Assisted Reproductive Technologies (ART) have revolutionized fertility services and how reproductive problems are solved, and have facilitated the quest for parenthood for various consumer demographics. We address two research questions: How and why does technological innovation impact the legitimation of consumption? Under what circumstances does this change in legitimacy dynamics result in market expansion? Qualitative methods and automated content analysis were used to analyze a set of visual and textual data, which includes articles from two newspapers (*The Guardian* and *The New York Times*) and three magazines (*Elle*, *Cosmo*, and *New Scientist*), as well as marketing material from US and UK fertility clinics and related health organizations.

We find that decentralized technology innovation which relies on scientific legitimacy impacts normative legitimacy (parenthood norm) and socio-affective legitimacy (in contrast to socio-cognitive), while regulatory legitimacy plays a secondary role. The socio-affective mechanism is fueled by how media and marketers frame mythologized parenthood and time scarcity in order to minimize implications of risk failure. Last, despite high probability of technology failure, this market has expanded rather than contracted over time. From our frame analysis, we see that, while ART were heavily adopted by infertile couples and single women when it entered the mainstream, in recent years the use of ART has been expanded to individuals seeking fertility preservation from cancer treatment, gay couples, couples in need of gestational surrogacy, and single, young women seeking egg preservation to name a few.

Our research contributes to literature on institutionalization, by showing that technology innovation is a distinct determinant of consumption-related legitimacy, whilst differentiating between decentralized and centralized technological innovation. Finally, we link scientific legitimacy to the emotional facet of social legitimacy, and its influence on consumption in a market characterized by moderate success in helping consumers reach their goal of parenthood. Lastly, we hope that this work may have implications for providers looking to promote services in contexts where high hopes and high risk surround complex technologies, which may include a variety of medical services.

REFERENCES

- Fischer, Eileen, Cele C. Otnes, and Linda Tuncay (2007), "Pursuing parenthood: Integrating cultural and cognitive perspectives on persistent goal striving," *Journal of Consumer Research*, 34(4), 425-440.
- Giesler, Markus (2008), "Conflict and compromise: drama in marketplace evolution," *Journal of Consumer Research*, 34(6), 739-753.
- Giesler, Markus (2012), "How doppelgänger brand images influence the market creation process: Longitudinal insights from the rise of Botox cosmetic," *Journal of Marketing*, 76(6), 55-68.

Humphreys, Ashlee (2010a), "Megamarketing: The creation of markets as a social process," *Journal of Marketing*, 74(2), 1-19.

Humphreys, Ashlee, and Craig J. Thompson (2014), "Branding disaster: Reestablishing trust through the ideological containment of systemic risk anxieties," *Journal of Consumer Research*, 41(4), 877-910.

Martin, Diane M., and John W. Schouten (2014), "Consumption-driven market emergence," *Journal of Consumer Research*, 40(5), 855-870.

Scaraboto, Daiane, and Eileen Fischer (2013), "Frustrated fatshionistas: An institutional theory perspective on consumer quests for greater choice in mainstream markets," *Journal of Consumer Research*, 39(6), 1234-1257.

Consuming the Inauthentic as a Self-Authenticating Act in Insa-dong, Seoul

Hyun Jeong Min, Black Hills State University, USA

EXTENDED ABSTRACT

As authenticating acts and authoritative performances (Arnould and Price 2000), tourism has provided researchers with fertile ground to examine the pursuit of authenticity through consumption. MacCannell (1973) indicates that modern tourists, who are concerned about the shallowness and inauthenticity of their lives, are motivated by the hope of discovering and experiencing authentic cultures. Although—as Cohen (1988) suggests—authenticity is a socially negotiable concept perceived by individuals based on their own personal experiences and expectations (Leigh, Peters, and Shelton 2006), prior research has established that objects and experiences that are *perceived* inauthentic may not have the ability to authenticate one's individual and communal identity. However, the present study attempts to put on the weight to the other side by showing that through cynicism, perceived inauthenticity could authenticate consumers' individual and communal identities, based on an examination of consumption in the traditional cultural district of Insa-dong in Seoul, South Korea. Insa-dong is an ideal empirical setting because about 100,000 domestic and foreign tourists visit the district every day (Insa Traditional Culture Preservation Association 2012), but many Koreans often criticize it as inauthentic and overly commercialized.

While early studies on cynicism tend to view it as a psychological defect that needs to be corrected (Fleming and Spicer 2003), more recent research shows that cynicism is not necessarily unethical and does not lead to negative outcomes for organizations, employees, and consumers, emphasizing its role in social critique (Karfakis and Kokkinidis 2011) and consumer resistance to the consumerist marketplace (Mikkonen, Moisander, and Firat 2011). However, both negative and positive cynicism often have an effect on individuals' identity construction as protection against aggressive marketing practices (Helm 2004; Odou and de Pechpeyrou 2010) and overwhelming managerial controls (Casey 1995; Kunda 1992). As seen in Mikkonen et al. (2011), cynicism is also part of the consumer identity project by allowing people to take the moral high ground to disillusioned members of society and organizations. However, it does not necessarily lead to reforming actions that help change society or organizations (Bloom 2008) because while cynical individuals may dis-identify with cultural prescriptions of a given society or organization they still perform them (Fleming and Spicer 2003), and, arguably, one such case in modern society is nationalism.

While nation and nationalism have long been discussed as a contingent outcome of modernity (Gellner 1983) based on artificial invention of tradition (Hobsbawm 1983), recent studies on nationalism examine everyday reproduction of nationhood. They highlight that the seemingly declining importance of national identity, as commonly claimed by postmodernists, may be based on the fact that people take national identity for granted in their everyday life. Billig (1995) calls this taken for granted national identity banal nationalism. In their everyday life, the citizens of a nation are reminded of their national place in a world of nations, but this reminding is so familiar that it is not consciously registered as a reminding, thus reproducing embodied national identity (Billig 1995). For instance, nations are reproduced through ordinary people's mundane practices (Fox and Miller-Idriss 2008) such as consumption of consumer goods (Belk and Paun 1995; Douglas and Isherwood 1979). In this vein, consumption practices in Insa-dong may play an important role in reproducing Korean identity. Korean tradition-themed commodities and experiences in the district may flag or remind consumers of

Korean national identity regardless of whether they enjoy or criticize the offered commodities and experiences. Rather than mindless acceptance and enjoyment, criticism on the authenticity of the place and the offered commodities may engage these consumers more strongly in the matter of whether the commodity/service is truly Korean. In this process, Korean identity may be reproduced even though they are not directly involved in actual consumption of such inauthentic commodities. Therefore, while criticizing or talking about national tradition and its authenticity, nations can be discursively constituted (Fox and Miller-Idriss 2008).

The primary data for this research project were collected in 2013 through qualitative interviews with 24 native Korean consumers who had prior experiences in visiting Insa-dong. Materials and photos obtained since 2004 through multiple observations in the location were used as supplement data for our project. Other supplementary data include websites of Insa-dong-related entities, government promotional materials, newspaper articles, documentaries about Insa-dong, movies about Korean tradition, among others. Data analysis entailed an iterative process of coding and categorizing. Provisional understandings of consumers' experiences were formed, challenged, and revised in multiple readings of the individual transcripts and the data set as a whole in conjunction with emerging themes, including cynicism on Insa-dong and the relation between the consumption of Insa-dong and the consumer self.

In contrast to a typical description of the place as “a museum alive with the lives, histories, and cultures of Korean people” (Insa Traditional Culture Preservation Association 2012), the research participants perceived Insa-dong as an inauthentic representation of Korean traditional culture despite its official christening as a traditional cultural district. Data analysis demonstrates that despite its contested authenticity, however, consuming the place brand of Insa-dong authenticates the individual consumer self and reproduces a national identity as Korean through engaged cynicism on commercialization, governmental control, and the static view of tradition that the government and businesses in the district take in constructing the place.

Through our analysis, Korean nationalism, which incorporates both banal and hot nationalism based on the historical trajectory of Koreans who experienced both brutal colonialism and rapid economic development after the Korean War, has emerged as a condition that makes consumers engage in the consumption of the place despite their perceived inauthenticity of the themed place. This reinforces the association of Insa-dong and Korean tradition and ultimately the reproduction of Korean national identity for the consumers of the place.

By examining the consumption practices in a traditional cultural district of Insa-dong, this study has illustrated the role of cynicism as an important mechanism to authenticate the self for modern consumers who often face inauthentic market offerings. This study also shows that socio-cultural ideology such as nationalism is an important condition for consumers' ongoing engagement in inauthenticity.

REFERENCES

- Arnould, Eric J and Linda L Price (2000), “Authenticating Acts and Authoritative Performances: Questing for Self and Community,” in *The Whys of Consumption: Contemporary Perspectives on Consumer Motives, Goals, and Desires*, ed. S. Ratneshwar, David Glen Mick and Cynthia Huffman, London: Routledge, 140-63.

- Belk, Russell W. and Janeen Arnold Costa (1998), "The Mountain Man Myth: A Contemporary Consuming Fantasy," *Journal of Consumer Research*, 25 (3), 218-40.
- Belk, Russell W. and Magda Paun (1995), "Ethnicity and Consumption in Romania," in *Marketing in a Multicultural World*, ed. Janeen Arnold Costa and Gary J. Bamossy, Thousand oaks, CA: Sage, 180-208.
- Billig, Michael (1995), *Banal Nationalism*, London: Sage.
- Bloom, Peter (2008), "Capitalisms Cynical Leviathan: Cynicism, Totalitarianism, and Hobbes in Modern Capitalist Regulation," *International Journal of Zizek Studies*, 2 (1), 1-30.
- Casey, Catherine (1995), *Work, Self and Society: After Industrialism*, London: Sage.
- Cohen, Erik (1988), "Authenticity and Commoditization in Tourism," Vol. 15, 371.
- Douglas, Mary and Baron C. Isherwood (1979), *The World of Goods*, New York: Basic Books.
- Fleming, Peter and André Spicer (2003), "Working at a Cynical Distance: Implications for Power, Subjectivity and Resistance," *Organization*, 10 (1), 157-79.
- Fox, Jon E. and Cynthia Miller-Idriss (2008), "Everyday Nationhood," *Ethnicities*, 8 (4), 536-63.
- Gellner, Ernest (1983), *Nations and Nationalism*, Ithaca, NY: Cornell University Press.
- Helm, Amanda (2004), "Cynics and Skeptics: Consumer Dispositional Trust," in *Advances in Consumer Research Vol. 31*, ed. Barbara E. Kahn Kahn and Mary Frances Luce, Valdosta, GA: Association for Consumer Research, 345-51.
- Hobsbawm, Eric J. (1983), "Introduction: Inventing Traditions," in *The Invention of Tradition*, ed. Eric J. Hobsbawm and Terence Ranger, Cambridge: Cambridge University Press, 1-14.
- Insa Traditional Culture Preservation Association (2012), "Welcome Message," <http://www.hiinsa.com/eng/insadong/insadong1.asp>.
- Karfakis, Nikos and George Kokkinidis (2011), "Rethinking Cynicism: Parrhesiastic Practices in Contemporary Workplaces," *Culture and Organization*, 17 (4), 329-45.
- Kunda, Gideon (1992), *Engineering Culture: Control and Commitment in a High-Tech Corporation*, Philadelphia, PA: Temple University Press.
- Leigh, Thomas W., Cara Peters, and Jeremy Shelton (2006), "The Consumer Quest for Authenticity: The Multiplicity of Meanings within the Mg Subculture of Consumption," *Journal of the Academy of Marketing Science*, 34 (4), 481-93.
- MacCannell, Dean (1973), "Staged Authenticity: Arrangements of Social Space in Tourist Settings," *The American Journal of Sociology*, 79 (3), 589-603.
- Mikkonen, Ilona, Johanna Moisander, and A. Fuat Firat (2011), "Cynical Identity Project as Consumer Resistance-the Scrooge as a Social Critic?," *Consumption, Markets & Culture*, 14 (1), 99-116.
- Odou, Philippe and Pauline de Pechpeyrou (2010), "Consumer Cynicism: From Resistance to Anti-Consumption in a Disenchanted World?," *European Journal of Marketing*, 45 (11/12), 1799-808.

Form, Function, and Fluency: Surprising Effects of Product Presentation (Dis)fluency on Attribute Evaluations

James A. Mourey, DePaul University, USA
Aparna Labroo, Northwestern University, USA

EXTENDED ABSTRACT

Relative comparison suggests that presenting very different (v. very similar) items sequentially should accentuate the stark differences among the items such that a hedonic, pleasurable item should seem much *more* pleasurable following the presentation of a functional, utilitarian item as opposed to following the presentation of a hedonic item.

Indeed, previous research, such as the two-factor model on assimilation and contrast (Meyers-Levy and Sternthal 1993) would suggest that stimuli that have little overlap should produce contrast effects granted plenty of cognitive resources are available. Otherwise, assimilation is predicted. Other research exploring the juxtaposition of two or more products in a market share similar effects of dominance (Huber, Payne, and Puto 1982), contrasted preferences, and even surprising consequence on choice (Wilcox et al. 2009).

However, the prior research focused primarily on the rational, logical considerations of product comparisons and less, if at all, on the metacognitive experience of fluency that can arise from observing products in choice contexts. In the current research, we propose that the presentation of heterogeneous or homogeneous sets of products can affect an individual's metacognitive experience of fluency and, in turn, affect the individual's evaluation of a product. More specifically, we propose that the presentation of homogeneous products in a given set will be experienced as fluent and, as such, result in more heuristic, extreme evaluations. The presentation of heterogeneous products (i.e., varying on even just one dimension) in a given set will be experienced as disfluent and, as such, result in more deliberative, conservative evaluations, thereby attenuating the evaluations of the products.

To test our theory, we conducted three studies using products selected from the famous SkyMall magazine each pretested to be either utilitarian or hedonic. In study 1 ($n = 122$), utilitarian products presented with other utilitarian products (i.e., fluent) were rated as significantly more useful/functional than when they were presented with hedonic products (i.e., disfluent). In study 2 ($n = 125$), hedonic products presented with other hedonic products (i.e., fluent) were rated as significantly more fun/funny than when they were presented with utilitarian products (i.e., disfluent). These findings are contrary to what the two-factor theory would predict regarding stimuli, overlap, and the likelihood for contrast or assimilation. In study 3 ($n = 118$), we use products within the same product category (i.e., shirts) to rule out the possibility that effects in the first two studies were due to product variation as opposed to the varying utilitarian/hedonic attributes of the products. Study 3 replicated the findings of the prior studies by showing that utilitarian shirts (i.e., dress shirts) are perceived to be more useful/functional when presented in a series with other utilitarian shirts, hedonic shirts (e.g., a Hawaiian shirt) are perceived to be more fun/funny when presented in a series with other hedonic shirts, and the heterogeneous presentation of shirts mitigates their usefulness/functionality (for utilitarian shirts) and their fun/funniness (for hedonic shirts).

With respect to theory, the studies contribute to the prior research on contrast effects, the two-factor model on assimilation and contrast, and other, more rational approaches to understanding comparisons between stimuli by adding a metacognitive, "feelings as information" perspective to the literature. Although rationally the

presentation of two very different products should highlight their differences and result in more extreme evaluations, particularly on the dimension on which the stimuli differ, the metacognitive experiences of fluency and disfluency that arise from homogeneous and heterogeneous product presentation yield more extreme and more conservative evaluations, respectively. Thus, prior rational theorizing that suggests heterogeneous presentation should lead to greater contrast in evaluations does not explain the muted findings found within the heterogeneous presentation evaluations herein. More work can be done to explore the relationship between the prior research and the current findings, specifically with respect to when consumers are more likely to rely on rationality versus their metacognitive experience.

With respect to practice, the presentation of product options and varieties has been an important cornerstone of marketing communications for decades but plays an even more important role in online markets where customers can scroll through hundreds to thousands of products on a website. Whether it makes sense to feature similar products or different products in sequences may depend on the marketing objective of a company, as there may be instances in which differences should be highlighted (e.g., comparing with a competitor's products) or minimized (e.g., offering alternatives for an out-of-stock option). Equally important, understanding the mindset of consumers matters, as customers engaging in more rational, deliberate decision making may exhibit contrast and assimilation effects consistent with the prior literature whereas other customers engaging in less rational processing may be more likely to rely on the metacognitive experiences shown here.

REFERENCES

- Dechêne, Alice, Stahl, Christoph, Hansen, Jochim, and Michaela Wänke (2010), "The Truth About the Truth: A Meta-Analytic Review of the Truth Effect," *Personality and Social Psychology Review*, 14 (2), 238-257.
- Huber, Joel, Payne, John. W., and Puto, Christopher (1982), "Adding Asymmetrically Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis," *Journal of Consumer Research*, 9 (1), 90-98.
- Lynch, John G., Chakravarti, Dipankar, and Anusree Mitra (1991), "Contrast Effects in Consumer Judgments: Changes in Mental Representations or in the Anchoring of Rating Scales," *Journal of Consumer Behavior*, 18, 284-297.
- Meyers-Levy, Joan, and Sternthal, Brian (1993), "A Two-Factor Explanation of Assimilation and Contrast Effects," *Journal of Marketing Research*, 30 (3), 359-368.
- Tversky, Amos (1972), "Elimination by Aspects: A Theory of Choice," *Psychological Review*, 79 (July), 291-299.
- Whittlesea, B.W.A., and J.P. Leboe (2003), "Two Fluency Heuristics (and How to Tell Them Apart)," *Journal of Memory and Language*, 49, 62-79.
- Wilcox, Keith, Beth Vallen, Lauren Block, and Gavan J. Fitzsimons (2009), "Vicarious Goal Fulfillment: When the Mere Presence of a Healthy Option Leads to an Ironically Indulgent Decision," *Journal of Consumer Research*, 36 (3), 380-93.

When Do Limited Time Offers Work? A Reactance Perspective

Ashesh Mukherjee, McGill University, USA

Seung Yun Lee, Konkuk University, South Korea

Andrew D. Gershoff, University of Texas at Austin, USA

EXTENDED ABSTRACT

Marketers often use limited-time offers to attract customers. For example, retailers make offers that are for “one week only”; flash sales websites make offers stating “today’s deal” or “deal expires in one hour”; and online shopping portals make limited-time offers with a countdown clock ticking down the remaining time. Given the popularity of limited time offers, it is important to understand when these offers do or do not work in terms of improving product evaluation. Past research has found that putting any kind of restriction on offers – such as time restriction or quantity restriction – tends to increase product evaluation because restrictions prompt consumers to make inferences of product value (Inman et al. 1997; Parker and Lehman 2011). The present research extends this literature by applying the theoretical lens of reactance to limited time offers, and showing that the positive effect of limited time offers on product evaluation is moderated by factors related to reactance.

Reactance has been defined as the motivational state aroused when individuals perceive threats to their freedom of action (Brehm 1966; Levav and Zhu 2009). We propose that limited time offers can prompt reactance when consumers perceive that their freedom to buy the product whenever they want is being overly restricted. For example, compared to the offer “20% off regular price” which has no time restriction, a limited-time offer stating “20% off regular price, deal expires in one hour” gives consumers lesser freedom regarding when the offer can be accepted. We suggest that such restrictions on one’s freedom of choice timing can prompt reactance, which in turn can reduce the positive effect of limited time offers on product evaluation. We verify this proposed reactance mechanism in series of four studies by showing that a set of factors related to reactance – trait reactance, an experimental manipulation of reactance, and time to expiry of the offer – moderate the positive effect of limited time offers on product evaluation. We also show that negative reactance responses to limited time offers can be overcome by reminding consumers of future regret if they miss the offer.

Study 1 tested the hypothesis that individuals high in trait reactance are likely to experience greater reactance to limited time offers than those low in trait reactance, which in turn should reduce the positive effect of limited time offers. One hundred and eighty student participants read an advertisement for a new brand of digital camera which manipulated the presence versus absence of a limited time offer by including or omitting the phrase “one day only, buy now!” Participants then indicated their intent to purchase the advertised camera, and responded to a multi-item scale for trait reactance (Hong and Faedda 1996). Consistent with a reactance mechanism, spotlight analysis showed that the presence (versus absence) of the limited time offer increased purchase intent for low trait reactance respondents, but not for high trait reactance respondents. Study 2 tested the hypothesis that experimentally increasing reactance will reduce the positive effect of limited time offers on product evaluation. Two hundred and forty seven participants from Amazon Mechanical Turk evaluated an advertisement for a pair of headphones which manipulated the presence versus absence of a limited time offer, as well as reactance to the limited time offer. Consistent with a reactance mechanism, the limited time offer increased purchase intent in the control condition but not in the high reactance condition. Further-

more, reduction in purchase intent due to the reactance manipulation was found to be mediated by the manipulation check for reactance.

Study 3 tested the hypothesis that decreasing the time to expiry will increase reactance to limited time offers, and thus reduce the positive effect of limited time offers on product evaluation. One hundred and thirteen student participants evaluated an advertisement for a spa package with or without a limited time offer, featuring short or long expiry times. Consistent with a reactance mechanism, the limited time offer increased purchase intent for longer expiry times such as one week and one day, but not for shorter expiry times such as one hour and one minute. Finally, study 4 investigated whether negative reactance responses to limited time offers can be overcome by reminding consumers of future regret if they miss the offer. Two hundred and fifty nine student participants evaluated an online advertisement for a backpack with a short-horizon limited time offer. The advertisement manipulated the presence versus absence of a limited time offer, as well as the presence versus absence of an anticipated regret reminder. Results showed that the presence of an anticipated regret reminder was sufficient to overcome reactance responses and restore a positive effect of the limited time offer on purchase intent.

In summary, our findings make three theoretical contributions to the literature on limited time offers. First, we identify a new reactance mechanism underlying the effect of limited time offers on product evaluation. Second, we identify new reactance-based moderators of the effect of limited time offers on product evaluation, i.e., trait reactance, an experimental manipulation of reactance, and time to expiry of the offer. Third, we show that reminders of future regret can overcome reactance and restore the positive effect of limited-time offers on product evaluation. Methodologically, we present convergent evidence across four studies using different product categories and measures of product evaluation. Managerially, our results give new insight into when the widely used promotional technique of limited time offer is likely to be effective for increasing product evaluation.

REFERENCES

- Aggarwal, Praveen, Sung Youl Jun, and Jong Ho Huh (2011), “Scarcity Messages,” *Journal of Advertising*, 40 (3), 19-30.
- Aguirre-Rodriguez, Alexandra (2013), “The Effect of Consumer Persuasion Knowledge on Scarcity Appeal Persuasiveness,” *Journal of Advertising*, 42 (4), 371-79.
- Aiken, Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interactions*, Thousand Oaks, CA: Sage.
- Amaldoss, Wilfred and Sanjay Jain (2005), “Pricing of Conspicuous Goods: A Competitive Analysis of Social Effects,” *Journal of Marketing Research*, 42 (1), 30-42.
- Brehm, Jack Williams (1966), *A Theory of Psychological Reactance*, Cambridge, MA: Academic.
- Castro, Iana A., Andrea C. Morales, and Stephen M. Nowlis (2013), “The Influence of Disorganized Shelf Displays and Limited Product Quantity on Consumer Purchase,” *Journal of Marketing*, 77 (4), 118-33.
- Dubois, David, Derek D. Rucker, and Adam D. Galinsky (2016), “Dynamics of Communicator and Audience Power: The Persuasiveness of Competence versus Warmth,” *Journal of Consumer Research*, 43 (1), 68-85.

- Eisend, Martin (2008), "Explaining the Impact of Scarcity Appeals in Advertising: The Mediating Role of Perceptions of Susceptibility," *Journal of Advertising*, 37 (3), 33-40.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," white paper, www.afhayes.com/public/process2012.pdf
- Hong, Sung-Mook and Slavatora Faedda (1996), "Refinement of the Hong Psychological Reactance Scale," *Educational and Psychological Measurement*, 56 (1), 173-82.
- Howard, Shu and Roger Kerin (2007), "Reference Price and Scarcity Appeals and the Use of Multiple Influence Strategies in Retail Newspaper Advertising," *Social Influence*, 2 (1), 18-28.
- Inman, J. Jeffrey and Leigh McAlister (1994), "Do Coupon Expiration Dates Affect Consumer Behavior?" *Journal of Marketing Research*, 31 (3), 423-29.
- Inman, J. Jeffrey, Anil C. Peter, and Priya Raghbir (1997), "Framing the Deal: The Role of Restrictions in Accentuating Deal Value," *Journal of Consumer Research*, 24 (1), 68-79.
- Jung, Jae Min and James J. Kellaris (2004), "Cross-National Differences in Proneness to Scarcity Effects: The Moderating Roles of Familiarity, Uncertainty Avoidance, and Need for Cognitive Closure," *Psychology & Marketing*, 21 (9), 739-53.
- Kivetz, Ran (2005), "Promotion Reactance: The Role of Effort-Reward Congruity," *Journal of Consumer Research*, 31 (4), 725-36.
- Kristofferson, Kirk, Brent McFerran, Andrea C. Morales, and Darren Dahl (2017), "The Dark Side of Scarcity Promotions: How Exposure to Limited-Quantity Promotions Can Induce Aggression," *Journal of Consumer Research*, forthcoming.
- Levav, Jonathan and Rui Zhu (2009), "Seeking Freedom through Variety," *Journal of Consumer Research*, 36 (4), 600-10.
- Mukherjee, Ashesh and Seung Yun Lee (2016), "Scarcity Appeals in Advertising: The Role of Expectation of Scarcity," *Journal of Advertising*, 45 (2), 256-68.
- Parker, Jeffrey R. and Donald R. Lehmann (2011), "When Shelf-Based Scarcity Impacts Consumer Preferences," *Journal of Retailing*, 87 (2), 142-55.
- Roy, Rajat and Piyush Sharma (2015), "Scarcity Appeal in Advertising: Exploring the Moderating Roles of Need for Uniqueness and Message Framing," *Journal of Advertising*, 44 (4), 349-59.
- Simonson, Itamar (1992), "The Influence of Anticipating Regret and Responsibility on Purchase Decisions," *Journal of Consumer Research*, 19 (1), 105-18.
- Sinha, Indrajit, Rajan Chandran, and Srinivasa S. Srinivasan (1999), "Consumers Evaluation of Price and Promotional Restrictions: A Public Policy Perspective," *Journal of Public Policy and Marketing*, 18 (1), 37-51.
- Van Herpen, Erica, Rik Pieters, and Marcel Zeelenberg (2009), "When Demand Accelerates Demand: Trailing the Bandwagon," *Journal of Consumer Psychology*, 19, 302-12.

How Am I Doing? Perceived Financial Well-Being, Its Potential Antecedents, and Its Relation to Overall Well-Being

Richard Netemeyer, University of Virginia, USA

Dee Warmath, University of Wisconsin-Madison, USA

Daniel Fernandes, Catolica-Lisbon School of Business and Economics, Portugal

John G. Lynch, Jr., University of Colorado-Boulder, USA

EXTENDED ABSTRACT

The effect of financial education interventions is limited (Fernandes, Lynch, and Netemeyer 2014). Financial literacy has a very small effect on financial behavior. The effect of financial literacy is even lower among low-income groups who are the ones most in need for interventions to improve their financial health.

Financial matters are a problem for many consumers. The Pew Research Center (2015) reports that 55% of American households can replace less than one month of their income through their savings, and a 2016 PWC study found that 45% of employees stated that personal financial matters cause them the most stress in their lives; more stress than their jobs, health, or relationships combined.

Therefore, consumer researchers need to develop interventions and nudges that improve financial well-being. However, very little is known about what drives financial well-being and downstream implications posing a problem for policy makers about how to improve financial well-being of people.

The lack of an accepted definition of this construct and little systematic examination of its antecedents and consequences hampers efforts to address financial well-being and its role in general well-being. From a narrative qualitative procedure and five survey-based studies, the objectives of this research are to: 1) define the construct of financial well-being; 2) posit a framework of its antecedents and its relationship to the consequence of general well-being; 3) develop and validate a measure of financial well-being (Studies 1-3); and 4) empirically test the framework (Studies 4 and 5).

We had access to qualitative research from the CFPB (2015). They interviewed 59 adult consumers. Interviews were transcribed, sorted, coded, and then catalogued using computer-aided qualitative data analysis software. Building from existing literature and this qualitative data, we conceptualize financial well-being as two separate, but related, constructs: 1) stress related to the management of money today (current money management stress); and 2) a sense of security in one's financial future (future financial security).

Using three survey studies, we developed measures of these constructs and demonstrated predicted correlations with other constructs in the nomological net. We reduced the number of items to 10 (five for each construct of the scale).

With two additional studies (Study 4 and Study 5), we offered and supported a model of potential antecedents and consequences of current money management stress and future financial security. Importantly, we demonstrated that current money management stress and future financial security are influenced by different antecedents, but shared the same outcome of well-being. As such, the primary thesis of this paper relates to the interplay of stress about money matters today and a sense of security about a financial future in producing feelings of financial well-being and, ultimately, emotional / psychological well-being.

Current money management stress was predicted by traits and behaviors that are negative and more short-term oriented: making only minimal payments, lacking in self-control, and being materialistic. Behaviors and traits that reflect longer-term thinking, such as planning for money long-term and a willingness to take investment risk, were related to future financial security. Current money

management stress and perceived future financial security had the predicted effects on well-being. Finally, we found that within the battery of controls in the model, financial literacy showed a small negative partial effect on perceived future financial security, and had no effect on money management stress. This finding is consistent with existing literature on the lack of relationship between financial knowledge and financial outcomes.

The measures we developed are reliable, valid, and brief. These measures could be used by a variety of agencies and firms specializing in savings and retirement to gauge how consumers are feeling about their current and future financial situations, relate these measures to what consumers are actually doing, and then advise those who feel stressed or insecure about their financial future. The constructs and measures developed here would allow prioritization of interventions based on the relative opportunity with the present and future dimensions of financial well-being.

The results raise the issue of whether interventions aimed at reducing materialism and improving self-control would reduce current money management stress. In addition, whether training in planning for money, self-efficacy / ability, and willingness to take investment risk would enhance future financial security. The answer is "possibly". Though materialism is a trait/value likely internalized early in life (Richins 2004, 2011), there is evidence that some traits like self-control are malleable into early adulthood (Moffitt et al. 2011). Thus, school-based training / interventions designed to increase self-control with money may be worthwhile (Pathak, Holmes, and Zimmerman 2011). Similarly, financial skill, willingness to take investment risks, and planning for money are skills that can be acquired (Hader et al. 2013; Perry and Morris 2005).

Financial education efforts in these domains may be at least as effective, if not more so, than acquiring content knowledge about interest rates, bonds, etc. (Fernandes et al. 2014). Thus, designing and testing programs to increase financial skill, willingness to take investment risks, and planning for money leading to intended changes in future financial security seem to be worthwhile undertakings for academics and policymakers alike (CFPB 2015).

The measures developed in the present research – future financial security and money management stress collectively explained 33% (Study 4) and 39% (Study 5) of the variance in well-being. Recall that prior to our studies, we found little evidence examining the financial well-being / psychological well-being linkage. We also observe that the effect of current money management stress on well-being is stronger for low-income individuals, and that the effect of future financial security is stronger for younger individuals. Therefore, specific interventions aimed at current money management for low-income individuals or future financial security for younger individuals are more promising at improving the well-being of these individuals.

This study represents only an initial investigation of what traits, behaviors, and circumstances produce higher or lower levels of well-being and the implications of financial well-being for overall well-being. It is our intent that the concepts and findings presented here will instigate additional work and ultimately lead to a working model driving policy and program decisions.

REFERENCES

- Consumer Financial Protection Bureau (CFPB) (2015), "Financial Well-Being: The Goal of Financial Education," <http://www.consumerfinance.gov/reports/financial-well-being/>
- Fernandes, Daniel, John G. Lynch, and Richard G. Netemeyer (2014), "Financial Literacy, Financial Education, and Downstream Financial Behaviors," *Management Science*, 60 (8), 1861-1883.
- Hader, Liat, Sanjay Sood, and Craig R. Fox (2013), "Subjective Knowledge in Consumer Financial Decisions," *Journal of Marketing Research*, 50 (3), 303-316.
- Moffitt, Terrie E., Louise Arseneault, Daniel Belsky, Nigel Dickson, Robert J. Hancox, HonaLee Harrington, Renate Houts, Richie Poulton, Brent W. Roberts, Stephen Ross, Malcolm R. Sears, W. Murray Thomson, and Avshalom Caspi (2011), "A Gradient of Childhood Self-Control Predicts Health, Wealth, and Public Safety," *Proceedings of the National Academy of Sciences*, 108 (7), 2693-2698.
- Pathak, Payal, Jamie Holmes, and Jamie Zimmerman (2011), Accelerating Financial Capability Among Youth: Nudging New Thinking. New America Foundation. <http://www.newamerica.net/sites/newamerica.net/files/policydocs/AcceleratingFinancialCapabilityamongYouth.pdf>.
- Perry, Vanessa G., and Marlene D. Morris (2005), "Who is in Control?: The Role of Self-Perception, Knowledge, and Income in Explaining Consumer Financial Behavior," *Journal of Consumer Affairs*, 39 (2), 299-213.
- Pew Research Center 2015. The Precarious State of Family Balance Sheets. http://www.pewtrusts.org/~media/Assets/2015/01/financialsecurityM_Balance_Sheet_Report.pdf
- PwC (2016). Employee Financial Wellness Survey. <https://www.pwc.com/us/en/private-company-services/publications/assets/pwc-2016-employee-wellness-survey.pdf>.
- Richins, Marsha (2004), "The Material Values Scale: Measurement Properties and Development of a Short Form," *Journal of Consumer Research*, 31 (June), 209-219.
- Richins, Marsha (2011), "Materialism, Transformation Expectations, and Spending: Implications for Credit Use," *Journal of Public Policy & Marketing*, 30 (2), 141-156.

Unconventional Consumption Methods and Enjoyment of Things Consumed: Recapturing The “First Time” Experience

Ed O’Brien, University of Chicago, USA
Robert Smith, Ohio State University, USA

EXTENDED ABSTRACT

Jorge Spielman’s dinner guests had an idea: to honor their host, himself a blind clergyman, they dined blindfolded. In doing so they found that the same foods suddenly tasted better, as if depriving their sight heightened other senses. After many gatherings to similar effects, Spielman was inspired to open the world’s first “pitch black” restaurant in his hometown of Zürich, where patrons must eat in complete darkness. The restaurant has garnered a wealth of praise and profit since opening in 1999, and many eateries around the globe now imitate Spielman’s idea with similar success (Forbes 2015).

Is there something special about darkness that enhances gastronomic pleasures? Perhaps. However, we explore a broader feature that might more parsimoniously explain this phenomenon: the mere fact that dining in the dark is strange. We find that consuming an object via unusual means can boost enjoyment. Beyond darkness per se, many familiar experiences might be revitalized (at least temporarily) simply by consuming them in some unconventional way.

We suggest that unconventional methods invite a “first time” perspective on the consumption object; even if a person has eaten a particular dish before, the overall event of eating it *like this* likely feels unprecedented. Accordingly, perceived novelty leads people to attend more closely, engage more fully, and generally immerse themselves into an experience (Redden 2008; Sansone et al. 1992), and immersion can facilitate enjoyment (Brown and Ryan 2003; Csikszentmihalyi 1990; Killingsworth and Gilbert 2010). People commonly lament the inability to recapture “first time” experiences with now-familiar things, but perhaps consuming them in new ways can partly help.

We investigated this possibility by asking people to eat a snack (Experiment 1), consume a drink (Experiment 2), and watch a video (Experiment 3) by either normal or unusual means. We hypothesized that, when the consumption object is familiar and the consumption method is new, unconventionality may revitalize enjoyment for the thing consumed. Throughout, we also tested for various mediation and moderation evidence for the driving role of “first time” immersive feelings rather than something about individual consumption methods (e.g., an unusual method may simply be an objectively superior way to consume). To the extent that the same unconventional method no longer produces feelings of a “first time,” the boost should disappear (Experiments 1-2). Furthermore, unconventional methods should be especially beneficial after people have adapted to the consumption object (Experiments 2-3). Finally, not all unusual consumption methods should enhance enjoyment. Because we hypothesize that unconventionality may boost enjoyment by increasing immersion when it is otherwise waning, unusual methods that disrupt immersion should not boost the experience (Experiment 3). We seek to establish a general effect of unconventionality, highlighting when and how unconventional consumption methods could be most helpful.

Experiment 1: Eating Popcorn with Chopsticks

In Experiment 1, participants were asked to repeatedly eat popcorn using their hands (a conventional way to eat popcorn) or chopsticks (an unconventional way to eat popcorn). All of these participants have likely eaten popcorn before, but presumably very few participants have eaten this familiar snack using chopsticks. Our hy-

pothesis was three-fold: (i.) chopsticks may enhance enjoyment of the food; and if so, this should be (ii.) mediated by corresponding boosts in immersion akin to a revitalized “first time” experience, and also (iii.) moderated by time, such that enjoyment and immersion should wane once using chopsticks is no longer novel.

Method

Sixty-eight adult participants were randomly assigned to one of two between-subjects conditions. The study was ostensibly about snacking speed and getting people to eat more slowly. To allegedly achieve this goal, “traditional” participants were instructed to eat 10 kernels of popcorn one-at-a-time using their hands. This marked a single “trial,” and they completed two trials in total. “Unconventional” participants followed identical instructions but instead had to use chopsticks to eat for both trials. This cover story and manipulation helped disguise the hypothesis while also accounting for various incidental features (e.g., eating by the handful in one condition but not in the other).

After eating the popcorn in each trial, participants indicated their experienced enjoyment for the popcorn by rating how *enjoyable*, *positive*, and *delicious* it tasted, and how much they *savored* and *liked* it, each on individual scales anchored at 1 (*not at all*) to 9 (*extremely*). These dependent variables were collapsed into an enjoyment scale ($\alpha=.91$). Participants also reported their immersion during eating by rating how much the task led them to *immerse* in the experience and *focus* on the food, and how much it *intensified* the flavors, on the same scale. These mediator items were collapsed into an immersion scale ($\alpha=.84$).

Results

A Repeated Measures GLM with Condition (traditional, unconventional) as a between-subjects factor and Time (Trial 1 and Trial 2 rating scales) as a within-subjects factor revealed no main effect of Condition, $F(1, 66)=1.82, p=.182, \eta^2=.03$, or Time, $F(1, 66)=2.16, p=.146, \eta^2=.03$; on enjoyment, but did reveal the hypothesized significant interaction between these variables, $F(1, 66)=4.88, p=.031, \eta^2=.07$. Pairwise comparisons reveal that unconventionality indeed enhanced enjoyment at Trial 1: the same popcorn tasted significantly better when eaten one-at-a-time using chopsticks ($M=7.23, SD=1.08$) versus one-at-a-time using one’s hands ($M=6.45, SD=1.45$), $F(1, 66)=6.25, p=.015, d=.61$. In contrast, these boosts in enjoyment *disappeared* at Trial 2, at which point the eating experience returned to baseline: the popcorn was equally enjoyable regardless of whether people ate it using chopsticks ($M=6.57, SD=1.63$) or using hands ($M=6.59, SD=1.24$), $F(1, 66)=.004, p=.950, d=.01$. This suggests that chopsticks enhance enjoyment due to their novelty. Other accounts (e.g., if chopsticks encourage slower eating, provide effort justification, or otherwise reflect an inherently superior way of eating popcorn) predict that these initial boosts should remain. Results on immersion followed a similar pattern and mediated the enjoyment boosts at Trial 1, (Effect=.53, $SE=.22, 95\% CI_{bootstrapping} [.16, 1.00]$; Hayes 2013).

Experiment 1 demonstrates that unconventional consumption methods can boost enjoyment by facilitating immersion. Otherwise identical popcorn tasted better when eaten with chopsticks than with hands. Moderation by time and mediation by immersion both support the proposed framework: chopsticks enhance enjoyment be-

cause they provide an unusual and therefore immersive method of consumption and not because they are inherently superior in some way. As the unconventionality of chopsticks wanes, so goes their influence on hedonic experience. A post-test revealed an affective forecasting error such that only 16% of participants predicted enjoyment to be higher for popcorn consumed with chopsticks than by hand.

Experiment 2: Sipping Water in Unconventional Ways

In Experiment 2, participants were asked to generate their own ideas for unusual consumption methods so as to generalize the effects beyond any one method concocted by an experimenter. We also sought to further highlight the role of “first time” feelings in driving the boost. As proposed, unconventionality should enhance enjoyment to the extent that it invites an immersive experience. Accordingly, if people generate their own lists of unusual methods, it is unlikely that each and every idea will enhance enjoyment relative to conventional consumption, but our hypothesis suggests that rotating through them (i.e., having many individual “first time” experiences rather than relying on a single method) should maximize enjoyment over time. This further serves our goal of testing *when* unconventional methods should be most effective: rather than any one method being objectively better, we seek to highlight the critical role of “first time” feelings.

Method

Three hundred participants were recruited via Mturk. Participants grabbed a bottle of water and then listed five unique unconventional ways in which they had never consumed water before, with the restrictions that the ways could not objectively change the water itself (e.g., no adding flavors) and that they should be able and willing to actually drink using each method if instructed to do so. Sample responses include “Use a funnel and drink from tap” and “Drink from a spoon”. Participants were then randomly assigned to condition and sipped and rated the water five times. “Traditional” participants sipped the water in the normal way they usually drink for each of the five sips. “Unconventional-variety” participants sipped the water using different methods they listed, which were piped back one at a time at random. “Unconventional-repetition” participants sipped the water using one of the methods they listed which was piped at random for the first sip and then piped again repeatedly for the remaining sips. After each sip, all participants rated their enjoyment for the water on a similar scale as in Experiment 1 ($\alpha=.97$).

Results

A Repeated Measures GLM with Condition (traditional, unconventional-variety, unconventional-repetition) as a between-subjects factor and Time (Sip 1-5 rating scales) as a within-subjects factor revealed a main effect of Condition, $F(2, 297)=6.68, p=.001, \eta^2=.04$, a main effect of Time such that the water grew less enjoyable across sips, $F(2, 297)=53.64, p<.001, \eta^2=.15$, and the hypothesized interaction, $F(2, 297)=11.37, p<.001, \eta^2=.07$.

As can be seen, the “unconventional-variety” condition enhanced enjoyment for all but the initial sip: for each subsequent sip, participants who had many first-time experiences felt sustained enjoyment throughout the taste test, significantly more than those who drank normally each time ($ts \geq 2.00, ps \leq .046, ds \geq .29$) and those who drank in the same unconventional way each time ($ts \geq 2.60, ps \leq .010, ds \geq .34$). Likewise, repeating the same unconventional method made the water no more enjoyable than drinking it normally for each of these subsequent sips ($ts \leq .85, ps \geq .395, ds \leq .13$).

These findings emphasize the driving role of unconventionality in boosting enjoyment, beyond any one specific method per se. Second, these findings reveal that unusual methods are especially useful

for breaking hedonic adaptation when people grow to take an entity for granted. Otherwise identical water remained highly enjoyable to the extent that the *way* people consumed it remained unconventional.

Experiment 3: Watching a Video Anew

Experiment 3 further examined an important and intuitive boundary condition: not all unconventional methods enhance enjoyment. Participants were asked to watch the same video repeatedly. At the final exposure, some watched the video as they had for preceding exposures. Others watched this repetition in one of two “first time” unconventional ways, one of which impeded immersion (watching upside-down). While novel consumption methods should generally boost enjoyment by boosting immersion, we hypothesized that this form of unconventionality would not allow people to immerse into the experience, and so these participants may not enjoy the video more than normal.

Method

Three hundred participants were recruited via Mturk. Participants watched an exciting video of a motorcycle ride three times, and rated their enjoyment after each viewing via a similar enjoyment scale and immersion scale as previous experiments. Before the third viewing, participants were assigned to condition. “Traditional” participants simply continued this process again for the third viewing. “Unconventional-immersive” participants were told to watch using “hand goggles”—forming circles with their thumbs and index fingers around their eyes and using them to track the ride (e.g., to bob their heads left or right when the driver turned left or right). “Unconventional-disruptive” participants also watched the video in a new way, but one that should inhibit immersion: the video was flipped upside-down.

Results

A Repeated Measures GLM analyses with Condition as a between-subjects factor and Time (View 1-3 rating scales) as a within-subjects factor revealed no main effect of Condition on enjoyment, $F(2, 297)=1.04, p=.355, \eta^2=.01$, a main effect of Time such that the video grew less enjoyable across exposures, $F(1, 297)=17.33, p<.001, \eta^2=.06$, and the hypothesized interaction, $F(2, 297)=9.30, p<.001, \eta^2=.06$.

Pairwise comparisons reveal a significant effect at the third viewing where the manipulation took place, $F(2, 297)=6.39, p=.002, \eta^2=.04$. Unconventional participants who watched via hand goggles enjoyed the video significantly more ($M=5.75, SD=2.21$) than participants who watched the same video normally ($M=4.99, SD=2.50$), $t(297)=2.22, p=.028, d=.32$. Critically, not all unconventionality did the trick: unconventionality involving watching upside-down ($M=4.58, SD=2.41$) did *not* boost enjoyment versus watching normally, $t(297)=1.23, p=.218, d=.17$. Results on immersion revealed a similar pattern, and mediated the enjoyment boosts at Trial 3, (Effect=.37, $SE=.13, 95\% CI_{bootstrapping} [.12, .61]$; Hayes 2014).

Experiment 3 replicates and extends our general framework. Again, boosts in enjoyment derive from boosts in immersion into otherwise familiar experiences, and these boosts in immersion can be gleaned from unusual consumption methods. But accordingly, consumption methods that are unconventional but *disruptive* for immersion often fail to boost enjoyment as intended.

General Discussion

We find converging evidence across various domains of experience, direct effects, moderation analyses, mediation analyses, and control comparisons, all highlighting the same basic effect: otherwise identical entities can become more enjoyable merely when con-

sumed in an unconventional way. A familiar food tasted better when people used chopsticks to eat it (Experiment 1); a familiar drink tasted better when people took sips in continually new ways (Experiment 2); and a familiar video was more enjoyable when people used hand goggles to re-watch it (Experiment 3). Importantly, however, when unconventional methods grew dull (Experiment 1, Experiment 2) or inhibited immersion (Experiment 3), these boosts disappeared. This should not have been the case if unusual methods per se were objectively superior in some way, which would obviously explain why they enhanced enjoyment. Rather, the current experiments generally suggest that such boosts may reflect rejuvenated feelings of a "first time" consumption experience.

Practical concerns

The most important implication pertains to how these findings bear on the psychology of waste. Waste is a growing societal concern, around the globe and in all areas of life; see recent calls by World Bank (2012) and the OECD (2014) for the need to better understand how to combat these increasingly wasteful trends. When something declines in enjoyment, people notoriously assume that "it" is the problem and therefore abandon the entity for a new alternative (Campbell et al. 2014; Herrnstein and Prelec 1991). Clearly more research is needed to tackle these diverse trends, but the current studies reveal an overarching possible fix. Before intuitively (and perhaps mistakenly) reverting to a substitution strategy, simply changing the way "it" is experienced could reduce cost and prolong value. Beyond waste, the current findings more generally suggest an easy, cheap, and potentially effective way to better enjoy the things we consume: using unconventional methods, but not *overusing* them, may serve to boost enjoyment and combat hedonic adaptation.

Outstanding questions

Beyond these broader issues, the idea of unconventional consumption raises many fruitful avenues for research. What are the parameters of unconventionality? Experiment 3 highlights how methods that inhibit immersion can backfire, so it would be valuable to identify the most important sources of inhibition. Experiment 1 suggests that some boosts could pass very quickly, so future research should also identify how and why feelings of unconventionality can be maintained.

Finally, the current findings may parsimoniously explain existing wellbeing-boosting factors, which largely appear throughout the literature as isolated strategies and effects (see Quoidbach, Mikolajczak, & Gross 2015). If such manipulations invite people to behave atypically (which they often do, see Quoidbach et al. 2015 for a review), many factors touted to boost enjoyment might largely reflect the unconventionality of the method. Until these possibilities are tested, consider using the wrong utensils at tonight's meal rather than splurging at a trendy "dark" restaurant—it may taste just as delicious.

REFERENCES

- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848.
- Campbell, T., O'Brien, E., Van Boven, L., Schwarz, N., & Ubel, P. A. (2014). Too much experience: A desensitization bias in emotional perspective taking. *Journal of Personality and Social Psychology, 106*, 272-285.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York, NY: Harper Perennial.
- Forbes (2015). *Dining in the dark: Basel's Blindekuh Restaurant*. Retrieved from: <http://www.forbes.com/sites/karlaalindahao/2015/07/30/dining-in-the-dark-at-blindekuh-basel-switzerland-2015/>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Herrnstein, R. J., & Prelec, D. (1991). Melioration: A theory of distributed choice. *The Journal of Economic Perspectives, 5*, 137-156.
- Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science, 330*, 932.
- OECD (2014). *Society at a Glance 2014: OECD Social Indicators*. OECD Publishing. http://dx.doi.org/10.1787/soc_glance-2014-en
- Quoidbach, J., Mikolajczak, M., & Gross, J. J. (2015). Positive interventions: An emotion regulation perspective. *Psychological Bulletin, 141*, 655-693.
- Redden, J. P. (2008). Reducing satiation: The role of categorization level. *Journal of Consumer Research, 34*, 624-634.
- Sansone, C., Weir, C., Harpster, L., & Morgan, C. (1992). Once a boring task, always a boring task? Interest as a self-regulatory mechanism. *Journal of Personality and Social Psychology, 63*, 379-390.
- Schumann, D. W., Petty, R. E., & Clemons, S. (1990). Predicting the effectiveness of different strategies of advertising variation: A test of the repetition-variation hypotheses. *Journal of Consumer Research, 17*, 192-202.
- World Bank (2012). *What a waste: A global review of solid waste management*. Washington, DC.

European Consumers and their Persistent Resilience in the Face of Austerity

Deirdre M. O'Loughlin, University of Limerick, Ireland

Morven G. McEachern, University of Huddersfield, UK

Isabelle T. Szmigin, University of Birmingham, UK

Kalipso Karantinou, Athens University of Economics and Business, Greece

Belem Barbosa, University of Aveiro, Portugal

Maria Eugenia Fernández Moya, CUNEF, Spain

Grigorio Lamprinakos, Athens University of Economics and Business, Greece

EXTENDED ABSTRACT

While much has been written on austerity from political and economic perspectives (e.g. Blyth 2013), there has been limited marketing attention regarding the effects of austerity on consumers. Even less focus has been directed at long-term and proactive responses to austerity which, we argue, can be understood via the concept of persistent resilience (Golubchikov 2011). This study explores the nature of this enduring and dynamic form of resilience manifested by consumers across EU countries affected by austerity. Drawing on recent spatial studies, we contribute to academic literature by advancing our understanding of the concept of persistent resilience and by distinguishing its underlying characteristics within the consumption context of EU austerity.

There is an extensive literature on resilience and its varying definitions are represented from many areas including psychology (e.g. Lazarus 1993), sociology (e.g. Evans and Reid 2013), consumer research (e.g. Ball and Lamberton 2015); disaster studies (e.g. Baker and Baker 2014) and ecology (e.g. Adger 2000). Recent conceptualisations of resilience are premised not upon a one-off event from which individuals bounce back, but rather on their ability to continually re-emerge from on-going adversity, for which one must be continuously prepared and increasingly respond to (Neocleous 2012; Evans and Reid 2013). Thus, the growing importance of a sustained, flexible and dynamic response to the enduring challenges of modern society paves the way for a more relevant form of resilience to explore in our austerity context - *persistent resilience*.

Defined as "a form of engagement with more enduring, lasting challenges and pressures...that underlie everyday life", persistent resilience allows for a proactive and continuous renegotiation of everyday life practices and relationships (Golubchikov 2011, 4). Persistent resilience was conceived within spatial studies in response to the pressures of modern society but also as a coping strategy over prolonged periods of time. More recent studies have applied persistent resilience to explore how households and communities "develop responses to more long-term processes, such as the changing nature of employment and ... altering state policies" (Andres and Round 2015, 676). The associated restructuring of common, everyday practices and relations may, in turn, form the basis for more significant transformation and even permanent change at both an individual and societal level (De Verteuil and Golubchikov 2016). Building upon this spatial research, we propose that the ongoing phenomenon of austerity in affected EU states necessitates the activation of persistent resilience and we explore its specific nature and characteristics within an austerity consumption context, deliberately including in our study countries that have experienced varying degrees of austerity.

Our cross cultural interpretive study was conducted by a team of European researchers across six countries. A purposive sample (Patton, 1990) of 38 people across a range of demographics e.g. age (ranging from 18 to 65), gender (14 male and 24 female), life-stage, profession and income, including unemployed people, were interviewed from Ireland, UK, Spain, Portugal, Italy and Greece. Face to face in-depth interviews were chosen as an appropriate form of social

enquiry (Denzin and Lincoln 1994; Miles and Huberman 1994) to explore the effects of austerity over a lengthy period, in terms of changes to everyday consumption practices and experiences, both prior to and during austerity. The interviews ranged in length from 45 minutes to 2 hours and reached a deep level of richness and insight. Following transcription and, where necessary, translation, cycles of coding, cross-checking and theoretical review (Strauss and Corbin 1990; Clark and Braun 2013) were followed by all research team members. Using a thematic approach, three distinct themes of *self-efficacy*, *creativity* and *community* relating to persistent resilience were identified.

Persistent resilience was demonstrated through an active renegotiation of and continuous adaptation to everyday life challenges as well as in a process of transformation and long-term adjustment, often leading to a renewed sense of wellbeing, sustainable values and reciprocal goals. *Self-efficacy* was identified by participants' ability to persist, adapt and transform, often facilitated through a mind-set change. Manifested through upskilling, working several jobs and enterprise formation, self-efficacy was seen as part of a process of flexible adaptation to the risky austerity context. As part of this transformation, the restructuring of everyday practices was also undertaken through numerous creative means, reflected by the theme *creativity*, involving creative thinking, making and doing, and resourceful budgeting to demonstrate a persistent creative response to the financial challenges of austerity. Captured by the theme *community*, persistent resilience was further enabled through drawing on key relationships with family, friends and colleagues to share the burden of financial uncertainty and, together, increase strength and resilience. Community was also reflected through deep solidarity towards others at a localized level and also broader community and national levels. Collectively, the themes of self-efficacy, creativity and community, underpinning persistent resilience, reflect a wide range of proactive, continuous and sustained responses to the on-going challenges of austerity.

As European consumers continue to navigate long-term austerity, our study presents rich and timely insights into the nature of their persistent resilience and how this differs across culture and historical context. Reflecting the dynamic, enduring and proactive nature of this resilience, our analysis identifies a wide range of self-efficacious, creative and community-based strategies involving adapting to, persisting with and transforming consumers' everyday practices and social relations. Persistent resilience in our austerity context involves an enduring self-belief and positivity to creatively embrace continuous change and social reciprocity at personal, local and societal levels. While the economic and social pressures of austerity may, in some instances, still bring about marginalization, exclusion and displacement, persistent resilience provides the armor to continuously and creatively transform, and, thus, mitigate its effects. Regarding addressing potential limitations of the study, the size of subgroups within the cross-cultural sample could be increased by conducting larger scale multi-country qualitative research comparing differing levels of resilience. Future research should focus on investigating

how persistent resilience could be nurtured individually and collectively through collaboration between governments and local community bodies.

REFERENCES

- Adger, Neil (2000), "Social and Ecological Resilience: Are They Related", *Progress in Human Geography*, 24 (3), 347-64.
- Andres, Lauren and John Round (2015), "The Role of 'Persistent Resilience' within Everyday Life and Polity: Households Coping with Marginality within the 'Big Society'", *Environment and Planning A*, 47, (3), 676 – 90.
- Baker, Stacey, M. and Courtney N. Baker (2014), "Narratives of Cultural Trauma (and Resilience): Collective Negotiation of Material Wellbeing in Disaster Recovery", in *NA - Advances in Consumer Research*, 42, eds. June Cotte and Stacy Wood, Duluth, MN: Association for Consumer Research, 7-8.
- Ball, Joan and Cait Lamberton (2015), "Rising Every Time They Fall: The Importance and Determinants of Consumer Resilience", in *NA- Advances in Consumer Research*, 43, eds. Kristin Diehl and Carolyn Yoon, Duluth, MN :Association for Consumer Research, 192-93.
- Blyth Mark (2013), *Austerity: The History of a Dangerous Ide.*, New York: Oxford University Press.
- Clarke, Victorial and Virginia Braun (2013) "Teaching Thematic Analysis: Overcoming Challenges and Developing Strategies for Effective Learning", *The Psychologist*, 26 (2), 120-23.
- Denzin, Norman K., and Yvonna S. Lincoln (1994), *Handbook of Qualitative Research*. Thousand Oaks: Sage.
- DeVerteuil, Geoff & Oleg Golubchikov (2016), "Can Resilience be Redeemed?", *City*, 20 (1), 143-51.
- Evans, Brad and Julian Reid (2013), "Dangerously Exposed: The Life and Death of the Resilient Subject", *Resilience, International Policies, Practices and Discourses*, 1 (2), 83-98.
- Golubchikov, Oleg (2011) "Persistent Resilience: Coping with the Mundane Pressures of Social or Spatial Exclusion: Introduction to a Special Session." Paper presented at RGS-IBG Annual International Conference, 2 September 2011. London.
- Lazarus, Richard. S. (1993), "From Psychological Stress to the Emotions, *A History of Changing Outlooks*", *Annual Review of Psychology*, 44 (1), 1-21.
- Miles, Matthew B. and A. Michael Huberman (1994), *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks: Sage.
- Neocleous, Mark (2012), "Don't Be Scared, Be Prepared" Trauma-Anxiety-Resilience", *Alternatives*, 37 (3), 188-98.
- Patton, Michael Quinn (1990), *Qualitative Evaluation and Research Methods*. Thousand Oaks: Sage.
- Strauss, Anselm, and Juliet M. Corbin (1990), *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Thousand Oaks: Sage.

Moral Consumers and the Moral Economy

Mansour Omeira, University of Neuchâtel, Switzerland

Valéry Bezençon, University of Neuchâtel, Switzerland

EXTENDED ABSTRACT

Moral consumers are typically understood as those individuals who engage in moral (ethical) consumption (Komarova Loureiro et al. 2016). In the current paper, we develop theoretical propositions regarding moral consumers and their interface with the moral economy. After considering two aspects of moral persons, as moral agents and as moral subjects, we identify a first pathway of the moral consumer – moral economy interface, from consumers to the economy. We then argue that moral consumers include both natural and legal persons, and identify a second pathway of the interface, from the economy to consumers, before concluding with research implications.

Consumers are moral, in the sense of having moral personhood, independently of whether their consumption is deemed moral or immoral. Someone with moral personhood can be seen from two aspects: as moral agent and as moral subject (Gallagher 2007). As moral agents, consumers can take responsibility for their actions. As moral subjects or subjects of moral worth, they have rights and are owed respect. Is every moral agent a moral subject, and is every moral subject a moral agent? Some moral agents are not moral subjects. Humans forced into slavery conditions are moral agents who are denied the status of moral subjects. Some moral subjects, like biodiversity or culture, are not moral agents. Moral subjects who are also moral agents can respond to moral transgressions (Xie et al. 2014), such as product harm crises (Lu et al. 2016), through retaliation.

- P1:** *Ethical (moral) marketing involves the recognition that consumers are both moral agents and moral subjects*
- P2:** *Moral transgressions entail undermining the status of one or more beings as moral subject(s)*
- P3:** *Moral agency can be exercised over oneself (e.g. ethical consumption) or over others (e.g. retaliation)*

Moral consumers are moral; they are also consumers. We can consider different aspects or dimensions of consumption and other economic activities, such as the ecological, social, political, or cultural. Although analysis entails separating the different aspects, they are inseparable in the real world. Assessing the morality of the activity therefore requires considering its different aspects. For example, the ecological aspect can be captured in measures such as the ecological footprint. Addressing the social aspect can involve investigating the social practices associated with consumption. The cultural aspect of consumption can address its relation to value(s) (Graeber 2001), which are socially constructed. It enables consideration of the struggle between market economy and moral economy from a(n) (inter) subjective perspective, as a value conflict that may take the form of psychological tension in the individual (Burroughs and Rindfleisch 2002), or of political conflict in society. More importantly, it permits investigating how such conflict is managed (Miller 2008).

- P4:** *The morality of consumption, and of the economy more generally, is multidimensional*

- P5:** *The difference between market economy and moral economy relates to the value(s) under consideration*

- P6:** *The struggle between market economy and moral economy relates to value conflict and can be investigated as such*

What kind of persons are moral consumers? The typical focus is on the final consumption of individuals (natural persons). From a macro perspective, final consumption is undertaken by institutional units such as households or the government (European Commission et al. 2009). In addition to final consumption, intermediate consumption during production can be investigated. Can we consider legal entities as moral persons? There has been a growing recognition that corporations have a mind, and alongside it the notion of corporate crime has increasingly featured in legislation (Tombs 1999).

- P7:** *Both final and intermediate consumers are moral consumers*

- P8:** *Moral personhood encompasses both natural and legal persons*

We have already noted that consumers can respond to the moral transgressions of enterprises. Yet such moral transgressions can also transform consumer moral norms. A prominent example relates to the 2007 financial crisis, which came as people engaged in unethical behavior to receive bigger pay (Lewis et al. 2010). The pay structure focused on bonuses, which were unequally distributed (Crotty 2009). A bonus structure means that a certain pay is contingent on the achievement of set goals; such goal-setting increases the likelihood of engaging in unethical behavior (Schweitzer et al. 2004). A combination of income and status inequality and variable pay is likely to increase moral transgressions made for higher monetary gain. The highly visible status rewards and non-punishment of such perceived transgressions generates a social norm that challenges existing moral norms, and may eventually lead to habit change. Our approach provides a new interpretation of the finding that consumers assign less blame to people who morally transgressed if the transgression was to gain a large enough sum of money (Xie et al. 2014). That is, the outcome of the value conflict within a person can be tipped by the changing incentive structures and related evolution in social norms around her.

- P9:** *Repeated exposure to the non-punishment of perceived moral transgressions modifies moral norms*

- P10:** *Changes in the incentive structures of the market economy can alter how consumers resolve their value conflicts*

Our investigation into what it means to be a moral consumer has broad implications for furthering the research agenda on morality in and around markets. When are consumers not moral agents? The delimitations are important, including for accountability purposes in cases of consumer rage (Fullerton and Punj 2004). Who (or what) is or is not to be considered a moral subject? Shedding light on the

matter has major implications, including about whether to eat animals (Loughnan et al. 2014), or to protect cultural heritage (Vlasic and Turku 2016). Our analysis has also identified opportunities for research into the morality of corporate consumers, such as how consumers treat corporations as moral subjects. Taking corporations as moral agents, interesting questions include moral disengagement (Eriksson and Svensson 2016), risk-taking and the diffusion of responsibility (Wallach et al. 1964), and whistle-blowing (Dozier and Miceli 1985).

REFERENCES

- Burroughs, James E. and Aric Rindfleisch (2002), "Materialism and Well-Being: A Conflicting Values Perspective," *Journal of Consumer Research*, 29(3), 348-370.
- Crotty, James (2009). "Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'New Financial Architecture'," *Cambridge Journal of Economics*, 33(4), 563-580.
- Dozier, Janelle Brinker and Maria P. Miceli (1985), "Potential Predictors of Whistle-Blowing: A Prosocial Behavior Perspective," *Academy of Management Review*, 10(4), 823-836.
- Eriksson, David and Göran Svensson (2016), "The Process of Responsibility, Decoupling Point, and Disengagement of Moral and Social Responsibility in Supply Chains: Empirical Findings and Prescriptive Thoughts," *Journal of Business Ethics*, 134(2), 281-298.
- European Commission, International Monetary Fund, United Nations, Organisation for Economic Co-operation and Development, and World Bank (2009), *System of National Accounts 2008*, New York.
- Fullerton, R. A. and G. Punj (2004), "Repercussions of Promoting an Ideology of Consumption: Consumer Misbehavior," *Journal of Business Research*, 57(11), 1239-1249.
- Gallagher, Shaun (2007), "Moral Agency, Self-Consciousness, and Practical Wisdom," *Journal of Consciousness Studies*, 14(5-6), 199-223.
- Graeber, David (2001), *Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams*, New York: Palgrave.
- Komarova Loureiro, Yuliya, Julia Bayuk, Stefanie M. Tignor, Gergana Y. Nenkov, Sara Baskentli, and Dave Webb (2016), "The Case for Moral Consumption: Examining and Expanding the Domain of Moral Behavior to Promote Individual and Collective Well-Being," *Journal of Public Policy & Marketing*, 35(2), 305-322.
- Lewis, Victor, Kenneth D. Kay, Chandrika Kelso, and James Larson (2010), "Was the 2008 Financial Crisis Caused by a Lack of Corporate Ethics?" *Global Journal of Business Research*, 4(2), 77-84.
- Loughnan, Steve, Brock Bastian, and Nick Haslam (2014), "The Psychology of Eating Animals," *Current Directions in Psychological Science*, 23(2), 104-108.
- Lu, Dong, Yide Liu, Hongfeng Zhang, and Ivan K. W. Lai (2016), "The Ethical Judgment and Moral Reaction to the Product-Harm Crisis: Theoretical Model and Empirical Research," *Sustainability*, 8(7), 626.
- Miller, Daniel (2008), "The Uses of Value," *Geoforum* 39(3): 1122-1132.
- Schweitzer Maurice E., Lisa Ordóñez, and Bambi Douma (2004), "Goal Setting as a Motivator of Unethical Behavior," *Academy of Management Journal*, 47(3), 422-432.
- Tombs, Steve (1999), "Health and Safety Crimes: (In)visibility and the Problems of 'Knowing'," in *Invisible Crimes: Their Victims and their Regulation*, ed. Pamela Davies, Peter Francis, and Victor Jupp, London: Macmillan Press, 77-104.
- Vlasic, Mark and Helga Turku (2016), "'Blood Antiquities' Protecting Cultural Heritage Beyond Criminalization," *Journal of International Criminal Justice*, 14(5), 1175-1197.
- Wallach, Michael A., Nathan Kogan, and Daryl J. Bem (1964), "Diffusion of Responsibility and Level of Risk Taking in Groups," *The Journal of Abnormal and Social Psychology*, 68(3), 263.
- Xie, Wenwen, Boya Yu, Xinyue Zhou, Constantine Sedikides, and Kathleen Vohs (2014), "Money, Moral Transgressions, and Blame," *Journal of Consumer Psychology*, 24(3), 299-306.

Similarity Focus and Support for Redistribution

Nailya Ordabayeva, Boston College, USA

Daniel Fernances, Católica-Lisbon School of Business and Economics, Portugal

EXTENDED ABSTRACT

The inequality of wealth in the US has reached record high levels, which has sparked a debate about the role of inequality in the economic instability and the erosion of the middle class (Piketty 2011). But despite wide agreement that wealth inequality in the US is too high, support for redistributive policies has not been widespread, and there has been much debate about the effectiveness and the optimal level of redistribution (Jost and Hunyady 2005). Preferences for redistribution stem from individuals' distinct beliefs about the fairness of unequal outcomes (Bénabou and Tirole 2006). Resistance to redistribution is driven, to a significant extent, by individuals' belief that the unequal distribution of outcomes is fair because it results from natural differences in individuals' dispositional inputs such as hard work and effort (Alesina and Angeletos 2005). Whereas what drives support for, and resistance to, redistribution has been abundantly researched, little work has examined the strategies that can effectively shift redistribution support (Brown-Iannuzzi et al. 2014; Chow and Galak 2012).

The present research examines a new strategy to boost redistribution support – focus on similarity (vs. dissimilarity). We build on prior studies which showed that prompting individuals to focus on similarity (vs. dissimilarity) in an unrelated task (e.g., while evaluating pictures) can increase their perception of similarity of stimuli in subsequent judgments (e.g., the height of Mount Everest in relation to a numeric anchor, Mussweiler 2001). We hypothesize that prompting a similarity focus in an unrelated task (e.g., evaluation of pictures) will lead people to perceive greater similarity within the social environment while they determine their preferred level of redistribution. Specifically, we predict that focusing on similarity (vs. dissimilarity) will boost individuals' perceptions of how similar people are in their dispositional inputs (motivation and hard work), which will, in turn, weaken the justification of unequal outcomes and the perceived fairness of an unequal distribution, ultimately leading to greater support for redistributive policies. Four studies tested this prediction.

Study 1A manipulated similarity focus in a picture task. US participants were shown two pictures used in previous research (Markman and Gentner 1997), and they were asked to list the similarities between the two pictures (similarity focus condition), dissimilarities between the pictures (dissimilarity focus condition), or to describe one picture in detail (control condition). Afterwards, participants indicated the extent to which they would support or oppose two redistributive tax policies (creating a new tax for individuals earning more than \$1 million, creating a new tax for individuals earning more than \$5 million). To check if the similarity effect was contingent upon individuals' political ideology, participants also completed a multi-item scale (Nail et al. 2009) and a single-item scale (Jost 2006) of political ideology. Support for redistributive tax policies was stronger in the similarity condition than in the dissimilarity and control conditions (there was no difference between the dissimilarity and control conditions). This effect remained significant when political ideology was added to the analysis, and it did not depend on (i.e. was not moderated by) ideology.

Study 1B showed that the effect of similarity (vs. dissimilarity) focus generalized beyond tax policies to Americans' support for redistributive spending policies (expanding programs that improve the poor's economic opportunities, expanding programs that improve

the poor's living standards, and investing in initiatives that improve public services for the poor).

Study 2 tested the psychological process behind the effect. After listing the similarities or dissimilarities between the two pictures, participants indicated their support for redistributive tax and redistributive spending policies (as in Studies 1A and 1B). We then measured several factors that could mediate the effect of similarity. Specifically, we measured the three hypothesized mediators including the perceived similarity of individuals' dispositional inputs (motivation and hard work), justification of unequal outcomes (operationalized through just-world beliefs), and perceived fairness of an unequal distribution. We also measured additional factors that could provide alternative explanations, including the perceived similarity of external circumstances (good luck, opportunity), the perceived similarity of individual outputs (income, wealth), the personal gain (self-interest) from redistribution, subjective inequality (the perceived inequality of the wealth distribution), and commitment to the equality principle (that all individuals deserve equal rewards regardless of their contributions). The mediation analyses showed that the hypothesized factors, and not the alternative ones, mediated the effect of similarity (vs. dissimilarity) focus on redistribution support. Specifically, the serial mediation analysis confirmed that focusing on similarity (vs. dissimilarity) boosted individuals' perceptions that people are similar in their dispositional inputs (motivation and hard work), which, in turn, reduced the justification of unequal outcomes and the perceived fairness of an unequal distribution, ultimately resulting in stronger support for redistribution.

Study 3 tested if the similarity effect would hold with a more practical manipulation of similarity focus (rather than a theoretical manipulation involving abstract black-and-white pictures), which policy makers could potentially adapt to shift public preferences for redistribution. US participants listed all the ways in which they thought they were similar to other Americans (similarity focus condition) or different from other Americans (dissimilarity focus condition), after which they indicated their support for redistributive tax and spending policies. The similarity effect generalized to this more practical manipulation of similarity focus, thereby offering policy makers one potential route (e.g., in their communication efforts) to, at least temporarily, shift redistribution support.

Our findings propose an effective strategy to boost support for redistribution. They thereby add to the emerging view that redistributive preferences and beliefs that underlie them may, to some extent, be malleable and changed by environmental stimuli (Brown-Iannuzzi et al. 2014; Chow and Galak 2012). Our work also furthers the understanding of prior findings that redistribution support is low in racially fragmented environments (Alesina, Baqir and Easterly 1999). More generally, we hope that our findings will inspire future work on strategies that can change public perceptions of and preferences for redistribution.

REFERENCES

- Alesina, A., & Angeletos, G. (2005). Fairness and redistribution. *American Economic Review*, 95(4), 960–980.
- Alesina, A., Baqir, R., & Easterly, W. (1999). Public goods and ethnic divisions. *Quarterly Journal of Economics*, 114, 1243–1284

790 / Similarity Focus and Support for Redistribution

- Bénabou, R., & Tirole, J. (2006). Belief in a just world and redistributive politics. *Quarterly Journal of Economics*, 121 (2), 699-746.
- Brown-Iannuzzi, J. L., Lundberg, K. B., Kay, A. C., & Payne, B. K. (2014). Subjective status shapes political preferences. *Psychological Science*, 26 (1), 15-26.
- Chow, R. M., & Galak, J. (2012). The effect of inequality frames on support for redistributive tax policies. *Psychological Science*, 23 (12), 1467-69.
- Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, 61, 651-70.
- Jost, J. T., & Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Current Directions in Psychological Science*, 14 (5), 260-265.
- Markman, A. B., & Gentner, D. (1997). The effects of alignability on memory. *Psychological Science*, 5, 363-367.
- Mussweiler, T. (2001). "Seek and ye shall find": Antecedents of assimilation and contrast in social comparison. *European Journal of Social Psychology*, 31, 499-509.
- Nail, P. R., McGregor, I., Drinkwater, A. E., Steele, G. M., & Thompson, A. W. (2009). Threat causes liberals to think like conservatives. *Journal of Experimental Social Psychology*, 45, 901-07.
- Piketty, T. (2011). *Capital in the Twenty-First Century*. Éditions du Seuil: Paris, France.

Customers' Emotions in Service Failure and Recovery: A Meta-Analysis

Chiara Orsingher, University of Bologna, Italy

Sara Valentini, University of Bologna, Italy

Alexandra Polyakova, University of Sussex, UK

EXTENDED ABSTRACT

For customers, service failure and service recovery situations can be powerful triggers of strong emotional reactions. Consider the following titles of reviews taken from Tripadvisor as an example: "Disgusted, disappointed, DON'T GO", "Unexpected joy!". Since companies often need to deal with customer displays of emotions, understanding what role do emotions play and what firms should do to manage emotions successfully represents important issues. The last fifteen years of complaint handling research have witnessed a rapid growth in the number of studies that have included customers' emotional responses following service failure and recovery. The evidence accumulated in these years suggests that emotions are related to cognitive reactions of customers to service recovery efforts (i.e. perceived justice dimensions), and to relevant outcome variables such as loyalty, satisfaction, return intent, word of mouth, and complaint intentions (i.e., Lazarus 1966; Smith and Bolton 2002). Despite the significant number of empirical work, insights from this stream of research have not always been cumulative. Overall, these findings indicate that the impact of emotions may vary depending on the theoretical and methodological choices of the studies, the way emotions are measured (Richins 1997), and the cultural orientation. This suggests the need for a meta-analysis to integrate the evidence of accumulated empirical research. More specifically, through meta-analysis we aim to: 1) reflect on the theoretical conceptualization of emotions in service recovery domain, 2) map the constructs that have been examined in relation to emotions, 3) identify which of these constructs are more strongly related to emotions, and 4) assess the role of moderating variables in shaping the magnitude of the relationships.

In the current research we present a meta-analysis of 331 pairwise relationships coming from 69 independent studies of the correlates of emotions in service failure and recovery.

Our results show that for negative emotions, half of the studies relies on a discrete model (50.6%), and the remaining half (49.4%) on a dimensional model (Barret 1998). Within the discrete model, anger is the emotion that is most frequently taken into consideration (52%), followed by frustration, regret, and helplessness. Interestingly, for positive emotions, most studies are anchored to a dimensional view model (92.7%). Moreover, we found that discrete and dimensional constructs are measured differently. Discrete models tend to measure emotions using multi-item scales where each item represents different *nuances* of the same category of emotions. Dimensional models use multi-item scales where each item represents a specific type of emotion from a different emotion category.

Additionally, negative emotion scales show a wide dispersion of items expressing different types of emotions across studies, whereas this variation is less pronounced for positive emotion scales. For example, we found 25 different negative emotions mentions in the studies vs. only 13 positive ones. Anger is by far the emotion most frequently included (18.7%) in dimensional models, followed by disappointment and annoyance (both 7.8%, respectively). The most common positive emotions are happiness (20.6%), followed by joy (12.7%) and pleasure (11.8%).

We also analyzed the pairwise relationships and the average effect sizes of emotions' correlates and the results of the homogeneity analysis to test whether the observed variation in effect size

values is greater than the one expected from sampling error alone. First, among the three dimensions of justice, procedural justice is the dimension most strongly related to both negative ($r_{adj} = -0.36$) and positive emotions ($r_{adj} = 0.48$). Procedural justice has a stronger relationship with emotions than distributive justice. On average, all justice dimensions have higher effect sizes for positive emotions than for negative emotions, in absolute terms. This is also true for overall justice that has the strongest relationship with both negative and positive emotions, although the magnitude is higher for positive emotions. Positive emotions have a stronger impact on satisfaction after recovery ($r_{adj} = 0.56$) than negative emotions ($r_{adj} = -0.40$), although negative emotions have a strong negative impact on cumulative satisfaction ($r_{adj} = -0.58$).

With respect to the relationship between emotions and outcome variables, positive emotions are more strongly related to loyalty ($r_{adj} = 0.48$), than negative emotions ($r_{adj} = -0.26$). By contrast, negative emotions are more powerful in shaping WOM ($r_{adj} = -0.30$) than positive emotions ($r_{adj} = 0.23$). Finally, both positive and negative emotions are strongly related to trust ($r_{adj} = 0.49$ and $r_{adj} = -0.44$, respectively), although we retrieved few effect sizes for this relationship.

Regarding homogeneity analysis results are mixed. Although only five chi-square tests are significant, all credibility intervals are sufficiently wide (exceeding .11) or include zero (Sagie and Koslowsky 1993). These results suggest the presence of possible moderator variables.

The results of the moderator analyses show that, on average, dimensional models have higher effects sizes between emotions and their correlates. Scenarios produce on average higher effects size between emotions and their correlates, whereas a large number of items generates on average lower effect sizes than a smaller number. The type of participant (students vs. non-students) does not seem to affect the size of the correlations involving emotions and the other constructs. Among the cultural values, only uncertainty avoidance and long-term orientation significantly moderate the relationships with emotion correlates.

Thus, we draw four main conclusions: first, our results show that the relationships between emotions and their correlates are higher when researchers use dimensional models rather than discrete models of emotions.

Second, the analysis of pairwise relationships highlights that the perceived fairness of procedures is more powerful than tangible compensation and interpersonal treatment in triggering both negative and positive emotions. Third, satisfaction after recovery and loyalty are more strongly related to positive than to negative emotions. Finally, the findings of the moderator analysis indicate that scenarios might inflate the relationships between emotional reactions and their correlates and that multi vs. single item scale lower on average the correlations. Researchers should also note that uncertainty avoiding cultures generate higher effect sizes in the relationship between emotions and their correlates, and suggests, for these cultures, an important role of the contact personnel and the company's policies in handling the emotional reactions of customers.

REFERENCES

- Barrett, L. F. (1998). Discrete emotions or dimensions? The role of valence focus and arousal focus. *Cognition & Emotion, 12*(4), 579-599.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research, 24*(2), 127-146.
- Sagie, A., & Koslowsky, M. (1993). Detecting moderators with meta-analysis: an evaluation and comparison of techniques. *Personnel Psychology, 46*(3), 629-640.
- Smith, A. K., & Bolton, R. N. (2002). The effect of customers' emotional responses to service failures on their recovery effort evaluations and satisfaction judgments. *Journal of the Academy of Marketing Science, 30*(1), 5-23.

Grammatical Subject, Base Rates, and Persuasion

Max Ostinelli, Winthrop University, USA

David Luna, Baruch College, USA

EXTENDED ABSTRACT

Companies often make claims about the success rates of their products and/or the failure rates of competitors' products. We examine whether changes in the grammatical subject used in these claims affect persuasion. Specifically, we differentiate between user-subjects, where users are the grammatical subject of the sentence, and product subjects, where the product is the grammatical subject of the sentence. For example, the success of a weight loss program can be presented either with a user-subject claim stating that "80% of participants succeed in reducing their excess weight" (Digitale 2010) or with a product-subject claim stating that "our program succeeds in reducing excess weight for 80% of participants." Similarly, the failure of competitors' sales training program can be presented with a user-subject claim stating that "75% of all participants in traditional sales training fail to learn anything" (Miller and Sinkovitz 2012) or with a product-subject claim stating that "Traditional sales training fails to teach anything for 75% of all participants."

We empirically demonstrate that changes in the grammatical subject affect persuasion through a mediation chain that includes attribution of causality and optimism bias as mediators. Drawing on the linguistic literature (Fausey and Boroditsky 2010; McGlone et al. 2013), we suggest that user-subject claims lead to the causal attribution of success/failure to the users of the product rather than to the product's characteristics.

Based on research on unrealistic optimism (Weinstein 1987), we predict that this difference in causal attribution affects peoples' expectations about product performance. That is, situations perceived as more controllable can increase people's expectation of outperforming others (Helweg-Larsen and Shepperd 2001; Weinstein 1987). Thus, user-subjects, which lead to causal attributions that are more controllable (i.e., performance depends on customers' actions) should prompt more optimism, which results in the overestimation of success (e.g., I will be among those who succeed) and in the underestimation of failure (e.g., I will not be among those who fail).

Following these predictions, the persuasiveness of different grammatical subjects should depend on whether claims are about success or failure. For success claims (e.g., 70% success rate), user-subject claims should be more persuasive (e.g., result in higher attitudes toward the product described) than product-subject claims, since greater optimism bias increases the perceived likelihood of personal success. For failure claims (e.g. 70% failure rate), user-subject claims should be less persuasive, resulting in less damaging attitudes toward the product described, since greater optimism bias decreases the perceived likelihood of personal failure.

We tested this prediction in four experiments. In Experiment 1, participants read a claim about the performance of two blenders (i.e., blender A and blender B) which manipulated both the type of claim and its grammatical subject, resulting in a 2(claim type: success vs. failure) x 2(subject: user vs. product) between-subject design. Success claims reported that blender A performed better than blender B. In the user-subject condition, participants were informed that "50% of customers perform much better with blender A than blender B," whereas, in the product-subject condition, participants were informed that "blender A performs much better than blender B for 50% of customers." Failure claims reported that Blender B performs worse than Blender A. In the user-subject condition, participants were informed that "50% of customers perform much worse with blender B than

blender A," whereas in the product-subject condition, participants were informed that "blender B performs much worse than blender A for 50% of customers." The dependent variable was the choice between the two blenders. Results revealed a significant interaction effect. For success claims (e.g., Blender A performs better than Blender B), more participants chose Blender A in the user-subject condition than in the product-subject condition, hence showing that the user-subject was more persuasive. We explain this finding by suggesting that the optimism bias cued by the user-subject makes people believe they can do better than the average consumer, thus making them more likely to choose blender A. For failure claims (i.e., Blender B performs worse than Blender A), more participants chose Blender A in the product-subject condition than in the user-subject condition. Because the claim discredited the performance of blender B, this finding suggests that the user-subject was less persuasive than the product-subject (i.e., fewer [more] people chose Blender A[B]). We suggest that optimism bias cued by the user-subject makes people believe they are less likely to fail than the average consumer, thus resulting in an underestimation of possible failure for blender B.

Experiment 2 provides evidence for the underlying mechanism by testing the three-path mediation process (subject→causal attribution→optimism bias→attitudes) using the bootstrap procedure proposed by Hayes (2012, model 6). Experiment 3 replicates the subject effect with different base rates ranging from 15% to 85%. Finally, a field study conducted with Google AdWords shows that a success claim for an existing company resulted in a higher click-through-rate when presented with a user-subject, than with a product-subject.

This work makes several contributions. First, it contributes to research on linguistic framing (Patrick and Hagtveldt 2012) in a significant manner: Whereas most examples of verbal framing examine changes in specific words (e.g., 97% lean meat vs. 3% fat meat), our work examines changes in syntax, which can, in principle, be applied to a broader variety of marketing communications of product success and failure. Second, it contributes to research on causality. Previous work on causality suggests that product attributions are more persuasive because perceived to be more stable and thus more diagnostic of the product future performance (Folkes 1984). We show that under some conditions product attribution can be less persuasive than customer attribution, hence enriching our understanding of the effects of causal attribution on persuasion.

REFERENCES

- Digitale, Erin (2010), "\$12.7 Million Grant for Study of Childhood Obesity Treatment," (accessed June, 20th 2015).
- Fausey, Caitlin M. and Lera Boroditsky (2010), "Subtle Linguistic Cues Influence Perceived Blame and Financial Liability," *Psychonomic Bulletin & Review*, 17 (5), 644-50.
- Folkes, Valerie S. (1984), "Consumer Reactions to Product Failure: An Attributional Approach," *Journal of Consumer Research*, 10 (March), 398-409.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling" in Retrieved from <http://www.afhayes.com/public/process2012.pdf>.

- Helweg-Larsen, Marie and James A Shepperd (2001), "Do Moderators of the Optimistic Bias Affect Personal or Target Risk Estimates? A Review of The Literature," *Personality and Social Psychology Review*, 5 (1), 74-95.
- McGlone, Matthew S., Robert A. Bell, Sarah T. Zaitchik, and Joseph McGlynn III (2013), "Don't Let the Flu Catch You: Agency Assignment in Printed Educational Materials About The H1N1 Influenza Virus," *Journal of Health Communication*, 18 (6), 740-56.
- Miller, Marc and Jason Sinkovitz (2012), *Selling Is Dead: Moving Beyond Traditional Sales Roles and Practices To Revitalize Growth*: John Wiley & Sons.
- Weinstein, Neil D. (1987), "Unrealistic Optimism About Susceptibility to Health Problems: Conclusions From a Community-Wide Sample," *Journal of Behavioral Medicine*, 10 (5), 481-500.

The Drain of Affective Decisions

Ashley Otto, Baylor University, USA

Joshua Clarkson, University of Cincinnati, USA

Ryan Rahinel, University of Cincinnati, USA

EXTENDED ABSTRACT

A fundamental premise in decision making is that decisions based on affect are fast and economical relative to decisions based on cognition. That is, “going with one’s gut” reliably leads to quicker decision making and requires less processing resources to make a decision than does a more cognitive focus such as “thinking things through” (Epstein 1990). This pattern is evident from the robust finding that constraints on processing resources such as cognitive load, time pressure, and distraction increase the reliance on affect in decision making (e.g., Nowlis and Shiv 2005; Pham, Cohen, Pracejus, and Hughes 2001; Shiv and Fedorikhin 1999). Thus, relative to its cognitive counterpart, decisions based on affect are highly resource-efficient (see Pham 2007).

Despite this robust effect, we ask in this paper whether consumers’ perceptions of the *resource efficiency* of affect-based decision match reality. In particular, we propose the possibility that consumers’ perceive affect- (v. cognitive-) based decisions to require more—rather the less—resources to arrive at a decision. This proposition is based on research showing that individuals tend to *overestimate* the impact of future affect (Gilbert et al. 1998; Lowenstein and Schkade 1999; Wilson et al. 2004; Wilson and Gilbert 2003). That is, though individuals accurately predict the valence of their affect and even the specific emotions that they will experience (i.e., joy vs. anger; Robinson and Clore 2001), they are not able to accurately predict the duration and impact of their future affective states, with the specific tendency to *overestimate* these errors (e.g., Gilbert, Driver-Linn, and Wilson 2002; Gilbert, Lieberman, Morewedge, and Wilson 2004; Buechel, Zhang, and Morewedge 2014; see also Loewenstein 2005). Just as individuals tend to make overestimation errors regarding the impact of affective responses (see Wilson and Gilbert 2003), we argue for an overestimation error regarding the *resource demand* associated with affectively-based decisions.

This misperception is critical because, if true, it should directly undermine consumers’ desire to engage in the decision making process. In other words, if consumers perceive an insufficiency or drain of resources when making affect-based decisions, then they should consequently demonstrate a greater propensity to delay these decisions. Importantly, here, choice delay serves not only as an outcome measure but as a specific choice context that should be most sensitive to subtle differences in perceptions—if in fact perceptions do not align with reality. Essentially, the option to engage in choice delay allows for the opportunity for perceptions to override the general properties of affectively-based decisions, which appear most apparent when choice is forced (i.e., absent a no-choice option; see Shiv and Fedorikhin 1999). Given that consumers are rarely forced to make choices, this research therefore raises the possibility that marketing tactics emphasizing affect (e.g., advertisements, slogans, storylines) could unintentionally inhibit consumers’ motivation to purchase.

We tested this possibility in three experiments. Importantly, in each experiment, we controlled for decision importance and difficulty, as both variables have been previously shown to impact consumers’ desire to postpone decisions (Dhar 1997; Krijnen, Zeelenberg, and Breugelmans 2015; Greenleaf and Lehman 1995). Relatedly, we also rule out alternative explanations related to cognitive laziness and mood. These variables have no impact on the results, which only further strengthen our confidence in role of consumers’ perceptions

of resource drain in eliciting delay related to affect- and cognitive-based decisions.

Experiment 1

Using a real-choice paradigm, Experiment 1 sought to test the hypothesis that affectively-based decisions elicit greater choice delay.

Method and Results

Ninety undergraduates (51% Male; $M_{age} = 20.47$) were recruited to complete a study on print advertisements. Following the study welcome, all participants were told that a consumer packaged goods company, whose name was ostensibly concealed for privacy purposes, was seeking feedback on print advertisements. Participants were randomly assigned to receive one of three granola bar advertisements. Importantly, across all conditions the image on the advertisement remained the same. However, to manipulate the basis of the decision, we altered the slogan printed on the ad. This manipulation is consistent with prior research that has manipulated the affective or cognitive basis of a decision by altering an advertisement’s slogan (see Cian, Krishna, and Schwarz 2015).

Importantly, after viewing the ad, all participants were told that as a thank you for their time, they would be receiving a granola bar. Participants were asked what they would like to do—make a granola bar choice *now* or make a granola bar choice *later*. For those who opted to make a choice now, they were presented with the granola bar options on a subsequent screen. For those who opted to make a choice later, they were presented with the granola bar options at the end of the study. Importantly, then, only the timing of the decision varied, as it was clear to participants that the decision would be made.

The choice data were analyzed via a chi-square test to analyze potential differences in delay (0 = *make choice*, 1 = *delay choice*) as a function of the basis of the decision (0 = *control*, 1 = *cognitive*, 2 = *affective*). As expected, the analysis revealed a significant difference in delay based on the basis of the decision ($\chi^2(2, N = 90) = 7.78, p = .020$). Follow up analyses revealed that those in the affectively-based condition were much more likely to delay choice (60%) compared to those in the cognitively-based (26.67% [$\chi^2(1, N = 60) = 6.79, p = .009$]) or control (33.33% [$\chi^2(1, N = 60) = 4.29, p = .038$]) conditions, which did not differ from one another ($p > .57$).

Discussion

The findings of Experiment 1 offer initial evidence that consumers are more likely to delay affectively-based decisions—here, in an actual consumption experience. Indeed, across conditions, participants responded to the same choice. However, those in the affectively-based condition were significantly more likely to delay the choice than were those in the cognitively-based and control conditions. This latter effect is especially interesting as it provides initial evidence that an affective-basis *increases* consumers’ likelihood to engage in delay.

Experiment 2

The goal of Experiment 2 was to directly test the possibility that consumers are miscalibrated with regard to their perceptions of affectively-based decisions. That is, while research has repeatedly

demonstrated that affectively-based decisions are less resource demanding (see Pham 2007), we contend that consumers' perceive affectively-based decisions to be more (not less) resource demanding. Though inconsistent with reality, this prediction is consistent with work demonstrating that individuals tend to overestimate the impact and duration of future affective states (Lowenstein and Schkade 1999; Wilson and Gilbert 2003).

Method and Results

One hundred and forty (56% Female; $M_{\text{age}} = 36.14$) participants were recruited through Mechanical Turk to complete a study on decision making. All participants were told that the study was about tea and were randomly assigned to one of three conditions: affective, cognitive, or control. Participants in the affective and cognitive conditions were instructed to focus on either their *feelings* (affectively-based condition) or *thoughts* (cognitively-based condition) in relation to tea (adapted from Mikles et al. 2010, 2011), while those in the control condition were given no further instructions.

Participants were then asked to imagine that they were shopping at a grocery store and that they came upon the tea aisle and noticed a few options available for purchase. Prior to making a purchasing decision, participants responded to a series of questions regarding the tea scenario that assessed the perceived resource drain associated with making a decision ($\alpha = .71$; e.g., *How much do you anticipate feeling exhausted of your mental resources after considering this decision?*, *How mentally exhausted do you anticipate feeling after considering this decision?*, *How much do you anticipate feeling drained of your mental resources after considering this decision?*). Following these questions, participants were asked to make a choice to decide whether or not to purchase tea *now* or decide whether or not to purchase tea *later*.

Participants' choice was coded as 0 = *make choice* or 1 = *delay choice*. These data were then submitted to a chi-square test to compare the difference in delay as a function of the basis of the decision (0 = *control*, 1 = *cognitive*, and 2 = *affective*). The analysis revealed a significant difference in choice delay based on the basis ($\chi^2(2, N = 140) = 15.28, p < .001$). Those in the affectively-based condition (28.57%) were much more likely to delay choice than those in the cognitively-based (6.12%; $\chi^2(1, N = 91) = 8.28, p = .004$) or control (4.08%; $\chi^2(1, N = 91) = 10.42, p = .001$) conditions, which did not differ from each other ($p > .64$). Importantly, meditational analysis confirmed a significant mediating pathway through the perceived resource drain index (95% CI: .027, .72).

Discussion

The findings of Experiment 2 demonstrate that consumers: (i) do in fact perceive affectively-based decisions as more draining of their mental resources than cognitively-based decisions, and (ii) this misperception dictated the desire to engage in the decision-making process.

Experiment 3

Experiment 2 demonstrated that consumers delay affectively-based decisions because they perceive them as being more draining of mental resources. Importantly, if the findings of Experiment 2 hold true, then this effect should only occur for consumers who naturally believe their resources *can be drained*—that is, those who believe that they have a limited (vs. unlimited) storehouse of available resources (Mukhopadhyay and Gohar 2005; Job, Dweck, and Walton 2010). Thus, in Experiment 3, we offer an alternative test of the mechanism by examining the role of willpower beliefs (i.e., the extent to which individuals believe their ability to regulate behavior is a limited or unlimited resource; see Job et al. 2010).

Method and Results

One hundred participants (51% Male; $M_{\text{age}} = 37.23$) were recruited through Mechanical Turk to complete a study on decision making. Following an introduction to the study, participants were told that the study was about coffee. As in Experiment 2, participants were assigned to one of three decision bases conditions: affective, cognitive, or control. Specifically, those in the affectively-based condition were asked to describe their *feelings* about purchasing coffee, while those in the cognitively-based condition were asked to describe their *thoughts* about purchasing coffee on a series of items that were intentionally biased to promote agreement with these statements. Importantly, however, participants responded to each of the items on 5-point scales anchored at 1 – *Somewhat agree* to 5 – *Completely agree*, which were intentionally biased to promote agreement with the statements (Clarkson, Janiszewski, and Cinelli 2013; Salancik 1974; Salancik and Conway 1975; Tormala and DeSensi 2008; see Petrocelli, Martin, and Li 2010). Those in the *control* condition did not receive a focus manipulation and were automatically forwarded to the next portion of the study.

All participants were then asked to imagine that they were shopping for coffee and noticed several options available. Participants were then instructed to think about the scenario and asked to make a choice between deciding on whether or not to purchase coffee *now* or whether or not to purchase coffee *later*. Finally, following a series of filler questions, participants completed the Implicit Theories about Willpower Scale (Job et al. 2010) to index participants' willpower theories ($\alpha = .85$; e.g., *Your mental stamina fuels itself, Even after strenuous mental exertion, you can continue doing more of it*).

The choice data (0 = *make choice*, 1 = *delay choice*) were submitted to a hierarchical logistic regression, with the basis of the decision (0 = *control*, 1 = *cognitive*, 2 = *affective*) and willpower theory (continuous, mean-centered) as main effect predictors in the first step and their interaction in the second step (Cohen et al. 2003). Replicating the prior two studies, the analysis revealed a main effect of decision basis ($\beta = .84$, Wald's $\chi^2 = 7.30, p = .007$) and, as expected, no main effect of willpower theory ($p > .98$). Importantly, the results revealed a significant decision basis \times willpower theory interaction ($\beta = -.93$, Wald's $\chi^2 = 5.26, p = .022$; see Figure 1). Consistent with expectations, limited theorists (+1 SD) were significantly more likely to delay choice in the affectively-based condition, compared to both the cognitively-based ($\beta = 1.85$, Wald's $\chi^2 = 6.05, p = .014$) or control ($\beta = 1.70$, Wald's $\chi^2 = 8.56, p = .003$) conditions, which did not differ from each other ($p > .30$). For unlimited theorists (-1 SD), there was no difference in choice delay based on the basis of the decision ($ps > .83$).

Discussion

The findings of Experiment 3 offer an alternative means by which to test the robustness of the proposed misperception associated with affectively-based decisions. Here, we examined the role of willpower theories and found that the effect of an affective basis on choice delay was bound to those who naturally perceive they have a limited (vs. unlimited) amount of resources. That is, consumers delayed affectively-based decisions when they implicitly believed they had an insufficiency of resources (i.e., limited theorists). Importantly, these findings only corroborate those of Experiment 2, which demonstrated that perceptions of resource drain underlie the effect of affect on choice delay. Together, then, the findings of Experiments 2 and 3 offer converging means by which to demonstrate a resource-based account for the delay of decisions based on affect.

Conclusion

Though research has reliability demonstrated that affective (vs. cognitive) based decisions require less resources to arrive at a decision, we find that consumers are miscalibrated with regard to the perceived resource drain of affect-based decisions. Three experiments demonstrated that this perceived insufficiency of mental resources altered consumers' desire to engage in the decision-making process. That is, perceiving a lack of sufficient resources naturally altered a consumer's desire to make decisions. Moreover, this effect occurred despite controlling for decision difficulty and decision importance and independent of cognitive laziness or mood. Finally, we demonstrated the robustness of this misperception by showing that the effects only occurred for those who perceive they have a limited (vs. unlimited) amount of resources.

Collectively, we believe this work offers critical insight for marketers who all too often seek to invoke an affective-basis in consumers' decisions. That is, marketers alter images, storylines, and slogans to elicit greater affect. Yet the present findings suggest these strategies propel consumers to disengage from the decision-making process. Indeed, Experiment 1 demonstrated that even subtle advertisement slogans that manipulate decision bases (e.g., "To refuel your dreams" vs. "To refuel your mind") altered whether or not consumers wanted to engage in actual choice. Furthermore, by studying the effects of this misperception on choice delay (vs. forced choice), we have not only allowed for the opportunity for perceptions to override reality, but also allowed for a more naturalistic test of consumer decision making.

REFERENCES

- Buechel, Eva C., Jiao Zhang, Carey K. Morewedge, and Joachim Vosgerau (2014), "More Intense Experiences, Less Intense Forecasts: Why People Overweight Probability Specifications in Affective Forecasts," *Journal of Personality and Social Psychology*, 106, 20-36.
- Cian, Luca, Aradhna Krishna, and Norbert Schwarz (2015), "Positioning Rationality and Emotion: Rationality is Up and Emotion is Down," *Journal of Consumer Research*, 42, 632-651.
- Clarkson, Joshua J., Matthew J. Valente, Christopher Leone, and Zakary L. Tormala (2013), "Motivated Reflection on Attitude-Inconsistent Information: An Exploration of the Role of Fear of Invalidity in Self-Persuasion," *Personality and Social Psychology Bulletin*, 39, 1559-1570.
- Cohen, Jacob, Patricia Cohen, Stephen G. West, and Leona S. Aiken (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*, Mahwah, NJ: Erlbaum.
- Dhar, Ravi (1997), "Consumer Preference for a No-Choice Option," *Journal of Consumer Research*, 24, 215-231.
- Epstein, Seymour (1990). Cognitive-Experiential Self-Theory. In L. A. Pervin (Ed.), *Handbook of Personality Theory and Research*, New York: Guilford Press, 165-192.
- Gilbert, Daniel T., Erin Driver-Linn, and Timothy D. Wilson (2002), "The Trouble with Vronsky: Impact Bias in the Forecasting of Future Affective States," In L. F. Barrett and P. Salovey (Eds.), *The Wisdom in Feeling: Psychological Processes in Emotional Intelligence*, New York: Guilford Press, 114-143.
- Gilbert, Daniel T., Matthew D. Lieberman, Carey K. Morewedge, and Timothy D. Wilson (2004), "The Peculiar Longevity of Things Not so Bad," *Psychological Science*, 15, 14-19.
- Gilbert, Daniel T., Elizabeth C. Pinel, Timothy D. Wilson, Stephen J. Blumberg, and Thalia P. Wheatley (1998), "Immune Neglect: A Source of Durability Bias in Affective Forecasting," *Journal of Personality and Social Psychology*, 75, 617-638.
- Greenleaf, Eric A., and Donald R. Lehmann (1995), "Reasons for Substantial Delay in Consumer Decision Making," *Journal of Consumer Research*, 22, 186-199.
- Job, Veronika, Carol S. Dweck, and Gregory M. Walton (2010), "Ego Depletion—Is it all in your Head? Implicit Theories about Willpower Affect Self-Regulation," *Psychological Science*, 21, 1686-1693.
- Krijnen, Job MT, Marcel Zeelenberg, and Seger M. Breugelmans (2015), "Decision Importance as a Cue for Deferral," *Judgment and Decision Making*, 10, 407-415.
- Loewenstein, George (2005), "Hot-Cold Empathy Gaps and Medical Decision Making," *Health Psychology*, 24, S49.
- Loewenstein, George, and David Schkade (1999), "Wouldn't it be Nice? Predicting Future Feelings," In E. Diener, D. Kahneman, & N. Schwarz (Eds.), *Well-Being: The Foundations of Hedonic Psychology*, New York: Russell Sage Foundation Press, 85-105.
- Should I go with my Gut? Investigating the Benefits of Emotion-Focused Decision Making (2011), "Should I go with my Gut? Investigating the Benefits of Emotion-Focused Decision Making," *Emotion*, 11, 743-753.
- Mikels, Joseph A., Corinna E. Löckenhoff, Sam J. Maglio, Laura L. Carstensen, Mary K. Goldstein, and Alan Garber (2010), "Following your Heart or your Head: Focusing on Emotions Versus Information Differentially Influences the Decisions of Younger and Older Adults," *Journal of Experimental Psychology: Applied*, 16, 87-95.
- Mikels, Joseph A., Sam J. Maglio, Andrew E. Reed, and Lee J. Kaplowitz (2011), "Should I Go With My Gut? Investigating the Benefits of Emotion-Focused Decision Making," *Emotion*, 11, 743-753.
- Mukhopadhyay, Anirban, and Gita Venkataramani Johar, (2005), "Where There is a Will, is There a Way? Effects of Lay Theories of Self-Control on Setting and Keeping Resolutions," *Journal of Consumer Research*, 31, 779-786.
- Nowlis, Stephen M., and Baba Shiv (2005), "The Influence of Consumer Distractions on the Effectiveness of Food-Sampling Programs," *Journal of Marketing Research*, 42, 157-168.
- Petrocelli, John V., Jacob L. Martin, and Winston Y. Li (2010), "Shaping Behavior Through Malleable Self-Perceptions: A Test of the Forced-Agreement Scaling Effect (FASE)," *Journal of Research in Personality*, 44, 213-221.
- Pham, Michel Tuan (2007), "Emotion and Rationality: A Critical Review and Interpretation of Empirical Evidence," *Review of General Psychology*, 11, 155-178.
- Pham, Michel Tuan, Joel B. Cohen, John W. Pracejus, and G. David Hughes (2001), "Affect Monitoring and the Primacy of Feelings in Judgment," *Journal of Consumer Research*, 28, 67-88.
- Robinson, Michael D., and Gerald L. Clore (2001), "Simulation, Scenarios, and Emotional Appraisal: Testing the Convergence of Real and Imagined Reactions to Emotional Stimuli," *Personality and Social Psychology Bulletin*, 27, 1520-1532.
- Salancik, Gerald R. (1974), "Inference of One's Attitude from Behavior Recalled Under Linguistically Manipulated Cognitive Sets," *Journal of Experimental Social Psychology*, 10, 415-427.

- Salancik, Gerald R., and Mary Conway (1975), "Attitude Inferences from Salient and Relevant Cognitive Content About Behavior," *Journal of Personality and Social Psychology*, 32, 829-840.
- Shiv, Baba, and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 26, 278-292.
- Tormala, Zakary L., and Victoria L. DeSensi (2008), "The Perceived Informational Basis of Attitudes: Implications for Subjective Ambivalence," *Personality and Social Psychology Bulletin*, 34, 275-287.
- Wilson, Timothy D., and Daniel T. Gilbert (2003), "Affective Forecasting," *Advances in Experimental Social Psychology*, 35, 345-411.
- Wilson, Timothy D., Thalia P. Wheatley, Jaime L. Kurtz, Elizabeth W. Dunn, and Daniel T. Gilbert (2004), "When to Fire: Anticipatory Versus Postevent Reappraisal of Uncontrollable Events," *Personality and Social Psychology Bulletin*, 30, 340-351.

The Role of Scales on Evaluations of Identical Goal Progress

Timucin Ozcan, Rollins College, USA
Kunter Gunasti, Washington State University, USA

EXTENDED ABSTRACT

People often use different measurement scales due to personal, social, cultural, economical, or technical reasons as well as simple convenience. The naive act of using different ways to measure progress may lead two people to feel very differently about their levels of goal accomplishment even when they have totally identical achievements. For example, imagine that Mark and Jessica run a lap around town covering 2.23 miles of distance every day. Mark is keeping track of the total distance he runs in miles, whereas Jessica is counting the number of days she runs. Both of them run for 9 days completing 20 miles each. Will they feel the same way about their progress and willingness to continue their exercise? We propose that Mark will have a higher sense of accomplishment as he just reached the 20-mile benchmark. Despite achieving identical progress, Jessica will not share the same sense of achievement with Mark. As Jessica is measuring his progress differently (in days), she feels the urge to run one more day to reach the 10-day benchmark based on her choice of measuring progress. Further imagine that both run for another day and they both complete 10 days and 22.3 miles of running. This time Jessica will be feeling great about his progress because she completed a 10-day course of running. On the other hand, Mark will not feel very accomplished and he might feel a need to run just another day to reach 25 miles and feel a sense of completeness based on his arbitrary choice of measurement scale.

Vast literature in numerosity predicts that a more numerous scale leads to perceptions of larger numerical magnitudes compared to a less numerous scale (e.g., Burson, Larrick and Lynch 2009; Pandelaere, Briers and Lembregts 2011). For example, 365 days might be seen as longer than 12 months because the former is more numerous (Monga and Bagchi 2012). Thus, 20 miles might be perceived as better progress than 9 days. On the other hand, in the case of 10 days and 22.3 miles, numerosity literature would predict that the more numerous progress reported in miles should be perceived as higher than the less numerous progress measured in days. Yet, we propose a potential reversal of this effect. We base our prediction on another stream of research, which suggests that round numbers (ending with 0 or 5) serve as natural reference points to be achieved. It has been shown that people try to reach round numbers as numerical goals in various domains, including SAT scores, baseball statistics, when trading currencies and stocks and running marathons (Allen, Dechow, Pope and George 2016; Pope and Simonsohn 2011; Osler 2003). While numerosity literature has often compared scales with different granularity (e.g., months vs years) to demonstrate the role of number magnitudes in consumer perceptions, the recent findings related to round numbers have been limited to use of single scales and the tendency to reach the next round number.

The purpose of our research, therefore, was to examine scale-induced roundness and numerosity effects and show how use of different measurement scales affect perceptions and evaluations of progress and feeling of achievement. In a recent study Gunasti and Ozcan (2016) found that round numbers create a sense of completeness, fullness or wholeness especially in brand names domain. Authors tested various real and fictitious brand names and product types to illustrate that consumers prefer brand names including numbers ending with 0 and 5 over those with larger numbers because they perceive these products as more complete. This completeness effect was also investigated in a variety of different contexts such as complete-

ness of product attributes (Ozcan and Sheinin 2012, 2013) and have been shown to impact consumer evaluations and decisions. Thus, the scalecity effect will be mediated by the completeness perceptions induced by round numbers on corresponding scales. Formally, we posit the following hypotheses:

- Hypothesis 1: Scalecity effect - When measuring and evaluating identical goal progress using different scales, the scale that corresponds to round numerical values will lead to: i) a higher sense of accomplishment, ii) decreased motivation/persistence to keep working toward a goal, and iii) lower risk taking behavior.*
- Hypothesis 2: Identical or even lower progress expressed in lower but round numbers on a given scale might be perceived as better than equal or even higher progress expressed in higher but non-round numbers on another scale*
- Hypothesis 3: The scalecity effect (scale-induced perception of accomplishment) will be mediated by an artificial sense of completeness conveyed by round numbers measured on a scale.*

We conducted five experimental studies to test our hypotheses. While the first three studies confirm H1 and H2, Studies 4 and 5 further test the mediation effect of completeness. Study 4 demonstrates the mediation. We found that people might decide that they have not performed well in a task and just to feel a sense of accomplishment they will work unnecessarily harder to lose additional amounts of weight; run additional distances/days; spend more time and work more persistently on a task; risk money and effort; and try to reach round number benchmarks totally based on their arbitrary choice of scales. While number magnitude (numerosity) affects goal evaluations as shown in past literature, this effect is moderated and often reversed by the tendency to attain scale-induced round numbers. We term this the scalecity effect and further show that this tendency is mediated by the feeling of completeness stimulated by round numbers on specific measurement scales defining the progress.

Overall, our research makes three important contributions to the literature. First, we expand on the research on numerosity and unitosity (e.g., Burson, Larrick and Lynch 2009; Pandelaere, Briers and Lembregts 2011; Monga and Bagchi 2012; Bagchi and Li 2011; Cheema and Bagchi 2012) and integrate these efforts with the literature on round numbers and numerical cognition (e.g., Allen et al. 2016; Pope and Simonsohn 2011; Lynn, Flynn and Helion 2013; Bhattacharya, Holden, and Jacobsen 2012; Osler 2003; Gunasti and Ozcan 2016; Gunasti and Devezer 2016; Yan and Duclos 2013) to introduce what we term the “scalecity” effect. We demonstrate that people feel more accomplished when identical progress corresponds to a round number on the specific scale they use even when compared to a non-round number with a higher magnitude on another scale. Second, we show that the scalecity effect (scale-induced differences in perceptions of progress) manifests itself as a tendency to spend more time and money, exert higher effort, persist longer in a task, and take unnecessary risks just to reach a round number on an arbitrarily chosen scale (e.g., airlines miles). Third, we demonstrate

that this scalecity effect is mediated by the perceived completeness induced by number roundness.

REFERENCES

- Allen, Eric J., Patricia M. Dechow, Devin G. Pope, and George Wu (2016), "Reference-Dependent Preferences: Evidence from Marathon Runners," *Management Science*, Published Online: April 20, 2016, [http://dx.doi.org/10.1287/mnsc.2015.2417]
- Bagchi, Rajesh, and Xingbo Li (2011), "Illusionary Progress in Loyalty Programs: Magnitudes, Reward Distances, and Step-Size Ambiguity," *Journal of Consumer Research*, 37 (February), 888-901.
- Bhattacharya, Utpal, Craig W. Holden, and Stacey Jacobsen (2012), "Penny Wise, Dollar Foolish: Buy-Sell Imbalances On and Around Round Numbers," *Management Science*, 58 (2), 413-31.
- Burson, Katherine, A., Richard, P. Larrick and John Jr. G. Lynch (2009), "Six of One, Half a Dozen of the Other: Expanding and Contracting Numerical Dimensions Produces Preference Reversals," *Psychological Science*, 20 (9), 1074-78.
- Cheema, Amar, and Rajesh Bagchi (2011), "The Effect of Goal Visualization on Goal Pursuit: Implications for Consumers and Managers," *Journal of Marketing*, 75 (2), 109-23.
- Gunasti, Kunter, and Timucin Ozcan (2016), "Consumer Reactions to Round Numbers in Brand Names," *Marketing Letters*, 27 (2), 309-22.
- _____, and Berna Devezer (2016), "How Competitor Brand Names Affect Within-Brand Choices," *Marketing Letters*, 27 (4), 715-27.
- Lynn, Michael, Sean Masaki Flynn, and Chelsea Helion (2013), "Do Consumers Prefer Round Prices? Evidence from Pay What-You-Want Decisions and Self-Pumped Gasoline Purchases," *Journal of Economic Psychology*, 36 (June), 96-102.
- Monga, Ashwani, and Rajesh Bagchi (2012), "Years, Months, and Days versus 1, 12, and 365: The Influence of Units versus Numbers," *Journal of Consumer Research*, 39 (1), 185-98.
- Osler, Carol (2003), "Currency Orders and Exchange Rate Dynamics: An Explanation for the Predictive Success of Technical Analysis," *Journal of Finance*, 58 (5), 1791-819.
- Ozcan, Timucin, and Daniel A. Sheinin (2012), "Effects of Complete Products on Consumer Judgments," *Journal of Product & Brand Management*, 21 (4), 246-54.
- _____, (2013), "Understanding Common Attribute Devaluation in Multifunctional Products," *Journal of Marketing Theory and Practice*, 21 (4), 389-404.
- Pandelaere, Mario, Barbara Briers, and Christophe Lembregts (2011), "How to Make a 29% Increase Look Bigger: The Unit Effect in Option Comparisons," *Journal of Consumer Research*, 38 (2), 308-22.
- Pope, Devin, and Uri Simonsohn (2011), "Round Numbers as Goals Evidence from Baseball, SAT Takers, and the Lab," *Psychological Science*, 22 (1), 71-79.
- Yan, Dengfeng, and Rod Duclos (2013), "Making Sense of Numbers: Effects of Alphanumeric Brands on Consumer Inference," *International Journal of Research in Marketing*, 30 (2), 179-84.

Meaning in Life, Powerlessness, and Nostalgia: Using Nostalgia to Mitigate the Effect of Powerlessness on the Search for Meaning in Life

Jun Pang, Renmin University of China, China
Sheng Bi, Washington State University, USA
Huan Chen, Renmin University of China, China
Andrew Perkins, Washington State University, USA

EXTENDED ABSTRACT

Meaning in life refers to thoughts and feelings connected to the self-perceived significance of one's own life (Steger and Frazier, 2005). When one's life meaning has been threatened, he/she will be motivated to restore their meaning in life. Previous research has established numerous threats that might undermine one's perception of meaning in life, such as interpersonal rejection (Zadro, Williams, and Richardson 2004). The present research suggests an important and very common threat: one's feeling of powerlessness.

Individuals experience feelings of powerlessness in everyday settings. This ubiquitous feeling of powerlessness can result in an aversive experience associated with uncertainty, self-doubt, and negative emotions (Galinsky, Gruenfeld, and Magee, 2003). To alleviate this aversive experience, consumers tend to restore a sense of power by purchasing status-related products (Rucker and Galinsky, 2008). While the need to restore power is certainly an important individual motivator, we suggest that another motivator might be just as influential: *restoring one's meaning in life*. Despite the ubiquity of instances where one might feel powerless in society, as well as the power of the search for meaning in life as a motivator, we are aware of no research that explore the relationship between feelings of powerlessness and the search for meaning in life. The present research addresses this gap by examining whether feelings of powerlessness can influence one's motivation to search for and restore meaning in life.

One way an individual who feels powerless might attempt to mitigate that feeling is through consumption activities. Prior research has shown that nostalgic products can activate consumers' memories of the significant events they have experienced and enhance consumers' perceptions of connectedness with important others (Wildschut et al., 2010). We suggest that both of these experiences should help consumers perceive their life as meaningful. Therefore, we predict that the motivation to search for meaning in life resulting from feelings of powerlessness will increase consumers' preferences for nostalgic products.

We conducted four studies to test these propositions. Study 1 measured the individual differences in power and examined its relationship with preference for nostalgic products. We recruited 111 participants at QQ Survey, a Chinese website similar Mturk. Participants first completed a scale to measure their sense of power and then reported overall attitudes toward an advertisement for instant noodles that was manipulated to elicit feelings of nostalgia versus a control. Results showed a significant power \times nostalgia interaction ($\beta = .61$, $t(107) = 2.11$, $p = .037$). As hypothesized, increased feelings of powerless were positively related to preference for the nostalgic noodle product ($\beta = .44$, 95% CI = .887, .002), but not the control ($\beta = 0.17$, 95% CI = -.199, .534).

Study 2 used a controlled experiment to test the main effect again. We recruited 196 participants at QQ Survey and randomly assigned them to the high-power, the low-power, or the control condition. We primed power firstly by asking participants to find out at least 10 words from a 10 \times 10 grid. The words were related to high power (e.g., boss and control), low power (e.g., subordinate and submissive), or irrelevant to power (e.g., music and paper). Then participants were asked to choose between two concerts, one playing nos-

talgic music and the other playing non-nostalgic music. A Chi-square test suggested a significant effect of power ($\chi^2(2) = 23.32$, $p < .001$). Low-power participants were more likely to choose the nostalgic concert than high-power participants (100% vs. 60%, $\chi^2(1) = 24.12$, $p < .001$) and the ones in the control condition (100% vs. 70.83%, $\chi^2(1) = 16.39$, $p < .001$). No differences were found between the high-power condition and the control condition ($\chi^2(1) = 1.27$, $p = .18$).

Study 3 aimed to test the underlying process. Forty eight participants were recruited. We first manipulated power by asking participants to recall an experience in which they had high power or low power. After that, participants indicated to what extent they wanted to search for meaning in life. Then they were asked to make a choice among four real snack products, two nostalgic and two non-nostalgic. A Chi-square test on the product choice showed a significant effect of powerlessness on nostalgic preference ($\chi^2(1) = 3.46$, $p = .06$). Next, we used a bootstrapping approach to test the mediating process. Results indicated that after controlling for the effect of emotion ($\beta = 0.25$, $p = .32$), low power led to a stronger motivation to search for meaning in life ($\beta = -1.05$, $p = .002$), which then increased the likelihood of choosing nostalgic products ($\beta = .94$, $p = .03$). Power had no direct effect on choice ($\beta = -0.91$, $p = .23$). Further, the mediating effect was negative and had a 95% confidence interval that excluded zero ($\beta = -.98$, 95% CI = -3.29 ~ -.10). These results support the proposed mediation process.

Study 4 aimed to examine a boundary condition. We recruited 176 participants from Mturk and randomly assigned them to 2 (power: low power vs. high power) \times 2 (meaning in life: reading vs. no reading) between-participants design. Participants were first assigned to either read an article that suggested that merely reading can provide meaning in life, or read nothing. Then participants were made to feel powerless or powerful by imagining that they are an employee or a boss. At last, they were asked to choose a soup brand among the four real soup brands: two nostalgic brands and two non-nostalgic brands. A logistic regression revealed a significant power \times reading interaction ($\chi^2 = 5.76$, $p = .016$). More importantly, low-power participants who were not provided the article were more likely to choose the nostalgic soup brands than high-power participants (72.1% vs. 52.2%, $\chi^2(1) = 3.74$, $p = .053$). However, in the reading condition, there was no significant difference.

In conclusion, the four studies provide consistent evidence that consumers who feel powerless will prefer nostalgic products, and that this effect is mediated by motivation to search for meaning in life. These studies provide a new explanation for how individuals cope with feeling powerless. Beyond the theoretical contributions, this research also provides important implications on marketing practice.

REFERENCES

- Galinsky, A. D., D. H. Gruenfeld, and J. C. Magee (2003), "From Power to Action," *Journal of Personality and Social Psychology*, 85 (3), 453-466.
- Rucker, D. D. and A. D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35 (2), 257-267.

802/Meaning in Life, Powerlessness, and Nostalgia: Using Nostalgia to Mitigate the Effect of Powerlessness on the Search for Meaning in Life

Steger, Michael F and Patricia Frazier (2005), "Meaning in Life: One Link in the Chain from Religiousness to Well-Being," *Journal of Counseling Psychology*, 52 (4), 574-582.

Wildschut, T., Sedikides, C., Routledge, C., Arndt, J., & Cordaro, F. (2010). Nostalgia as a repository of social connectedness: the role of attachment-related avoidance. *Journal of personality and social psychology*, 98(4), 573-586.

Zadro, Lisa, Kipling D Williams, and Rick Richardson (2004), "How Low Can You Go? Ostracism by a Computer Is Sufficient to Lower Self-Reported Levels of Belonging, Control, Self-Esteem, and Meaningful Existence," *Journal of Experimental Social Psychology*, 40 (4), 560-567.

The Asymmetric Effect of a Firm's Invested Effort in the CSR Campaign

Taehoon Park, University of South Carolina, USA
Elise Chandon Ince, University of South Carolina, USA
Anastasiya Pocheptsova Ghosh, University of Arizona, USA

EXTENDED ABSTRACT

An increasing number of companies are involved in prosocial behaviors called Corporate Social Responsibility (CSR). In contrast, firm-induced incidents that impair social good are coined Corporate Social Irresponsibility (CSI). This research investigates how consumers evaluate a company and its CSR campaign when the firm is involved in both a CSR and a CSI, depending on the order of the two: the response (CSI-CSR) and the insurance (CSR-CSI) mechanism. Some work has demonstrated the positive evaluation of insurance mechanism, because consumers attribute the cause of the negative event to external factors if it is preceded by CSR campaign (Klein and Dawar 2004). By contrast, another work (Wagner, Lutz, and Weitz 2009) argues that the insurance mechanism is viewed negatively when a CSI is highly congruent with a CSR, because consumers become suspicious about the firm's true motive for CSR campaign initiation. Expanding upon previous findings, we propose a moderating factor that defines how consumers respond to the insurance mechanism: invested effort by the firm in the CSR.

Consumers' skepticism has been identified as an important factor that impacts how consumers evaluate a CSR campaign and the firm (Drumwright 1996; Yoon, Gürhan-Canli, and Schwarz 2006). Although consumer suspicion about CSR motive can be derived from its temporal order in relation to a CSI incident (Wagner, Lutz, and Weitz 2009), we argue that having a CSR campaign initiated prior to a CSI does not harm company evaluation, when the firm invests high effort in the CSR campaign. Based on the previous findings that the level of firm's effort in the campaign is interpreted as the level of firm's commitment to the social good (Ellen et al. 2000, 2006), we argue that consumers will infer an altruistic motive from a CSR campaign with high effort in the insurance mechanism, improving company evaluation. For the response mechanism, however, the level of perceived ulterior motive will not differ based on the level of invested effort due to that the motive of the campaign (i.e., to offset any wrongdoing) is clear. And thus, ironically, investing more effort in response to a CSI accident that has already happened will not improve evaluations of the CSR campaign or the company.

We present three studies testing our hypotheses. Study 1 investigates whether more effort invested in a CSR campaign improves consumer reaction only in the insurance mechanism. The study employed a 2 (mechanism type: insurance vs. response) by 2 (invested effort: high vs. low) between-subject design. Participants read about a company that accidentally polluted a local river. As the effort, the company either donates money only or runs a task force team for river cleaning in addition to making a donation. Half of the participants read that the CSR was initiated before the CSI, whereas the other half read the opposite order. Participants then reported the perceived product performance and expected campaign success. As expected, there was a significant mechanism type by invested effort interaction on perceived product performance ($F(1, 204) = 3.96, p = .048, \eta_p^2 = .019$). Participants in the insurance condition reported marginally higher perceived product performance when the effort invested by the firm was high (vs. low), while no difference emerged for the response condition. Similar pattern was found for campaign success.

The goal of study 2 was to replicate the effect with a different manipulation of firm's invested effort. As a proxy for invested effort, the number of charities the firm supports was used expecting that

supporting multiple (vs. single) charities would be perceived as more effortful. Participants were randomly assigned to a 2 (mechanism type: insurance vs. response) by 2 (number of charities: multiple vs. single) between-subject design. Participants read about the same scenario as study 1 except for the effort manipulation. Then, participants reported how competent, effective, and efficient the company was and the degree to which the company developed the campaign to offset the CSI incident. Finally, they rated the importance of having a CSR campaign for a company as a covariate. An ANCOVA revealed a significant mechanism type by number of charity interaction on perceived competence ($F(1, 214) = 4.68, p = .032, \eta_p^2 = .021$). In the insurance condition, perceived competence was greater for the CSR campaign with the multiple (vs. single) activities, while perceived competence did not differ in the response condition. A moderated mediation supported our hypothesis: the indirect effect of the interaction between mechanism and number of charity through perceived motive was significant for the insurance condition (indirect effect = $-.11, SE = .08; 90\% CI, -.28 \text{ to } -.02$), but not for the response condition ($90\% CI, -.06 \text{ to } .02$).

Study 3 investigates whether the source of CSR effort can change firm's evaluation. Specifically, when firms ask consumers to get involved in choosing which charity to support (a common tactic employed by companies), the effort comes from consumers and not the company, and therefore will not have a beneficial effect for the insurance mechanism. The study employed 2 (mechanism type: insurance vs. response) by 2 (charity choice: consumers vs. executives) between-subject design. The scenario was about a hair care products company donates money to a non-profit organization supporting development of low-carbon energy. For the source of effort, the company either let their consumers or executives choose the non-profit organization. Participants reported their attitudes toward the company as well as the perceived motive of the campaign. An ANOVA revealed a significant mechanism type by charity choice interaction on firm evaluation ($F(1, 158) = 6.49, p = .012, \eta_p^2 = .039$). Participants in the insurance condition reported marginally lower evaluations of the firm with consumer (vs. executive) involvement. Interestingly, participants in the response condition reported marginally higher firm evaluation with consumer (vs. executive) involvement. Similar pattern was found for perceived firm's motive. A moderated mediation supported our hypothesis.

Contributing to the knowledge of consumers' response to companies' CSR efforts, this research suggests new ways for marketing managers to mitigate the potential negative effects from engaging in CSR campaigns in light of CSI incidents.

REFERENCES

- Drumwright, Minette (1996), "Company Advertising with a Social Dimension: The Role of Noneconomic Criteria," *The Journal of Marketing*, 60(4), 71–87.
- Ellen, Pam, Lois Mohr, and Deborah Webb (2000), "Charitable Programs and the Retailer: Do They Mix?," *Journal of Retailing*, 76(3), 393–406.
- Ellen, Pam, Deborah Webb, and Lois Mohr (2006), "Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs," *Journal of the Academy of Marketing Science*, 34(2), 147–57.

- Friestad, Marian and Peter Wright (1994), "The People Persuasion Cope with Knowledge Persuasion Model : How Attempts," *Journal of Consumer Research*, 21(1), 1–31.
- Klein, Jill and Niraj Dawar (2004), "Corporate Social Responsibility and Consumers' Attributions and Brand Evaluations in a Product-Harm Crisis," *International Journal of Research in Marketing*, 21(3), 203–17.
- Wagner, Tillmann, Richard Lutz, and Barton Weitz (2009), "Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions," *Journal of Marketing*, 73(6), 77–91.
- Yoon, Yeosun, Zeynep Gürhan-Canli, and Norbert Schwarz (2006), "The Effect of Corporate Social Responsibility (CSR) Activities on Companies With Bad Reputations," *Journal of Consumer Psychology*, 16(4), 377–90.

Divided, Strategic, or Something Else? Exploring the Impact of Social Mobility on Habitus

Erika L. Paulson, Quinnipiac University, USA

EXTENDED ABSTRACT

Bourdieu's theory of distinction is commonly applied to social mobility. According to this theory, social mobility results in a *divided habitus* where individuals are forever caught between two competing habituses. However, others have suggested that mobile individuals can pick and choose their habitus at will, a position termed a *strategic habitus*. Both positions have received empirical support, raising two questions. First, does the experience of social mobility conform more closely to the idea of the divided habitus or strategic habitus? Second, what factors influence the outcome?

Bourdieu's theory of distinction is used to approach these research questions. Briefly, this theory works to understand how individuals draw boundaries between different social groups and compete to arrange them hierarchically. The currencies in this competition are social, economic, and cultural capital. Social class is believed to be mirrored in the amount of and type of capital possessed (Berntal, Crockett, and Rose 2005; Carfagna et al 2014; Coskuner-Balli and Thompson 2012; Holt 1998; Moisis, Arnould, and Gentry 2013; Üstüner and Holt 2007, 2010).

Cultural capital can be objectified in consumption items, displayed through consumption behaviors and practices known as taste, or embodied in the habitus. An individual's habitus can be expressed in a variety of ways including "standing, speaking, walking, [...] feeling and thinking" (Bourdieu 1990a, 70). Habitus is not only a characteristic of an individual, but is also shared among those in a group such as a social class (Bourdieu 1990b, 77). What happens when an individual's social class changes? Does their habitus change?

Bourdieu theorizes that social mobility, either upward or downward, results in a divided habitus. Bourdieu describes how upwardly-mobile students "continually desire reintegration into their community of origin but at the same time are also unable to fully assimilate into the elite" (Bourdieu 1998, 107). This outcome is known as a divided habitus or a habitus *clivé* and has received empirical support (Aarseth, Layton and Nielsen 2016; Lawler 1999; Saatcioglu and Ozanne 2013; Savage 2015).

However, Lahire (2011) downplays the notion of a divided habitus as one of many contradictions an individual experiences. Emmonson (2003) further emphasizes how individuals make strategic, tactical choices in which habitus to use. Such ideas have found empirical support (Abrahams and Ingram 2013; Demetry, Thurk, and Fine 2015; Lehman 2009). Here, this position is referred to as a *strategic habitus*.

A total of 26 life history interviews were conducted. Respondents were first screened for subjective social mobility and semi-structured questions were included to measure mobility objectively. Respondents were nearly evenly composed of men and women. Most were white, while others classified themselves as belonging to one or more racial or ethnic groups. There was also a wide age range and respondents came from every region of the United States. The grounded theory method was used to guide the analysis and interpretation of the interviews (Fischer and Otnes 2008; Glaser and Strauss 1967; Goulding 2005; Spiggle 1994). Attention was given to habitus as well as other closely related concepts. The habitus itself has been subdivided into emotional (Arsel and Bean 2013) and moral (Saatcioglu and Ozanne 2013) dimensions. While habitus and consumption are conceptually distinct, in practice they overlap and

intertwine with one another and attention is given to both constructs in the analysis.

Does the experience of social mobility conform more closely to the idea of the divided habitus or the strategic habitus? Results suggest that the direction of mobility plays a crucial role in determining the outcome. Furthermore, changes in the habitus do not always align with either the divided or the strategic habitus.

For the downwardly mobile, habitus appears resistant to change. Adelaide's story vividly illustrates downward mobility and a habitus that remains upper class. She comes from an upper class family and attended exclusive private schools in her youth. However, the death of a parent meant a series of sudden, downward movements for her throughout adolescence. In adulthood she married a working class man and the differences between Adelaide and her husband reveal that her habitus is still rooted in the upper class. She openly invokes her pedigree to explain why she has a different "level set" than her blue collar husband. She admits to "judging" his coworkers and bristles at working class children being fed Mountain Dew, sporting buzzcuts, wearing camouflage, and using improper grammar. Her judgements indicate she retains her original habitus. This is because there is little incentive for downwardly mobile individuals to adjust to a less valued habitus.

In contrast, the upwardly mobile exhibit more change to their habitus. It no longer matches their original habitus but neither does it entirely conform to their new class. One example of such change comes from Adam, the son of immigrant parents who have moved steadily upward from the lower class. Overall, he describes himself falling somewhere in-between his parents and his new milieu. For example, Adam is "off-put" by his girlfriend's ability to spend \$300 or \$400 in one shopping trip. Such feelings indicate his habitus has not completely changed to fit his new class. For the upwardly mobile, one's habitus falls somewhere between their origin and destination.

Upward and downward mobility have different effects on taste because they are very different experiences. Downward mobility is embarrassing and provides no incentive for those who experience it to change their habitus. For the upwardly mobile the move up is celebrated, providing an incentive to change. It is also worth reconsidering whether Bourdieu's concept of a divided habitus accurately captures the experience. Rather than reflecting double isolation, the habitus appears blended. Additional work must also consider the role played by race, gender, and other characteristics as they intersect with social mobility. Overall, this work provides a look into the experience of social mobility. Investigating the effects is particularly important given the frequent, dynamic nature of mobility in the United States. The frequency of mobility also makes it essential to understand how mobility affects habitus and consumer behavior generally. Exploring social mobility also highlights the need to revisit traditional theories of the habitus.

REFERENCES

- Aarseth, Layton and Nielsen (2016), "Conflicts in the Habitus: The Emotional Work of Becoming Modern," *The Sociological Review*, 64 (1), 148-165.
- Abrahams, Jessica, and Nicola Ingram (2013), "The Chameleon Habitus: Exploring Local Students' Negotiations of Multiple Fields," *Sociological Research Online*, 18 (4), 21.

- Arsel, Zeynep, and Jonathan Bean (2013), "Taste Regimes and Market-mediated Practice," *Journal of Consumer Research*, 39 (February), 899-917.
- Berenthal, Matthew J., David Crockett, and Randall L. Rose (2005), "Credit Cards as Lifestyle Facilitators," *Journal of Consumer Research*, 32 (June), 130-145.
- Bourdieu, Pierre (1984/2010), *Distinction*, trans. Richard Nice, London: Routledge.
- Bourdieu, Pierre (1990a), *The Logic of Practice*, Cambridge: Polity Press.
- Bourdieu, Pierre (1990b), *In Other Words: Essays towards a Reflexive Sociology*, Cambridge: Polity Press.
- Bourdieu, Pierre (1998), *The State Nobility: Elite Schools In The Field Of Power*, Stanford: University Press.
- Carfagna, Lindsey B., Emilie A. Dubois, Connor Fitzmaurice, Monique Y. Ouimette, Juliet B. Schor, and Margaret Willis (2014), "An Emerging Eco-Habitus: The Reconfiguration of High Cultural Capital Practices Among Ethical Consumers," *Journal of Consumer Culture*, 14 (July), 158-78.
- Coskuner-Balli, Gokcen, and Craig J. Thompson (2013), "The Status Costs of Subordinate Cultural Capital: At-Home Fathers' Collective Pursuit of Cultural Legitimacy Through Capitalizing Consumption Practices," *Journal of Consumer Research*, 40 (June), 19-41.
- Demetry, Daphne, Jessica Thurk, and Gary Alan Fine (2015), "Strategic Poverty: How Social and Cultural Capital Shapes Low-income Life," *Journal of Consumer Culture*, 15 (March), 86-109.
- Emmison, Michael (2003), "Social Class and Cultural Mobility: Reconfiguring the Cultural Omnivore Thesis," *Journal of Sociology*, 39 (September), 211-230.
- Fischer, Eileen, and Cele C. Otnes (2008), "Breaking New Ground: Developing Grounded Theories in Marketing and Consumer Behavior," in *Handbook Of Qualitative Research Methods In Marketing*, Russell W. Belk (Ed.), Elgar Publishing, 19-30.
- Glaser, Barry G. and Anselm L. Strauss (1967), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago: Aldine.
- Goulding, Christina (2005), "Grounded Theory, Ethnography and Phenomenology: A Comparative Analysis of Three Qualitative Strategies For Marketing Research," *European Journal of Marketing*, 39 (3/4), 294-308.
- Holt, Douglas B. (1998), "Does Cultural Capital Structure American Consumption?" *Journal of Consumer Research*, 25 (June), 1-25.
- Lahire, Bernard (2011), *The Plural Actor*, trans. David Fernbach, Polity Press.
- Lawler, Steph (1999), "'Getting Out and Getting Away': Women's Narratives of Class Mobility," *Feminist Review*, 63 (September), 3-24.
- Lehmann, Wolfgang (2009), "Becoming Middle Class: How Working-Class University Students Draw and Transgress Moral Class Boundaries," *Sociology*, 43 (August), 631-47.
- Moisio, Risto, Eric J. Arnould, and James W. Gentry (2013), "Productive Consumption in the Class-Mediated Construction of Domestic Masculinity: Do-It-Yourself (DIY) Home Improvement in Men's Identity Work," *Journal of Consumer Research*, 40 (August), 298-316.
- Saatcioglu, Bige, and Julie L. Ozanne (2013), "Moral Habitus and Status Negotiation in a Marginalized Working-Class Neighborhood," *Journal of Consumer Research*, 40 (December), 692-710.
- Savage, Mike (2015), *Social Class in the 21st Century*, Pelican Books.
- Spiggle, Susan (1994), "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, 21 (December), 491-503.
- Üstüner, Tuba, and Douglas B. Holt (2007), "Dominated Consumer Acculturation: The Social Construction of Poor Migrant Women's Consumer Identity Projects in a Turkish Squatter," *Journal of Consumer Research*, 34 (June), 41-56.
- (2010), "Toward a Theory of Status Consumption in Less Industrialized Countries," *Journal of Consumer Research*, 37 (June), 37-56.

Self-Disclosure Asymmetry in Online Communities: A Challenge of Demographic Diversity

Cornelia (Connie) Pechmann, University of California Irvine, USA

Kelly EunJung Yoon, University of California Irvine, USA

Denis Trapido, University of Washington Bothell, USA

Judith J. Prochaska, Stanford University, USA

EXTENDED ABSTRACT

The success of online communities depends on the active engagement and strong attachment of the members (Ren et al., 2012). Disclosure of personal information is a commonly proposed mechanism that induces close interpersonal relationships (Ensari and Miller, 2002). Therefore, a question that arises is how online communities can encourage members to disclose themselves to the community, and result in positive outcomes. Our study considers this question by examining online health communities for smoking cessation (Pechmann et al., 2016).

Self-disclosure is “any message about the self that a person communicates to another” (Wheeless and Grotz, 1976, p. 47). Researchers have found that disclosing personal information such as demographics is positively associated with developing high-quality relationships (Phillips et al., 2009). In addition, interpersonal similarity in demographics helps individuals build close relationships (Naylor et al., 2012). However, consumers are often concerned about disclosing personal information to demographically dissimilar others, because this may potentially increase the psychological distance between them and others (Phillips et al., 2009). This greater distance may undermine dyadic ties, which in turn may weaken online communities

Therefore, understanding how similarity in and self-disclosure of demographics may affect dyads seems important for helping online communities improve engagement and goal attainment. Hence, we investigated how dyadic similarity in demographics affected whether the members of the dyad disclosed their personal demographic information to others. We also examined whether dyadic similarity affected the goal of dyadic abstinence (smoking cessation) due to the mediating effects of dyadic disclosure, dyadic tie strength, and total engagement.

Hypothesis 1: In online communities, members of demographically dissimilar versus similar dyads will be (a) less likely to engage in reciprocated self-disclosure and (b) more likely to engage in asymmetric self-disclosure about the demographic in their posts, but (c) only if there is an obvious minority on that demographic.

Hypothesis 2: In online communities, regardless of whether dyads are demographically similar or dissimilar, self-disclosure of demographics in posts will be associated with tie strength.

Our first study examined 8 online communities that participated in a 100-day quit-smoking program called Tweet2Quit in 2012-2013 (Pechmann et al. 2016). Individuals who were interested in an online community for quitting smoking and who met the screening criteria (i.e., ages 18-59, residing in the continental USA, current smokers, interested in quitting, mobile phone with data plan, social media users) were assigned to 20-member communities on Twitter consisting entirely of other smokers. Participants were mailed 8 weeks of study-provided nicotine patches to help them quit and were sent automated

daily reminders to post to their online community. Also, they were encouraged to choose a quit date within one week of joining the online community, so that all members were striving for the same goal with similar milestones.

The demographics of the online community members were measured by a survey – gender, employment status, marital status, and age. Once members began to post to their online communities, the dyads that were formed were identified using social network analysis (details below). After this, the demographic similarity or dissimilarity of each dyad was determined by comparing the dyad members’ survey responses. Goal attainment, defined as sustained smoking abstinence, was assessed using email surveys (Pechmann et al. 2016). A dyad was identified based on whether a member sent at least one post to another member (Centola and van de Rijt 2015). Tie strength was measured as the count of posts exchanged between two members of a dyad (Shriver et al. 2013). Individual-level self-disclosure of demographics was assessed by two independent coders who examined if a post discussed gender, employment status, marital status, or age. Self-disclosure was coded in terms of occurrences and also content. Dyadic-level self-disclosure of examined demographics were coded as follows (Moon 2000): non-disclosure meaning neither dyad member self-disclosed the demographic (0), asymmetric self-disclosure meaning one member did so (1), and reciprocated self-disclosure meaning both members did so (2).

H1 predicted that demographically dissimilar versus similar dyads would show less reciprocated and more asymmetric self-disclosure of that demographic in their posts, if there was an obvious minority on that demographic. To examine H1, our z-tests compared the percentages of dissimilar versus similar dyads who reached each stage of self-disclosure by demographic. The results supported the hypothesis. We expected to see dissimilarity-based self-disclosure asymmetry for gender and employment status because men and the unemployed had an obvious minority standing in these online communities. Consistent with this expectation, gender dissimilar versus similar dyads were less likely to engage in reciprocated self-disclosure and more likely to engage in asymmetric self-disclosure of gender in posts. Also, employment dissimilar versus similar dyads were less likely to engage in reciprocated self-disclosure and more likely to engage in asymmetric self-disclosure of employment status in posts. For marital status and age, where there was no obvious minority, these effects did not obtain.

H2 posited that self-disclosure of either similar or dissimilar demographics in posts would relate to positive dyadic outcomes. To test H2, self-disclosure type was regressed on each outcome, separately for similar and dissimilar dyads. For dissimilar dyads, most of the results supported the hypothesis. For employment-dissimilar dyads, self-disclosure of employment status in posts related to tie strength. For maritally dissimilar dyads, self-disclosure of marital status in posts related to tie strength. For age dissimilar dyads, self-disclosure of age in posts related to tie strength. For similar dyads, self-disclosure of gender in posts related to tie strength. For employment-similar dyads, self-disclosure of employment status in posts related to tie strength. For maritally similar dyads, self-disclosure of marital status in posts related to tie strength.

In this research, we explored a psychological phenomenon, self-disclosure asymmetry, wherein one member of a dyad self-disclosed his or her demographic but the other did not. We reasoned that self-disclosure asymmetry might help to explain the weakness of ties in online communities that are comprised of diverse strangers. Furthermore, we observed substantial self-disclosure inhibition in the online communities that we studied, primarily in the form of asymmetric or one-sided self-disclosure. When there was an obvious minority on a demographic, minority members of dyads chose to conceal this demographic from majority members.

REFERENCES

- Centola, D., & van de Rijt, A. (2015). Choosing your network: Social preferences in an online health community. *Social science & medicine*, 125, 19-31.
- Ensari, N., & Miller, N. (2002). The out-group must not be so bad after all: the effects of disclosure, typicality, and salience on intergroup bias. *Journal of personality and social psychology*, 83(2), 313.
- Naylor, R. W., Lambertson, C. P., & West, P. M. (2012). Beyond the "like" button: The impact of mere virtual presence on brand evaluations and purchase intentions in social media settings. *Journal of Marketing*, 76(6), 105-120.
- Pechmann, C., Delucchi, K., Lakon, C. M., & Prochaska, J. J. (2016). Randomised controlled trial evaluation of Tweet2Quit: a social network quit-smoking intervention. *Tobacco control*, tobaccocontrol-2015-052768.
- Phillips, K. W., Rothbard, N. P., & Dumas, T. L. (2009). To disclose or not to disclose? Status distance and self-disclosure in diverse environments. *Academy of Management Review*, 34(4), 710-732.
- Ren, Y., Harper, F. M., Drenner, S., Terveen, L., Kiesler, S., Riedl, J., & Kraut, R. E. (2012). Building member attachment in online communities: Applying theories of group identity and interpersonal bonds. *Mis Quarterly*, 36(3).
- Shriver, S. K., Nair, H. S., & Hofstetter, R. (2013). Social ties and user-generated content: Evidence from an online social network. *Management Science*, 59(6), 1425-1443.
- Wheless, L. R., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. *Human Communication Research*, 2(4), 338-346.

The Conformity-Risk Paradox: Why Increasingly Risky Mortgages are Acquired by Increasingly Risk-Averse Consumers

Léna Pellandini-Simányi, Università della Svizzera italiana, Switzerland

Ádám Banai, Central Bank of Hungary, Hungary

EXTENDED ABSTRACT

According to the ‘financialization of everyday life’ theory, consumers took increasingly risky mortgages before the crisis because of the emergence of a new financial culture that promoted growing risk-tolerance (Aalbers 2008; Fligstein and Goldstein 2015). Rogers’ (2010) theory of the diffusion of innovation would imply a reverse trend: that late adopters are more conformist and, by extension, more risk-averse than early adopters.

While in most markets product risk is constant or decreases over time (i.e. surgeries get safer as expertise accumulates, etc.), in some markets, product risk increases. The mortgage market of the 2000s was one of such markets. In these markets, the conformity-based explanation implies a paradox relationship between risk-tolerance and actual riskiness of products: increasingly risk-averse consumers should hold increasingly risky products simply because they jumped later on the bandwagon. We call this the *conformity-risk paradox*.

We test this paradox through the case of mortgage borrowing, examining two hypotheses:

Hypothesis 1: Increasingly risky mortgages were not taken by increasingly risk-tolerant consumers over time.

Hypothesis 2: Increasingly risky mortgages were taken by increasingly conformist consumers over time.

Methodology

Our test case is the Hungarian mortgage market between 2000 and 2010, which meets the criteria of becoming increasingly risky over time (Balás et al. 2015). Mortgage borrowing was practically non-existent before 2000 in Hungary (Pellandini-Simányi et al. 2015), hence the case also meets the criteria of being a new market. We used a survey with 189 mortgage borrowers, using face-to-face interviews and random walk sampling method. The sample is representative of mortgage borrowers in Hungary in terms of age, education and settlement type (Balás et al. 2015).

We used four variables:

1. *Time of acquisition of the mortgage*
2. *Actual mortgage risk*

We composed this variable based on three features:

- (1) Denomination: based on the historical standard deviation of exchange rates HUF = 1, EUR = 2, CHF = 3 and other FX (JPY loans) = 4.
- (2) Interest rate type: Variable = 4, fixed = 2.
- (3) Payment-to-Income ratio: below 10% = 1, 10%-33% = 2, 33%-50% = 3, above 50% = 4.

The riskiness score is the sum of the above, taking values from 3 to 12.

3. *Borrower’s risk tolerance*

We used a modified version of the question for *investment* risk tolerance of the American Survey of Consumer Finances:

Imagine that you need a loan. Which of the following statements on this card comes closest to the amount of financial risk that you are willing to take when you borrow money?

1. *Take substantial financial risk expecting to pay substantially lower installments*
2. *Take above average financial risks expecting to pay below the average installments*
3. *Take average financial risks expecting to pay average installments*
4. *Not willing to take any financial risk*

We further asked respondents how they would have answered the above question at the time when they acquired their mortgage, and if it differed, used that answer in the analysis.

4. Borrower’s conformity

We define conformity as a tendency to follow other people’s behaviour and opinions as opposed one’s own judgement. People may choose mortgages because their friends and acquaintances do so. We measured this aspect by asking respondents how many people they knew who held a similar mortgage at the time when they acquired it (none = 0; one or two = 1; many = 2). Moreover, conformity is at play when people assess the riskiness of the mortgage based on the behavior and advice of others, such as friends, acquaintances or bank clerks, rather than their own assessment. We thus asked respondents who considered their mortgage low-risk (more than 90% of the sample) to indicate the influences on their assessment (yes = 1; no = 0):

I considered the mortgage low-risk because...

- *many of my acquaintances, friends held a similar mortgage.*
- *people whose opinion I respect suggested that it is not risky.*

The conformity score is the sum of these two, taking values between 0 and 2.

Analysis

Hypothesis 1: Increasingly risky mortgages were not taken by increasingly risk-tolerant consumers over time.

Our data shows a steady increase of riskiness of mortgages between 2000 and 2008 (from 5.5 to 8.4). Yet risk-tolerance remained consistently low: between 1.6 and 1.8 in all periods between 2003 and 2010, with even a minor, temporary decrease in 2005-6 (1 = zero risk-tolerance, 2 = average risk tolerance out of 4). Individual-level differences between one’s self-assessed risk tolerance and the risk of one’s mortgage (labeled ‘risk attitude-behaviour gap’ (ABG)) shows a steady upward trend from 4.2 to 6.4 between 2000 and 2008. These

findings confirm our hypothesis that increasingly risky borrowing was not accompanied by an increase in risk tolerance.

Hypothesis 2: Increasingly risky mortgages were taken by increasingly conformist consumers over time.

Borrowers on average had a high number of acquaintances with similar mortgages when they acquired their mortgage, suggesting an element of herd behavior. 90% of borrowers thought that their mortgage was low-risk, mainly based on the behavior and opinion of others. Conformity is high (above 0.9 between 2000 and 2004 and 1.2 between 2005 and 2008 on a scale of 0 to 2) throughout the period, with a slight decrease in 2007-8. Analyzing conformity by risk category shows that conformity tends to be higher for higher risk products, lending support to our hypothesis that increasingly conformist consumers took the increasingly risky mortgages. This is supported by the result that people of higher conformity levels have a significantly higher risk attitude-behaviour gap (t-test statistics, significant at $p < 0.05$). To further test this finding, we run an ordered logit estimation for the actual risk of the mortgage as dependent and the conformity index as independent variable, and gradually included risk-tolerance, age (at the time of borrowing), settlement type, education and income as control variables. Even after including all controls, a significant positive (0.529) relationship remained between conformity and the riskiness of the mortgage.

The widening attitude-behaviour gap has several alternative explanations, which we excluded. First, it may be caused by a cohort effect: older people tend to be more risk-averse, hence an increase in the average borrower age would also lead to decreasing risk-tolerance over time. T-test statistics, however, show that the average age (mid-thirties) of borrowers did not change significantly over the period. Second, the widening gap may be caused by the subprime extension of the market towards people of lower socio-economic status. Low SES status borrowers are more risk-averse (Pellandini-Simanyi and Banai 2017); yet they only have access to higher risk financial products. Thus, more low-SES borrowers entering the market over time may lead to a widening attitude-behaviour gap. This explanation, however, does not apply for the Hungarian case. The average income and labor market position of households taking mortgages did not change significantly over the period; even, after 2007, high income households' mortgage debt grew even quicker than that of low income households (Tóth and Medgyesi, 2010; Balás, Banai and Hosszú 2015).

Conclusion

Theories of the proliferation of risky mortgages suggest a shift in attitudes, either through the 'financialization of everyday life' (Fligstein and Goldstein 2015) or through meaning-making processes that normalized risky mortgages (Peñaloza and Barnhart 2011). Our study shows that meanings need not change for consumers to acquire risky products. Consumers did not see risky mortgages as increasingly normal, but rather, mistakenly, as low-risk, inferred from the behavior and opinion of others. Paradoxically, increasingly risky mortgages were acquired by increasingly risk-averse consumers. Thus, instead of a shift in attitudes, the attitude-behavior gap opened further over time.

Our findings are consistent with Roger's (2010) diffusion of innovation theory, suggesting that less conformist and more risk-tolerant consumers adopt new products first, followed by more conformist and risk-averse adopters. We extend this by arguing that in (1) markets of increasingly risky offers and (2) high information asymmetry, this results in a conformity-risk paradox: the adoption of

increasingly risky products by increasingly risk-averse consumers, who jumped later the bandwagon.

REFERENCES

- Aalbers, Manuel B. (2008), "The Financialization of Home and the Mortgage Market Crisis," *Competition & Change*, 12 (2), 148-66.
- Balás, Tamás, Adam Banai, and Zsuzsanna Hosszú (2015), "Modelling Probability of Default and Optimal Pti Level by Using a Household Survey," *Acta Oeconomica*, 65 (2), 183-209.
- Barsky, Robert B, F. Miles Kimball, Thomas Juster, and Matthew Shapiro (1997), "Preference Parameters and Behavioral Heterogeneity: An Experimental Approach in the Health and Retirement Study," *Quarterly Journal of Economics*, 112 (2), 537-79.
- Brown, Martin and Roman Graf (2012), "Financial Literacy, Household Investment and Household Debt: Evidence from Switzerland," Working papers on finance No13/1, University of St.Gallen.
- Brown, Sarah, Gaia Garino, and Karl Taylor (2013), "Household Debt and Attitudes toward Risk," *Review of Income and Wealth*, 59 (2), 283-304.
- Fligstein, Neil and Adam Goldstein (2015), "The Emergence of a Finance Culture in American Households, 1989-2007," *Socio-Economic Review*, 13 (3), 575-601.
- Goldstein, Adam and Neil Fligstein (2014), "The Transformation of Mortgage Finance and the Industrial Roots of the Mortgage Meltdown," <http://sociology.berkeley.edu/sites/default/files/faculty/fligstein/Rise%20and%20Fall%20Revised%20June%202014%20Final%20Version.pdf>.
- H. Peyton, Young (2015), "The Evolution of Social Norms," *Annual Review of Economics*, 7, 359-87.
- Holló, Dániel (2009), "Risk Developments on the Retail Mortgage Loan Market," *MNB Bulletin*, 4 (3), 14-19.
- Hunter, Caroline and Judy Nixon (1999), "The Discourse of Housing Debt: The Social Construction of Landlords, Lenders, Borrowers and Tenants," *Housing, Theory, and Society*, 16 (4), 165-78.
- Langley, Paul (2008a), "Financialization and the Consumer Credit Boom," *Competition & Change*, 12 (2), 133-47.
- (2007), "Uncertain Subjects of Anglo-American Financialization," *Cultural Critique*, 65 (Fall), 67-91.
- (2008b), *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*, Oxford: Oxford University Press.
- Mandel, Naomi (2003), "Shifting Selves and Decision Making: The Effects of Self-Construal Priming on Consumer Risk-Taking," *Journal of Consumer Research*, 30 (1), 30-40.
- Mendoza, Norma A. and John W. Pracejus (1997), "Buy Now, Pay Later: Does a Future Temporal Orientation Affect Credit Overuse?," in *Advances in Consumer Research*, Volume 24, Vol. 24, ed. Merrie Brucks and Deborah J. MacInnis, Provo, UT: Association for Consumer Research, 499-503.
- Minsky, Hyman P. (1986), *Stabilizing an Unstable Economy*, New Haven and London: Yale University Press.
- (1992), "The Financial Instability Hypothesis," *The Jerome Levy Economics Institute of Bard College*, WP # 74.
- Pålsson, Anne-Marie (1996), "Household Saving Behaviour and Financial Management: Does the Degree of Relative Risk Aversion Vary with Household Characteristics?," *Journal of Economic Psychology*, 17 (6), 771-87.

- Pellandini-Simanyi, Lena and Banai, Adam (2017) “Financialization of everyday life: Measurement and critique”, Annual Meeting of the Society for the Advancement of Socio-Economics, Lyon, France.
- Pellandini-Simanyi Lena, Hammer Ferenc and Vargha Zsuzsanna. (2015) “The Financialization of Everyday Life or the Domestication of Finance? How mortgages shape borrowers’ temporal horizons, relationships and rationality in Hungary”. *Cultural Studies*, 59(5-6): 733-759.
- Peñaloza, Lisa and Michelle Barnhart (2011), “Living U.S. Capitalism: The Normalization of Credit/Debt,” *Journal of Consumer Research*, 38 (4), 743-62.
- Raghubir, Priya and Sanjiv R. Das (2010), “The Long and Short of It: Why Are Stocks with Shorter Runs Preferred?,” *Journal of Consumer Research*, 36 (6), 964-82.
- Rogers, Everett M. (2010), *Diffusion of Innovations (4th Edition)*, New York: The Free Press.
- Schooley, Diane K. and Debra Drecnik Worden (1996), “Risk Aversion Measures: Comparing Attitudes and Asset Allocation,” *Financial Services Review*, 5 (2), 87-99.
- Tóth, István György and Márton Medgyesi (2010), “Jövedelemeloszlás és Megélhetési Nehézségek a Konszolidációs Csomagok és a Válságok Közepette Magyarországon,” in *Közékp. A válság munkapiaci hatásai*, ed. György Molnár, Budapest: MTA Közgazdaságtudományi Intézet Országos Foglalkoztatási Közalapítvány, 180-200.
- Tversky, Amos and Daniel Kahneman (1985), “The Framing of Decisions and the Psychology of Choice,” in *Environmental Impact Assessment, Technology Assessment, and Risk Analysis*, ed. Mumpower J.L. Covello V.T., Stallen P.J.M., Uppuluri V.R.R., Berlin, Heidelberg: NATO ASI Series (Series G: Ecological Sciences), vol 4. Springer.
- Vargha, Zsuzsanna (2011), “From Long-Term Savings to Instant Mortgages: Financial Demonstrations and the Role of Interaction in Markets,” *Organization*, 18 (2), 215-35.
- Wainwright, Thomas (2009), “Laying the Foundations for a Crisis: Mapping the Historico-Geographical Construction of Residential Mortgage Backed Securitization in the Uk,” *International Journal of Urban and Regional Research*, 33 (2), 372-88.
- Wennberg, John E., Benjamin A. Barnes, and Michael Zubkoff (1982), “Professional Uncertainty and the Problem of Supplier-Induced Demand,” *Social Science & Medicine*, 16 (7), 811-24.

Sadness Reduces Decisiveness

Beatriz Pereira, Iowa State University, USA
Scott Rick, University of Michigan, USA

EXTENDED ABSTRACT

People often make decisions when feeling distressed. Sadness is a particularly prevalent and long-lasting emotion (e.g., Jordan et al. 2011), and therefore understanding its impact on decision-making is particularly important. Recent research has found that sadness can generate suboptimal decisions (e.g., increased willingness to pay and impatience; Lerner et al. 2004, 2013). However, beyond quality of decision-making, sadness may influence the willingness to actively engage in decision-making to begin with, an issue that has not been explored in research using forced-choice paradigms.

According to appraisal theory (Smith & Ellsworth 1985), the way people cognitively appraise their environment is both a cause and consequence of different emotions. Sadness, in particular, is characterized by a high sense of uncertainty (e.g., about one's ability to cope; Tiedens and Linton 2001). Therefore, we propose that sadness can impair decision-making by reducing decisiveness. Indecisiveness may generate unnecessary search costs (Rassin et al. 2008). Moreover, waiting too long to select popular options may result in these becoming unavailable (students losing potential seats in a course, Palatano and Wengrovitz 2007). For consumers, indecisiveness can result in missed limited time offers opportunities.

Aside from costs to the consumer, indecisiveness can be costly for retailers. Purchase delays can increase stocking costs or turn into total revenue loss if the purchase is permanently deferred. Consumers' difficulty in selecting a single alternative is one of the most important causes of delaying purchases (Greenleaf and Lehmann 1995).

Previous research has shown that negative affect integral to the decision increases status quo choices (Luce 1998), but whether incidental sadness reduces decisiveness more generally is still an open question. We demonstrate that the uncertainty that accompanies sad states increases perceived choice difficulty and, consequently, increase indecisive behavior.

Experiment 1A

One way that people can express decision avoidance is by circumventing the responsibility for deciding (Anderson 2003). Hence, in Study 1A we examine whether incidental sadness increases indecision in the context of gift giving (e.g., whether gift-givers prefer to buy a specific versus a generic gift card). In this context, there is room for higher uncertainty given that people are inherently more knowledgeable about their own preferences.

Method

One hundred forty one participants were recruited from Amazon MTurk (44.7% female, mean age = 33.9). We induced either sadness or a neutral emotional state with video clips validated in previous research (Gross and Levenson 1995, Lerner et al. 2004). Participants in the Sadness condition viewed a clip from *The Champ* that portrays the death of a boy's father. Participants in the Neutral condition watched a video clip from a National Geographic documentary on coral reefs.

After the manipulation, all participants were told to imagine that they were going to a birthday party, and that they had decided to give their friend a gift card. Their friend and their friend's spouse love dining out, so the participant had decided to give them a restaurant gift certificate. Participants selected among Groupon gift cards (all costing \$35): a \$60 gift card to a French restaurant, a \$60 gift card to an Italian restaurant, or a \$50 gift card redeemable at either restau-

rant. We anticipated that sad participants would be more likely to select the third option, which forces their friend to make the restaurant decision, even when doing so required sacrificing \$10 in face value.

Results

We collapsed the first and second alternatives (French or Italian restaurant with a \$60 face value), since both these options are equally specific and choosing either require the same level of decisiveness. As predicted, Sadness participants were more likely to defer the choice of restaurant to their friend (72%) than Neutral participants (44%; $\chi^2(1) = 11.46, p = .001$). Sadness increased indecisiveness when choosing for others, even when there is a cost (\$10) associated with it.

Experiment 1B

One of the limitations from Experiment 1A is that the gift-giving context could be eliciting positive emotions, which could convolute the interpretation of the results. Therefore, in experiment 1B we made the choice to be about a restaurant certificate to be used by the person making the decision. In addition, we expected sadness to increase choice difficulty in this context, so we included such measure in this design. We hypothesized that the effect of sadness on decisiveness would be explained by the increased decision difficulty.

Method

One hundred sixty two participants were recruited from Amazon MTurk (53.1% female, mean age = 36.5). Participants watched the same movie clips from Experiment 1A. After the emotion manipulation, all participants were told to imagine that they were going to purchase a restaurant voucher for an upcoming Restaurant Week in their hometown. The terms matched those of experiment 1A. Next, participants rated their choice difficulty ("How much difficulty did you experience when making the decision about which restaurant voucher to get?").

Results

Participants in the Sadness condition were marginally more likely to select the more flexible, but lower value option (27%) than were participants in the Neutral condition (15%; $\chi^2(1) = 3.42, p = .065$). The choice shares of the flexible, but lower value option, were smaller in the context of choice for the self, versus choice for others (as expected, due to higher certainty regarding one's own preferences).

We ran regression analysis using PROCESS macro for SPSS (Hayes 2013) to test the hypothesis that choice difficulty mediates the effect of sadness on decisiveness. Sadness condition was a significant predictor of choice difficulty ($\beta = .614, SE = .22, p = .006$). Choice difficulty significantly predicted preference for the flexible option ($\beta = .404, SE = .131, p = .002$). Sadness is not a significant predictor of flexible option when controlling for choice difficulty ($\beta = .463, SE = .422, p = .273$). The indirect effect of Sadness on choice of flexible option (i.e. indecisiveness) through choice difficulty was significant and positive ($\beta = .248, SE = .132, 95\% CI [.0493, .6008], 1,000$ bootstrap samples). Therefore, we conclude that sadness increases perceived choice difficulty, which in turn increases preference for the flexible – and less decisive – option.

Experiment 2

Experiment 2 extends the findings of Experiment 1A and 1B in two ways. First, Experiment 2 sheds additional light on the hypothesized process (lack of certainty present when one experiences sadness) by manipulating anger, an emotion as aversive as sadness, but not high in uncertainty (Smith and Ellsworth 1985). Second, it examines the influence of sadness on indecisiveness in a personal finance domain. Specifically, we gave participants a debt repayment scenario where they could allocate all of their money to one of two credit card accounts, or they could act more indecisively and split the payment between accounts. We hypothesized that sadness would increase the tendency to split one's available money across cards (arguably, a proxy for indecisiveness), while anger would not since it is not associated with an uncertainty appraisal.

Method

We conducted a pre-test to test whether they perceived splitting the payment between accounts to be reflective of indecisive behavior. One hundred participants (recruited through MTurk) completed the pre-test for a small payment (29% female, mean age = 32.5). They were asked to judge a target based on his/her decision in a debt repayment scenario (Amar et al. 2011). Participants were asked to imagine that the target received \$100 windfall from the government. The target had two debts where the money could be allocated: a Mastercard with a \$100 balance and 10% APR and a Visa with a \$1,000 balance and 15% APR. Participants were randomly assigned to one of three conditions: the target (i) paid off the smallest account, (ii) split payments evenly, or (iii) reduced the debt of the large, high-APR debt (the normative action). Participants rated the extent to which they thought the target was feeling indecisive, uncertain, and risk-averse. We ran a repeated measures ANOVA to test whether participants perceived the three targets differently. Pairwise comparisons show that the target who split the funds between the cards was perceived as being more indecisive, and uncertain. Importantly, this target was not perceived to be risk-averse, therefore splitting was not perceived as a strategy to reduce risk (which would conflict with the proposed explanation that people split due to uncertainty). Participants also stated that splitting was not a decision they would have made, and did not believe that splitting made targets feel good. Therefore, we conclude that participants perceived splitting as reflecting indecisiveness and uncertainty.

Two hundred and four participants (MTurk) completed the main experiment (37% female, mean age = 32). We first induced sadness, anger, or neutral emotional states with video clips validated in previous research (Gross and Levenson 1995, Lerner et al. 2004, Rotenberg, Ray and Gross 2007). Participants in the Anger condition viewed a four-minute clip from *My Bodyguard* that portrays a bullying incident. Participants were then presented with the scenario from the pretest and asked to indicate how much of their \$100 windfall they would use to repay each card. The decision is difficult, because participants must choose between completely repaying the small balance with a small APR (which is tempting) and chipping away at the high balance with a high APR (which is financially optimal).

Results

We computed an indecisiveness score, which captured the extent to which participants split their windfall evenly between the two debts. Specifically, indecisiveness scores range from 0 to 50 and are equal to $\min(\text{Mastercard payment}, \text{Visa payment})$. If participants equally split their windfall between debts, their indecisiveness score is $\min(50, 50) = 50$. If they allocate their entire windfall to one debt, their score is $\min(0, 100) = 0$. We ran a one-way between subjects ANOVA to test whether emotional condition predicts indecisive-

ness scores. The omnibus test was marginally significant ($F(2, 201) = 2.50, p = .085$). Pairwise comparisons show that indecisiveness scores were significantly greater in the Sadness condition ($M = 9.43, SD = 16.41$) than in the Anger condition ($M = 4.83, SD = 11.07; t(134) = 1.99, p = .049$) and the Neutral condition ($M = 4.80, SD = 12.91; t(129) = 1.94, p = .054$). Indecisiveness scores did not differ among Anger and Neutral conditions ($p = .99$).

Experiment 2 demonstrates that sadness reduces decisiveness, while anger does not (relative to a Neutral control condition). These results suggest that not all negative emotions reduce decisiveness, and that the appraisal of uncertainty that accompanies sadness is a potentially significant driver of the effect of sadness on decisiveness. We replicated this finding in a follow-up correlational study ($N = 114, 55.3\%$ female, mean age = 36.6) where participants rated their naturally occurring emotions and completed the debt repayment task (order counterbalanced). As predicted, sadness scores correlated positively and significantly with indecisiveness scores ($r(112) = .33, p < .001$). Indecisiveness did not correlate significantly with pride, hope, indifference or happiness (all p 's $> .10$), but it correlated significantly with anger ($r(112) = .20, p < .05$). When both anger and sadness are entered in a multiple regression, only sadness predicts indecisiveness (sadness: $\beta = .211, t(100) = 2.86, p = .005$; anger: $t(100) < 1$).

Experiment 3

Larger choice sets have been shown to increase decision avoidance (Tversky and Shafir 1992), so if sadness reduces decisiveness, people experiencing sadness would be better off when facing smaller choice sets. Ironically, given that people experiencing sadness have increased uncertainty over their preferences, they might believe that they are better off by having larger assortments available. Therefore, in Experiment 3 we tested whether sad participants would be willing to incur higher search costs to obtain a larger choice set.

Method

Two hundred seventy five students from a US Midwestern university completed the experiment for course credit (39.6 female, mean age = 21). We elicited sadness or a neutral state with the same videos used in the previous experiments. Then, we gave participants a short decision task where there is a trade-off between assortment and search costs. Participants are told that they are going to buy new eyeglasses, and they found two stores online. From store A, one mile away, they want to try 3 models. From store B, they want to try 15 models, but store B is further. Participants are then asked how many miles they are willing to drive in order to reach the store with the larger assortment (Inesi et al. 2011).

Results

Four participants with answers 3 standard deviations above the mean were excluded from the analysis, two in each condition. As predicted, participants in the Sadness condition were willing to drive significant more miles to reach the store with larger assortment ($M = 21.34, SD = 15.49$) than participants in the Neutral condition ($M = 17.60, SD = 12.86, t(269) = 2.15, p = .032$). Although having a larger assortment will likely make their choice even more difficult (Tversky and Shafir 1992), participants in the Sadness condition seem to be coping with their uncertainty by having a stronger preference for the larger assortment, even if this implies higher search costs.

General Discussion

Prior work has shown that sadness can either be detrimental or beneficial to decision-making, depending on the context and type of decision. Although this body of literature has documented

directional effects of sadness on decision-making (e.g., increasing impatience; Lerner et al. 2013), we propose and find across multiple experiments that sadness can actually reduce the propensity to be decisive. We show that sadness increases indecisiveness in the context of financial decision-making regarding one's current debts and in the context of selecting gifts for others and for themselves. This effect is explained by higher levels of choice difficulty and uncertainty over preferences. We also showed that sadness increases the propensity to engage in more search costs to acquire a product, which exacerbates choice difficulty for people experiencing this emotion.

A potential limitation of the current findings is that the indecisive behavior we observed could be interpreted as people seeking more variety (i.e., paying off more debt accounts, selecting the gift card option that can be used in more restaurants). Arguably, the gift card holder will still go to only one restaurant, and the debt holder will still have to pay both debts, so it is not clear that the flexible choices in our manipulations provide any variety in consumption.

Alternatively, choosing more variety might be a coping mechanism of people experiencing indecisiveness, and not a desire to consume more variety per se. Another possibility is that sad people may simply have an enhanced desire for multiple units (e.g., two small candies rather than one large candy). Multiple units may appeal to sad people for a number of reasons (e.g., being able to share with others, or spreading out therapeutic consumption over time). Future research should also investigate this possibility.

Our work suggests that sadness reduces decisiveness due to increased perceived choice difficulty, even when hesitation is costly. Alternatively, indecisiveness may prove beneficial when sadness-tinged decisions are suboptimal. It is possible that indecisiveness protects sad decision-makers from larger blunders.

REFERENCES

- Amar, M., Ariely, D., Ayal, S., Cryder, C., & Rick, S. (2011). Winning the battle but losing the war: The psychology of debt management. *Journal of Marketing Research*, 48, Special Issue, S38-S50.
- Anderson, C. (2003). The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychological Bulletin*, 129, 139-67.
- Bodenhausen, G. V., Gabriel, S., & Lineberger, M. (2000). Sadness and susceptibility to judgmental bias: The case of anchoring. *Psychological Science*, 11(4), 320-3.
- Cryder, C. E., Lerner, J. S., Gross, J. J., & Dahl, R. E. (2008). Misery is not miserly: Sad and self-focused individuals spend more. *Psychological Science*, 19(6), 525-30.
- Dhar, R. (1997). Consumer preference for a no-choice option. *Journal of Consumer Research*, 24(2), 215-31.
- Frost, R. O., & Shows, D. L. (1993). The nature and measurement of compulsive indecisiveness. *Behaviour Research and Therapy*, 31(7), 683-IN2.
- Garg, N., & Lerner, J. S. (2013). Sadness and consumption. *Journal of Consumer Psychology*, 23(1), 106-13.
- Gentry, J. W., Kennedy, P. F., Paul, K., & Hill, R. P. (1994). The vulnerability of those grieving the death of a loved one: Implications for public policy. *Journal of Public Policy & Marketing*, 13(2) 128-42.
- Greenleaf, E. A., & Lehmann, D. R. (1995). Reasons for substantial delay in consumer decision making. *Journal of Consumer Research*, 22, 186-99.
- Gross, J. J., & Levenson, R. W. (1995). Emotion elicitation using films. *Cognition and Emotion*, 9(1), 87-108.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Inesi, M. E., Botti, S., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2011). Power and choice: Their dynamic interplay in quenching the thirst for personal control. *Psychological Science*, 22(8), 1042-8.
- Jordan, A. H., Monin, B., Dweck, C. S., Lovett, B. J., John, O. P., & Gross, J. J. (2011). Misery has more company than people think: Underestimating the prevalence of others' negative emotions. *Personality and Social Psychology Bulletin*, 37(1), 120-35.
- Lerner, J. S., Li, Y., & Weber, E. U. (2013). The financial costs of sadness. *Psychological science*, 24(1), 72-9.
- Lerner, J. S., Small, D. A., & Loewenstein, G. (2004). Heart strings and purse strings: Carryover effects of emotions on economic decisions. *Psychological Science*, 15(5), 337-41.
- Luce, M. F. (1998). Choosing to avoid: Coping with negatively emotion-laden consumer decisions. *Journal of consumer research*, 24(4), 409-33.
- Patalano, A. L., & Wengrovitz, S. M. (2007). Indecisiveness and response to risk in deciding when to decide. *Journal of Behavioral Decision Making*, 20, 405-24.
- Rassin, E., Muris, P., Booster, E., & Kolsloot, I. (2008). Indecisiveness and informational tunnel vision. *Personality and Individual Differences*, 45(1), 96-102.
- Rassin, E., Muris, P., Franken, I., Smit, M., & Wong, M. (2007). Measuring general indecisiveness. *Journal of Psychopathology and Behavioral Assessment*, 29(1), 60-7.
- Rottenberg, J., Ray, R. D., & Gross, J. J. (2007). Emotion elicitation using films. In J. A. Coan & J. J. B. Allen (Eds.), *The Handbook of Emotion Elicitation and Assessment* (pp. 9-28). New York: Oxford University Press.
- Scherer, K. R., Wallbott, H. G., & Summerfield, A. B. (Ed.). (1986). *Experiencing Emotion: A Cross-Cultural Study*. Cambridge University Press.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, 48(4), 813-38.
- Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of personality and social psychology*, 81(6), 973-88.
- Tversky, A., & Shafir, E. (1992). Choice under conflict: The dynamics of deferred decision. *Psychological Science*, 3(6), 358-61.
- van Reekum, R., Stuss, D. T., & Ostrander, L. (2005). Apathy: why care?. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 17(1), 7-19.
- Verduyn, P., Delvaux, E., Van Coillie, H., Tuerlinckx, F., & Van Mechelen, I. (2009). Predicting the duration of emotional experience: two experience sampling studies. *Emotion*, 9(1), 83-91.

Market Memory

Dolbec Pierre-Yann, Concordia University, Canada

EXTENDED ABSTRACT

Do markets “remember”? How do these memories shape markets? Previous research has seldom examined the market processes underlying the accumulation of memories around the evolution of a market. Instead, it has either concentrated on micro-level, consumer-centric processes (Biehal and Chakravarti 1982), or on how the interactions between other ‘types’ of memories, such as popular memories (Thompson and Tian 2008), nationalistic memories (Hartmann et al. 2016), and memories associated to specific brands (Brown, Kozinets, and Sherry 2003) can inform market processes such as myth making, branding and market shaping. Moreover, a focus on the active work of market actors in the evolution of markets (Ertimur and Coskuner-Balli 2015; Scaraboto and Fischer 2013) has left the role of market devices, or “the material and discursive assemblages that intervene in the construction of markets” (Muniesa, Millo and Callon 2007, 2) such as the memory of a market, out of the analysis. Studying such devices on which the evolution of a market relies is crucial if we are to further our understanding of market systems. As I will show, a market memory is central in the evolution of a market by providing a shared yet conflictual representation of the past, structuring market evolution through path dependencies, offering cultural resources, shaping market actors’ identities, and linking a market with others.

I broadly define a market memory as a collection of memory events that are collectively remembered by current market actors. By memory event, I mean a certain event in time for which traces exist (e.g., photographs, videos, press coverage). Such traces allow for the activation, retrieval and re-interpretation of the memory event. My findings are theoretically informed by two streams of research: work in sociology on collective memories (e.g., Jedlowski 2001; Olick 1999) and work in management and institutional studies (e.g., Anteby and Molnar 2012; Lippman and Aldrich 2015; Ocasio, Mauskopf, and Steele 2015). In both of these streams of research, memories are used to explain how a collectively shared and commemorated past influences present events by “providing people with understandings and symbolic frameworks that enable them to make sense of the world” as we “rely on memory for the provision of symbolic representations and frames which can influence and organize both our actions and our conception of ourselves” (Miszta 2003, 13). This makes the study of a market memory central to our understanding of market systems.

Let me prelude by discriminating a market memory from other existing concepts. First, although the fields of history and memory studies have collided and converged, a market memory is different from the history of the same market. In line with existing work, I differentiate between history, which aims at providing if not an objective at least a comprehensive if contentious account of the past (Poole 2008), and the retrieval, reinterpretation, and commemoration of the past which constitute collective memories (Schwartz 2005). More, history includes all that we know (or aim at knowing) about a particular era, while collective memory emphasizes what market actors remember (Poole 2008). Finally, collective memories also include “aspects of culture as well as social practices and structures” (Reading 2003, 5).

Second, the creation and collection of individual memories, although inextricably intertwined with that of collective memory (Olick and Robbins 1998) such as a market memory, are different. Individual memories and their aggregation, which Olick (1999) refers to as collected memory, cannot address phenomena at the heart of

collective memories: what triggers and how memories are stored and retrieved, the remaking of the past by the present by different actors, the division between memorable and forgettable, that styles, genres, and discourses cannot be reduced to the aggregation of individual subjectivities, the storification of the past and the associated simplification of memories as they are “prepared, planned, and rehearsed socially and individually”, and the shaping of reality by collective memories (Olick 1999; Misztal 2003).

A third possible objection could be that a market memory is similar to a commercial myth (e.g. Thompson and Tian 2008). Myths such as the South (Thompson and Tian 2008), the American Frontier (Belk and Costa 1998), or the invisible hand of the market (Kennedy 2009) are the source of resonant meanings and ideals (Thompson and Tian 2008) that “provide a logical model capable of overcoming contradictions” (Levi-Strauss 1955, 443). They do so by providing a dramatized story that “selectively narrates ... a version of the past,” flattening its complexity (Bell 2003, 76) and offering simplified, packaged, and easily to understand narratives (Bell 2003). Through this process, memory events present in collective memories may be amplified or silenced (e.g. Schwartz 2005). Myths and collective memories, albeit linked, are offering different representations of the past.

I analyzed an extensive archival dataset that retraces the evolution of fifteen established fashion houses (e.g., Balenciaga, Chanel, Dior) representing four main subsets: ‘historical’ fashion house, which have existed for more than 50 years, ‘established’ fashion houses that have emerged in the last 25 years, ‘avant-garde’ designer brands that have been recognized as revolutionizing the field, and ‘new’ designer brands that have emerged in the last 10 years. For these 15 fashion houses, I also collected the coverage of two years (2010 and 2015) of fashion shows for the Fall and Summer seasons from four main publications (New York Times, Vogue, Women’s Wear Daily and Business of Fashion). because fashion shows are intricately intertwined with the history of the luxury fashion market and because designers and critics alike reference previous memory events when creating or interpreting shows. Each memory event identified and deemed important in these shows was further researched to inquire about its origin, how it became salient (i.e., remembered by the market as an important memory event), and how it was stored and maintained over time. My dataset totals 819 pages.

I intertwine notions of memory work—“a conscious and purposeful staging of memory” (Kuhn 2000, 186)—and institutional work—actions that create, maintain, or disrupt the understanding, practices, and rules that govern a market (Dolbec and Fischer 2015; Lawrence and Suddaby 2006)—to propose three types of memory work at the heart of the functioning of markets: (1) memory creation, (2) memory maintenance, and (3) memory shaping, and explain how these three types of memory work influences main institutional dynamics such as actors’ identities, institutional practices, other types of institutional work, institutional logics, bases for legitimacy claims, as well as interactions with other markets and how this defines a market’s identity.

Memory creation influences the development of most institutional dynamics by offering a bank of cultural resources for market actors to draw from and creating path dependencies. Perhaps one of fashion’s most central memories is that of Chanel’s ‘little black dress’ (LBD). As the story goes, Vogue US published in 1926 a picture of a simple, long-sleeve, calf length straight black crepe de chine dress

by Chanel that they referred to as “Chanel’s Ford” as it could become “a uniform for all women of taste” (Foreman 2014). If Chanel introduced the little black dress, the garment got forever stamped in consumers’ mind by its appearance on Audrey Hepburn in *Breakfast at Tiffany’s*. Even if this particular dress was designed by Givenchy, it only furthered Chanel’s memory as the creator of the LBD and became a key memory event in the history of the designer, her fashion house, and fashion as a whole. As a cultural resource, the dress has been adopted and adapted by countless subcultures and designers, from mods to Dior’s ‘New Look’. And the dress now is an inescapable object, “a rite of passage for generations of designers” (Foreman 2014). Its influence on the development of the fashion market has been such that it was included in the MoMA’s first fashion exhibition that focuses on 99 items “that serve as a window onto social, economic and political changes in the world over the last 100 years.”

Second, memory maintenance ensures the continuity of a market and associated dynamics by, for example, reifying the symbolic power of memories and actors associated to them (e.g., Chanel’s little black dress constantly reaffirms the position of Chanel in fashion), and by stabilizing boundaries that keep market identities in place. In fashion, the most efficient and lasting way to keep memories alive seem to be to have had a design piece consecrated at a staple of consumers’ everyday wardrobe (e.g. Chanel’s black dress, Heidi Slimane’s slim suit). Memory maintenance is also performed through the use of objects, actors, events, places, practices, and firms as points of reference. An example of this in the work of fashion critics is the coverage of the 2016 Fall-Winter menswear collection of Raf Simons by well-known critic Alexander Fury. In his article, Fury references another fashion house (and associated designer), Maison Martin Margiela, mentioning that “the collection was so Margiela, in its distressing, its conspicuous wear, XXL-scale sweaters and coats slipping and sliding off the figure”, that Raf Simons had “been following in Margiela’s tabi-toed footsteps all along—he’s previously stated it was a Margiela show that triggered his interest in entering the industry.” Fury here uses Margiela as a cultural referent to explain Simons’ collection, thereby reaffirming the place of Margiela, the person and the fashion house, as well as key elements of its design, in the collective memory of the fashion market.

Third, memory shaping allows for the reshaping of the past through forgetting and reinterpretation. This in turn leads to the re-configuration of the cultural resources available to market actors, influencing for example market identities and sensemaking. Two types of memory shaping are of interest here. First, memory can be reinterpreted to reformulate how history unfolded. The reframing of the origins of designers following their commercial success or the re-writing of the evolution of a fashion house following the outing of its creative director are two examples of this process. For example, Maison Martin Margiela, Yohji Yamamoto, and Rei Kawabuko are often presented in such a way that implies that their success and recognition were immediate, although all designers suffered from poor sales and critical reception for their first few shows (e.g. Thurman 2005), which helps reconcile their last influence on the fashion market. Second, memory erasure happens when memory events can undermine market dynamics. As other markets, the fashion market aims at shielding itself from some aspects of its functioning that could give rise to systematic critiques (e.g. Humphreys and Thompson 2014). If such critiques can arise from the ethical contradictions at the heart of value chains, it can also emerge from negative memories that could undermine the identities of institutional actors. For example, even if Roy Halston was an iconic designer who shaped the 1970s (Scheips 2013) whom *Vogue* dubbed “America’s first internationally renowned designer” (Alexander 2011) and whom ideas and

innovations, such as developing outfit that can take you from work to the club, partnering with a major retail chain (JC Penny in 1983) and artists (with Andy Warhol), his downfall was accompanied by his erasure from the fashion market memory. A number of reasons, from the downfall of his brand following the JC Penny collection to his ban as the creative director of his own brand to his death from an AIDS-related disease in 1990s, could partly explain the desire of the industry to distance itself from the world famous designer.

Finally, I explain how a market connects to adjacent markets by building linked market memories. This is important for the following two reasons: first, creating linkages with adjacent markets can reinforce or undermine market dynamics. For example, designers draw from memory events from the markets of arts, architecture, music, and literature as referents for their collection. Not only does this allow them to create symbolic associations for their work, but this influx of memory events from adjacent markets that are structured by a similar institutional logic, the logic of art, also supports this logic in fashion. Second, linking memory events from adjacent markets opens possibilities for market complexification. Work on institutional theory has argued that markets are complex institutions where firms are exposed to competing institutional demands (Greenwood et al. 2011). I propose that these competing demands and contradicting institutional resources and processes (Seo and Creed 2002) can favor institutional improvisation and market-level changes.

My findings and the concept of market memory have a number of theoretical implications. First, I offer a market device that can help explain the maintenance of markets and market changes through memory contests. This points to the long-lasting value of any discursive act in markets, and how their accumulation, archival, and retrieval can over time shape how a market develops. It possibly provides avenues for marketers to devise marketing strategies that aim at developing important memory events, or developing their memory-based skills to influence markets. Second, I further refine the link between institutional logics and collective memories (Ocasio et al. 2016) by explaining how markets become intricately linked through references to memory events. Third, I also extend the concept of collective memories to markets. This is an important step as previous work has positioned collective memories at the societal, organizational, national, and communal levels. As markets as long-lasting institutions that govern most of today’s social life, I redress this theoretical oversight.

REFERENCES

- Alexander, Ella (2011), “Halston,” *Vogue*, October 10th, <http://www.vogue.co.uk/article/roy-halston-frowick-biography>.
- Anteby, Michel and Virág Molnár (2012), “Collective Memory Meets Organizational Identity: Remembering to Forget in a Firm’s Rhetorical History,” *Academy of Management Journal*, 55 (3), 525-540.
- Biehal, Gabriel, and Dipankar Chakravati (1982), “Information-Presentation Format and Learning Goals as Determinants of Consumers’ Memory Retrieval and Choice Processes,” *Journal of Consumer Research*, 8 (4), 431-441.
- Brown, Stephen, Robert V. Kozinets, and John F. Sherry Jr. (2003), “Teaching Old Brands New Tricks: Retro Branding and the Revival of Brand Meaning,” *Journal of Marketing*, 67 (July), 19-33.
- Dolbec, Pierre-Yann and Eileen Fischer (2015), “Re-Fashioning a Field: Connected Consumers and Institutional Dynamics in Markets,” *Journal of Consumer Research*, 41 (6), 1447-1468.

- Ertimur Burçak and Gokçen Coskuner-Balli (2015), "Navigating the Institutional Logics of Markets: Implications for Strategic Brand Management," *Journal of Marketing*, 79 (2), 40-61.
- Foreman, Katya (2014), "The Little Black Dress: Never Out of Style," *BBC*, October 21st, <http://www.bbc.com/culture/story/20131209-the-dress-thats-always-in-style>.
- Fury, Alexander (2016), "Raf Simons," *Vogue*, January 20th, <http://www.vogue.com/fashion-shows/fall-2016-menswear/raf-simons>.
- Hartmann, Benjamin J., Katja H. Brunk and Markus Giesler (2016), "Brand Retrofication," *Association for Consumer Research 2016*.
- Jedlowski, Paolo (2001), "Memory and Sociology: Themes and Issues," *Memory and Society*, 10 (1), 29-44.
- Kuhn, Annette (2000), "A Journey through Memory," in S. Radstone (ed.) *Memory and Methodology*, New York, NY: Berg, 179-196.
- Lawrence, Thomas B. and Roy Suddaby (2006), "Institutions and Institutional Work," in S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.) *Handbook of Organization Studies*, 2nd Edition: 215-254. London: Sage.
- Lippman, Stephen and Howard Aldrich (2015), "A Rolling Stone Gathers Momentum: Generational Units, Collective Memory, and Entrepreneurship," *Academy of Management Review*, available at: <http://amr.aom.org/content/early/2015/11/12/amr.2014.0139>.
- Misztal, Barbara A. (2003). *Theories of Social Remembering*. Philadelphia, PA: Open University Press.
- Moorman, Christine and Anne S. Miner (1998), "Organizational Improvisation and Organizational Memory," *Academy of Management Review*, 23 (4), 698-723.
- Muniesa, Fabian, Yuval Millo and Michel Callon (2007), "An Introduction to Market Devices," *Sociological Review Monograph Series*, Fabian Muniesa, Yuval Millo and Michel Callon eds, 55 (2), 1-12.
- Ocasio, William, Michael Maskapf and Christopher Steele (2015), "History, Society, and Institutions: The Role of Collective Memory in the Emergence and Evolution of Societal Logics," *Academy of Management Review*, available at: <http://amr.aom.org/content/early/2015/11/12/amr.2014.0183.short>.
- Olick, Jeffrey K. (1999), "Collective Memory: The Two Cultures," *Sociological Theory*, 17 (3), 333-348.
- Olick, Jeffrey K. and Joyce Robbins (1998), "Social Memory Studies: From Collective Memory to the Historical Sociology of Mnemonic Practices," *Annual Review of Sociology*, 24, 105-140.
- Phelps, Nicole (2016), "Vogue: Jean Paul Gaultier Spring 2016 Couture," *Vogue*, January 27th, <http://www.vogue.com/fashion-shows/spring-2016-couture/jean-paul-gaultier>.
- Reading, Anna (2003), "Editorial," *Media, Culture, and Society*, 25, 5-6.
- Scaraboto, Daiane and Eileen Fischer (2013), "Frustrated Fashionistas: An Institutional Theory Perspective on Consumer Quests for Greater Choice in Mainstream Markets," *Journal of Consumer Research*, 39 (6), 1234-257.
- Scheips, Charlie (2013), *American Fashion*, Assouline.
- Schwartz, Barry (2005), "The New Gettysburg Address: Fusing History and Memory," *Poetics*, 33, 63-79.
- Seo, Myeong-Gu and W. E. Douglas Creed (2002), "Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective," *Academy of Management Review*, 27 (2), 222-247.
- Thompson Craig J. and Kelly Tian (2008), "Reconstructing the South: How Commercial Myths Compete for Identity Value through the Ideological Shaping of Popular Memories and Countermemories" *Journal of Consumer Research*, 34 (February), 595-613.
- Thurman, Judith (2005), "The Misfit," *The New Yorker*, July 4th, <http://www.newyorker.com/magazine/2005/07/04/the-misfit-3>.
- Walsh, James P. and Gerardo Rivera Ungson (1991), "Organizational Memory," *Academy of Management Review*, 16 (1), 57-91.

Curiosity and Want/Should Conflicts

Evan Polman, University of Wisconsin-Madison, USA

Rachel Ruttan, Northwestern University, USA

Joann Peck, University of Wisconsin-Madison, USA

EXTENDED ABSTRACT

News and entertainment websites often increase online traffic by tantalizing readers with sensational headlines containing phrases such as: *YOU WON'T BELIEVE WHAT HAPPENED NEXT*, or *YOU'LL BE SHOCKED WHEN YOU SEE THIS*, or *17 SECRETS YOU DON'T WANT TO KNOW*. Called clickbait, these headlines typically aim to exploit consumers' curiosity, by providing just enough information to make readers curious, but not enough to satisfy their curiosity without clicking through to the linked content. In a similar vein, many television episodes end on a cliffhanger – a plot device featuring a precarious dilemma or shocking revelation at the end of an episode – which spurs the audience to watch the next episode in order to find out how the story will continue.

This type of pursuit describes reconciling an information gap, or more precisely, what we call satisfying a *curiosity appeal*, which we define as a proviso that contains a promise to satisfy one's piqued curiosity provided one option is chosen over others. In the current research we leverage the motivational benefits of curiosity appeals to test interventions designed to help steer people away from tempting "want" options like choosing unhealthy foods, choosing smaller-sooner payouts, watching lowbrow films, taking the elevator, and toward less-than-tempting, though normatively desirable "should" options. In all, our interventions leverage curiosity by luring people with the information that satisfies a curiosity appeal. To illustrate, imagine having the solution to a puzzling trivia question revealed to you if you choose to take the stairs rather than take the elevator. By promising satisfaction to the curiosity appeal (caused by the trivia question) with choosing the "should" option (taking the stairs), we propose the "should" option is more likely to be chosen than when there is no curiosity appeal (and corresponding motivation to satisfy it).

Our approach to motivating consumers via curiosity appeals implies that curiosity appeals could be used to motivate consumers to choose all kinds of options, besides solely "should" options. However, we also show that when curiosity appeals are *misapplied* to "want" options, consumers will counter-intuitively choose "want" options with less (not more) likelihood. At first glance, it might seem like nudges (and curiosity appeals in particular) would hypothetically operate in the same way across options – for example, in a choice between option A and B, wherein option A is nudged, it should make little difference if option A is a "should" option or a "want" option (at a minimum, the nudge ought to increase options A's likelihood in choice regardless of whether it is a "should" or "want" option). However, we show that nudging a "want" option via a curiosity appeal is a heretofore undocumented and novel way to increasing consumers' choice of "should" options. That is, in our research we evidence two different ways for using curiosity to change consumers' decisions and increase their choice of "should" options: one where "should" options are nudged, and another where "want" options are nudged.

Our research is important because a large portion of marketing is about grabbing consumers' attention, and curiosity is a feeling that activates attention (Gottlieb, Oudeyer, Lopes, and Baranes 2013). Yet, empirical research on curiosity and its relevance to marketing has been slow to keep up, with a few notable exceptions such as Isikman, MacInnis, Ülkümen, and Cavanaugh (2016) and Menon and Soman (2002). In the current research, we examine curiosity in an

empirical context that explores decision making and the want/should conflict in consumers' decisions, with an emphasis on how to reconcile the conflict in a way that steers consumers toward more choice of "should" options.

Want/Should Conflicts

People regularly face a tension between what they want to do and what they believe they should do. Researchers have long studied the conflict between choosing options that provide immediate gratification and options that are less desirable in the short-term, but provide more long-term benefits (e.g., Baumeister, Bratslavsky, Muraven, and Tice 1998; Bazerman, Tenbrunsel, and Wade-Benzoni 1998; Haws 2016). Bazerman et al. (1998) dubbed this common struggle the "want/should conflict" whereby people face two competing options.

A common thread across past research is that making "should" choices is an effortful decision, requiring individuals to both override immediately rewarding temptations and to enact willpower (Milkman, Rogers, and Bazerman 2008). Accordingly, much of the literature to date has focused on how to increase consumers' willpower. For example, increasing individuals' self-control capacities and cognitive resources are well-studied psychological tools that enhance the ability to make "should" choices (e.g., Baumeister et al. 1998; Shiv and Fedorikhin 1999). However, another approach is to decrease the level of temptation evoked by "want" options (Hoch and Lowenstein 1991). For instance, providing individuals with some sense of immediate gratification (that is separate from what the "want" option itself provides) can reduce the immediate desire for a "want" option in favor of a "should" option. In one empirical demonstration, Urminsky and Kivetz (2011) provided people with an immediate financial bonus in an intertemporal choice between a smaller-sooner option and a larger-later option. The authors found that the bonus led people to prefer the larger-later option because receiving it provided a sense of immediate gratification, thus making it easier to choose the less tempting but higher valued "should" option. In the current research, we explore whether appealing to a positive, intrinsically motivating state (curiosity) that requires no financial incentives could similarly steer people toward more "should" options.

Curiosity

Research has found that curiosity is a powerful predictor of behavior, playing an important role in motivating learning, mastery, and facilitating scientific discovery (Koestler 1964). Curiosity involves positive feelings of interest, but also feelings of uncertainty due to a perceived lack of knowledge (Litman and Jimerson 2004). An important theory of curiosity suggests that curiosity signals the presence of an "information gap" – that is, a lack of desired experience or knowledge (Loewenstein 1994; see also Litman 2005; Menon and Soman 2002). This feeling of deprivation instills a motivation to seek out the missing information in order to reduce or eliminate the feeling of deprivation (Maner and Gerend 2007), even if the missing information is unpleasant (Kruger and Evans 2009) or causes people physical pain when they try to resolve their curiosity (Hsee and Ruan 2016). Despite this feeling, curiosity is not typically seen as an aversive state; on the contrary, curiosity has been found to mitigate a negative experience, by improving upon it (Isikman et al. 2016); and Loew-

enstein (1994) remarks that people like to make themselves curious precisely to satisfy their curiosity. Indeed, positive feelings such as novelty, surprise, and closure help define curiosity: a desire to know something (Gottlieb et al 2013).

Drawing on research supporting the motivational power of curiosity, we tested a previously unexplored strategy for steering behavior by creating interventions that discourage tempting behaviors (“wants”) and instead encourage less-than-tempting but nonetheless normatively desirable behaviors (“shoulds”). Our central prediction was that, in a choice between “want” and “should” options, a curiosity appeal that can be satisfied by selecting a “should” option will increase the choice of “should” options over “want” options. From a theoretical standpoint, it is noteworthy that no research has yet investigated how curiosity and temptation jointly influence consumer behavior; nor has research investigated whether receiving satisfaction to one’s curiosity will change, much less reverse one’s choices or preferences. To be sure, research has found that curiosity-inducing advertising has the effect of making consumers search for information (Krugman 1965); and that consumers tend to remember a curiosity-inducing brand better (Menon and Soman 2002) – but no research has looked at the effect of curiosity on making an actual choice, precisely one of the major aims of consumer behavior research.

Nudging “Wants”

Implied by our research, curiosity appeals can be used to nudge consumers to choose other options, besides solely “should” options. For instance, curiosity appeals (and nudges writ large) could conceivably be used to nudge consumers to choose “want” options. Despite the voluminous research on nudges, the notion that they can be *misused* to increase “want” options among consumers has not been investigated. However, we propose that when “wants” are nudged (via curiosity appeals), consumers will counter-intuitively prefer them less.

Prior research has shown that before consumers choose “want” options, they prefer to feel like they have earned the right to choose them (Kivetz and Simonson 2002). This is because consumers often feel guilty and uneasy when choosing “want” options (Kivetz and Simonson 2002; Mishra and Mishra 2011; Ramanathan and Williams 2007). As such, consumers feel like they require a reason (some justification) for choosing “want” options (Okada 2005). In support of this view, research has shown that bolstering one’s self-concept or bolstering one’s effort serve as guilt-reducing ways that help make “want” options more justifiable (Khan and Dhar 2007; Kivetz and Simonson 2002). In fact, quite often with compensatory decision making, the path to justifying and choosing “want” options tends to involve first choosing “should” options – as though consuming “should” options provides consumers with the feeling that they have earned the license to subsequently indulge and choose “want” options (Merritt, Effron, and Monin 2010).

Thus, when consumers have established that they have earned the right to indulge, they feel like they have leeway for choosing a “want” option. Nudges, however, are designed precisely to help consumers make decisions without having to invoke extensive effort (Thaler and Sunstein 2009). And without the feeling of spending effort, consumers may not feel like they have adequately earned the right to indulge. What is more, satisfying one’s curiosity evokes an overall positive feeling – it serves as a reward in itself (Loewenstein, 1994). When this feeling of reward is coupled with choosing a “want” option, people may feel like they are, in the moment, *over-indulging* if they choose a “want” option. As the literatures on balancing and hedonic editing show, consumers prefer to balance their

indulgence, by eschewing too much indulgence (Dhar and Simonson 1999). Thus, while choosing a “should” and being rewarded with the satisfaction of one’s curiosity feels like a balanced choice, choosing a “want” and being rewarded with the satisfaction of one’s curiosity feels like an overindulgence, and is consequently avoided.

Studies

In study 1, we gave participants a choice between two fortune cookies: one plain and one dipped in chocolate and covered in sprinkles. Half the participants were given no additional information – and this control group chose the cookies with a 20-80 split in favor of the chocolate-dipped cookie. The other half comprised our treatment condition. We told participants in this group that the plain cookie contained a fortune that would tell them something personal that we knew about them. This undoubtedly piqued their curiosity, and we observed a near complete reversal of preferences.

In study 2, we examined the special case that describes nudging a “want” option with a curiosity appeal. Thus, study 2 has three conditions – the same two conditions from study 1, plus a condition where a “want” option is nudged via a curiosity appeal. We found that in an intertemporal choice, over 80% of participants in the control condition chose the smaller-sooner “want” option. Yet when we tied participants’ choices to piquing their curiosity (with revealing the answers to a self-assessment quiz that participants took), the proportion of participants choosing the “want” option dropped significantly, in both instances. These two separate paths to increasing participants’ choice of “should” options provide evidence that curiosity appeals do more than simply incentivize participants into choosing one option over another, because we found that when “wants” are nudged with curiosity appeals, participants are *disincentivized* by the promise of curiosity relief.

In study 3, we investigated the different processes that underlie why people choose a “should” when it is nudged, and why people also choose a “should” when a “want” is nudged. To do this, we measured participants’ dispositional curiosity, and we measured participants’ unease, guilt, and overindulgence with choosing a nudged “want” option. We found that participants were more likely to choose a highbrow (“should”) film clip over a lowbrow (“want”) film clip when we piqued their curiosity (with a magic trick) and promised to satisfy their curiosity (revealing the secret behind the trick) provided they choose the highbrow film. This tendency was stronger among participants with higher dispositional curiosity (while holding constant other feelings such as fun, novelty, and attention). In a separate bootstrapping analysis, we found that when the “want” film clip is nudged, it makes people feel guilty choosing it, hence they prefer the alternative “should” film clip. For results to both tests (importantly, we did not find evidence supporting the possibility that psychological reactance is driving the effects).

Then, in studies 4 and 5 we broadened the scope and ecological validity of our investigation by moving to the field. In study 4, in a building on a large university campus, we designed a placard with an unanswered trivia question that we placed by the elevators. Then in a nearby stairwell, we placed different placards with the answers to the question (thus satisfying their curiosity). We changed the questions and corresponding answers every day, and ran our experiment for 28 days. The first 14 days made up our pretest phase. In this phase, we measured foot traffic (with a *SenSource* people-counting laser) in the intervention stairwell without our placards. In addition, we measured foot traffic in a separate stairwell on the other side of the building (our so-called control stairwell). The test revealed a significant interaction, such that the number of counts in the intervention stairwell during the posttest significantly exceeded the number of

counts during the pretest phase, whereas the number of counts in the control stairwell during the posttest and pretest phases was not significantly different.

In Study 5 we partnered with a locally-owned grocery store and tested whether curiosity gaps can motivate people to buy more fruits and vegetables. For each of the produce items (e.g., beets) we created a placard with a joke on it (e.g., “why did the beets blush?”) and posted the placard by the produce item’s regular sign that contained its details like price and origin. Then, close to the placard, we placed a cup containing bag closures with the respective punchline printed on them (e.g., “because the beets saw the salad dressing”). The placard indicated the punchline is on the nearby bag closures. In all, we had 17081 cases, and we found a significant 10% increase in fruits and vegetables purchases when our curiosity intervention was imposed.

In sum, our research demonstrates a new phenomenon in want/should conflict that goes beyond making “should” options easier to choose. Although we found that nudging “shoulds” increases the extent that they are chosen, we also found that nudging “wants” increases the extent that “should” options (rather than “want” options) are chosen. Taken together, our research shows that the powerful effects of curiosity come at a small cost and help promote a wide range of desirable behaviors, from choosing high-brow films to exercising more to healthier eating.

REFERENCES

- Bastardi, Anthony and Eldar Shafir (1998), “On the Pursuit and Misuse of Useless Information.” *Journal of Personality and Social Psychology*, 75 (1), 19-32.
- Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice (1998), “Ego Depletion: Is the Active Self a Limited Resource?” *Journal of Personality and Social Psychology*, 74 (5), 1252-1265.
- Bazerman, Max H., Ann E. Tenbrunsel, and Kimberly Wade-Benzoni (1998), “Negotiating with Yourself and Losing: Making Decisions with Competing Internal Preferences,” *Academy of Management Review*, 23 (2), 225-41.
- Berlyne, Daniel E. (1960), *Conflict, Arousal, and Curiosity*. McGraw-Hill Book Company.
- Bitterly, T. Bradford, Robert Mislavsky, Hengchen Dai, and Katherine L. Milkman (2015), “Dueling with Desire: A Synthesis of Past Research on Want/Should Conflict,” in *The Psychology of Desire*, W. Hofmann and L. Nordgren, eds.
- Dhar, Ravi, and Itamar Simonson (1999), “Making Complementary Choices in Consumption Episodes: Highlighting Versus Balancing,” *Journal of Marketing Research*, 36 (1), 29-44.
- Gottlieb, James, Oudeyer, Pierre-Yves, Lopes, Manuel, and Adrien Barnes (2013), “Information-seeking, curiosity, and attention: Computational and neural mechanisms,” *Trends in Cognitive Sciences*, 17 (11), 585-593.
- Haws, Kelly L. (2016), “Enhancing Self-Control in Consumer Decisions,” *Current Opinion in Psychology*, 10, 118-123.
- Hoch, Stephen J., and George F. Loewenstein (1991), “Time-Inconsistent Preferences and Consumer Self-Control.” *Journal of Consumer Research*, 17 (4), 492-507.
- Hsee, Christopher K. and Bowen Ruan (2016), “The Pandora Effect: The Power and Peril of Curiosity,” *Psychological Science*.
- Hsee, Christopher K., Yang, and Bowen Ruan (2015), “The Mere Reaction Effect: Even Non-Positive and Non-Informative Reactions can Reinforce Actions,” *Journal of Consumer Research*.
- Khan, Uzma, and Ravi Dhar (2007), “Where there is a Way, Is There a Will? The Effect of Future Choices on Self-Control.” *Journal of Experimental Psychology: General*, 136 (2), 277-288.
- Kivetz, Ran, and Itamar Simonson (2002), “Earning the Right to Indulge: Effort as a Determinant of Customer Preferences Toward Frequency Program Rewards,” *Journal of Marketing Research*, 39 (2), 155-170.
- Koestler, Arthur (1964), *The Act of Creation*. London: Hutchinson.
- Kruger, Justin and Matt Evans (2009), “The Paradox of Alypius and the Pursuit of Unwanted Information,” *Journal of Experimental Social Psychology*, 45 (6), 1173-9.
- Krugman, Herbert E. (1965), “The Impact of Television Advertising: Learning Without Involvement,” *Public Opinion Quarterly*, 29 (3), 349-356.
- Litman, Jordan (2005), “Curiosity and the Pleasures of Learning: Wanting and Liking New Information,” *Cognition & Emotion*, 19(6), 793-814.
- Litman, Jordan A. (2008), “Interest and Deprivation Factors of Epistemic Curiosity.” *Personality and Individual Differences*, 44 (7), 1585-1595.
- Litman, Jordan A. and Tiffany L. Jimerson (2004), “The Measurement of Curiosity as a Feeling of Deprivation,” *Journal of Personality Assessment*, 82 (2), 147-57.
- Loewenstein, George (1994), “The Psychology of Curiosity: A Review and Reinterpretation.” *Psychological Bulletin*, 116(1), 75.
- (1996), “Out of Control: Visceral Influences on Behavior,” *Organizational Behavior and Human Decision Processes*, 65 (3), 272-92.
- Maner, Jon K. and Mary A. Gerend (2007), “Motivationally Selective Risk Judgments: Do Fear and Curiosity Boost the Boons or the Banes?” *Organizational Behavior and Human Decision Processes*, 103 (2), 256-67.
- Merritt, Anna C., Daniel A. Effron, and Benoît Monin (2010), “Moral Self-Licensing: When Being Good Frees us to be Bad,” *Social and Personality Psychology Compass*, 4 (5), 344-357.
- Menon, Satya and Dilip Soman (2002), “Managing the Power of Curiosity for Effective Web Advertising Strategies,” *Journal of Advertising*, 31 (3), 1-14.
- Milkman, Katherine L., Todd Rogers, and Max H. Bazerman (2008), “Harnessing our Inner Angels and Demons: What we have Learned about want/should Conflicts and how that Knowledge can Help Us Reduce Short-Sighted Decision Making,” *Perspectives on Psychological Science*, 3 (4), 324-38.
- Mishra, Arul, and Himanshu Mishra (2011), “The Influence of Price Discount versus Bonus Pack on the Preference for Virtue and Vice Foods,” *Journal of Marketing Research*, 48 (1), 196-206.
- Okada, Erica Mina (2005), “Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods,” *Journal of Marketing Research*, 42 (1), 43-53.
- Ramanathan, Suresh, and Patti Williams (2007), “Immediate and Delayed Emotional Consequences of Indulgence: The Moderating Influence of Personality Type on Mixed Emotions.” *Journal of Consumer Research*, 34 (2), 212-223.
- Shiv, Baba, and Alexander Fedorikhin (1999), “Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision-Making,” *Journal of Consumer Research*, 26 (3), 278-292.

Thaler, Richard H. and Cass R. Sunstein (2009), *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Penguin Books.

Thaler, Richard H., and Eric J. Johnson (1990), "Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice," *Management Science*, 36 (6), 643-660.

Urminsky, Oleg, and Ran Kivetz (2011), "Scope Insensitivity and the "Mere Token" Effect." *Journal of Marketing Research*, 48 (2), 282-295.

Evaluation Overconfidence: When Uncertainty in Attribute Under Produces Less Extreme Product Evaluations

Deidre Popovich, Texas Tech University, USA

Ryan Hamilton, Emory University, USA

EXTENDED ABSTRACT

Consumers' ability to translate common product attributes (watts, calories, megapixels) into subjective evaluations (perceived energy efficiency, perceived healthiness, perceived picture quality) is fundamental to theories of consumer choice. One factor that might affect these evaluations is consumers' confidence in their understanding of these commonly encountered attributes. This research proposes that consumers are often overconfident in assessing their own understanding. We show that simple interventions that encourage consumers to reflect on the level of their knowledge (e.g., estimating an attribute level, explaining an attribute, making relative attribute judgments) can make consumers less confident in their attribute knowledge. This reduced confidence leads to more moderate (less extreme) product evaluations and affects the options consumers choose. The authors derive an explanation for this phenomenon by drawing on research on folk science and the illusion of explanatory depth.

Previous research in the domain of consumer confidence is diverse in scope, but has generally focused on confidence in the outcome of some judgment or evaluation (Brenner et al. 1996; Griffin and Tversky 1992; Karmarkar and Tormala 2010). This paper investigates a novel type of confidence: the implicit confidence consumers feel in their understanding of common product attributes. The ability to translate objective attribute information into subjective evaluations is fundamental to theories of consumer choice (Helson 1964; Janiszewski and Lichtenstein 1999; Kahneman and Tversky 1979; Sharif and Hovland 1961), but consumers' confidence in their understanding of the attributes they use to make these evaluations has not been investigated. We draw on insights from the literature in cognitive psychology on folk science and the illusion of explanatory depth (Keil 2003; Rozenblit and Keil 2002; Sloman and Fernbach 2016) to make the prediction that a variety of cognitive tasks—likely to be common during typical consumer decisions—can reduce consumers' confidence in their own ability to make evaluations. As we show, this leads to more moderate (less extreme) product evaluations and can affect choice.

We suggest that consumers are often more confident in their ability to evaluate common product attributes than is justified by their actual knowledge. We further suggest that this implicit confidence may be easily shaken by a number of simple interventions that invite consumers to consider the depth of their knowledge of a given attribute. We propose that the effect of these knowledge probes is to reduce consumers' confidence in their own ability to evaluate attributes, leading to less extreme evaluations of that attribute, relative to an otherwise equivalent consumer with unshaken confidence.

A series of six experiments demonstrate that knowledge probes related to common product attributes can influence subsequent product evaluations. Specifically, participants' subjective evaluations of attributes like gigabytes, watts, and calories, were less extreme following a knowledge probe than were evaluations made without one. The experimental evidence suggests that a knowledge probe related to an attribute reduces consumers' confidence in their ability to evaluate that attribute. This account was supported by a mediation analysis (Experiment 3), as well as by theoretically derived moderators. Specifically, when participants had a high level of attribute

knowledge, such that their confidence was well founded, the knowledge probe did not lead to less extreme evaluations (Experiment 4).

This phenomenon is robust across various manipulations of knowledge probes, including explaining an attribute (Pilot Experiment), making relative estimation (Experiment 1), estimating the focal option's attribute level (Experiments 2-4), and estimating the attribute level of unrelated options (Experiment 5). Taken together, the effect is consistent: a knowledge probe, regardless of the type, caused less extreme product evaluations.

This research provides several important contributions to theories of consumer judgment and decision-making. For one, it highlights the importance of a kind of confidence that has not previously been studied, namely, confidence in one's own understanding of common product attributes. This research demonstrates that changes in this kind of confidence can change consumers' product evaluations.

This research also demonstrates the counterintuitive finding that several common consumer activities frequently involved in making decisions—making estimates, making relative comparisons, explaining an attribute—are not inert, but can change the subsequent evaluations and decisions the consumer makes. This research suggests that anything in the decision-making process that encourages consumers to reflect on their attribute understanding could lead to less extreme product evaluations and thereby affect choice.

Although previous research has examined related issues such as how uncertainty can lead to purchase delay (Dhar 1997; Dhar and Simonson 2003) and how familiarity and confidence can facilitate judgments (Karmarkar and Tormala 2010; Park and Lessig 1981), it has not specified how the process of evaluating commonly encountered information such as product attributes can lead to more biased judgments. We contribute to the literature by specifying and testing a theoretical account based on overconfidence and uncertainty, which predicts that when consumers are prompted to re-assess their knowledge of a product attribute, they often become less certain of that knowledge.

REFERENCES

- Brenner, Lyle A., Derek J. Koehler, Varda Liberman, and Amos Tversky (1996), "Overconfidence in Probability and Frequency Judgments: A Critical Examination," *Organizational Behavior and Human Decision Processes*, 65 (3), 212-219.
- Dhar, Ravi (1997), "Consumer Preference for a No-Choice Option," *Journal of Consumer Research*, 24 (2), 215-231.
- and Itamar Simonson (2003), "The Effect of Forced Choice on Choice," *Journal of Marketing Research*, 40 (2), 146-160.
- Griffin, Dale and Amos Tversky (1992), "The Weighing of Evidence and the Determinants of Confidence," *Cognitive Psychology*, 24 (3), 411-435.
- Janiszewski, Chris and Donald R. Lichtenstein (1999), "A Range Theory Account of Price Perception," *Journal of Consumer Research*, 25 (4), 353-368.
- Kahneman, Daniel and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision under Risk," *Econometrica*, 263-291.

- Karmarkar, Uma R. and Zakary L. Tormala (2010), "Believe Me, I Have No Idea What I'm Talking About: The Effects of Source Certainty on Consumer Involvement and Persuasion," *Journal of Consumer Research*, 36 (6), 1033-1049.
- Keil, Frank C. (2003), "Folkscience: Coarse Interpretations of a Complex Reality," *Trends in Cognitive Science*, 7 (8), 368-373.
- Park, C. Whan and V. Parker Lessig (1981), "Familiarity and its Impact on Consumer Decision Biases and Heuristics," *Journal of Consumer Research*, 8 (2), 223-230.
- Rozenblit, Leonid and Frank Keil (2002), "The Misunderstood Limits of Folk Science: An Illusion of Explanatory Depth," *Cognitive Science*, 26, 521-562.
- Sharif, Muzafer and Carl I. Hovland (1961), *Social Judgment*, New Haven, CT: Yale University Press.
- Sloman, Steven and Philip Fernbach (2016), *The Knowledge Illusion: Why We Never Think Alone*, New York, NY: Riverhead Books.

Gender Identity and Liminality: An Exploration among Young Women with Breast Cancer

Kathrynn Pounders, University of Texas at Austin, USA

Marlys Mason, Oklahoma State University, USA

EXTENDED ABSTRACT

Individuals must consume and interact with socially constructed, cultural representations of the self and the body (Pavia and Mason 2004; Scaraboto and Fischer 2013; Thompson and Hirschman 1995; Thompson and Ustuner 2015). When consumers' internalized views or outward performativity conflict with such representations, identity may be threatened or questioned. This study explores the challenges that young women with breast cancer experience as they navigate embodiment and the intersectionality of their illness and gender identity.

Consumer bodies that don't conform to normative representations of what a woman should look like or how she should act may face exclusion in the marketplace. Heteronormative gender discourse suggests that the body is a significant constituent of gender identity, and that bodily schemas are significant in distinguishing between the heteronormative binaries of masculinity and femininity (Bourdieu 1986; 1997). Accordingly, gender discourses are significantly defined in bodies through habituated behavioral tendencies and social schemas (Illouz 2012). Embodied identities that transgress from heteronormative gender discourse may confront challenges in consumption and acceptance (Coskuner-Balli and Thompson 2013). While consumers can contest identities through collective unifying actions and resignifying practices (Scaraboto and Fischer 2013; Thompson and Üstüner 2015), at the core of such acts exists a presumption of an empowered consumer who embraces the embodied aspects of identity. However, this is *not* the case for consumers facing illness and limitations emanating from the body.

Following the diagnosis of a life-threatening or disabling illness, consumer identities are abruptly and profoundly disrupted (Pavia and Mason 2004). With breast cancer, the visible alterations that occur to the body (e.g., mastectomy, hair loss) affect core cultural markers of gender (Young 2014), and thus have resounding repercussions for gender identity. Previous gender expressions, such as styling one's hair or dressing to highlight a curvy body, are compromised due to the effects of treatment on body markers of gender and femininity. The need for control of the body and appearance is well-established (Thompson and Hirschman 1995). Thus, the context of breast cancer diagnosis and treatment represents a unique situation, as women have little to no control over changes to their body. Our understanding of the identity challenges that women face and how they manage these challenges in light of such an acute, abrupt disruption emanating from the body is limited.

Seventeen depth interviews were conducted with young women who had been diagnosed with breast cancer within the last five years. The phenomenological approach was followed for attaining an in-depth understanding of an individual's lived experiences (McCracken, 1989; Thompson et al., 1989). Informants ranged from 23-41 years old and represented diagnosis stages 1-4. All women were currently undergoing treatment, including chemotherapy, radiation, and surgeries. The sample was diverse in terms of family status and education, and included those currently employed and unemployed; married, divorced and never married; with children and without. The interviews began with grand tour questions (McCracken 1988) about the informant's cancer experience in general. Informants were then asked to discuss how the diagnosis and subsequent treatment impacted their identity.

Textual data was analyzed using an iterative part-to-whole method of the constant comparison (Spiggle, 1994). Researchers developed an understanding of the emic themes and concepts that emerged first in each interview and next across all interviews (Thompson, Locander and Pollio 1989). In an ongoing, recursive manner, the researchers consulted the literature to contextualize the narratives within gender identity.

A predominant theme that emerged among the informants was a liminal gender identity. More specifically, informants shared experiencing alterations of the body, changes in their motherhood identity, and constraints in their sexual identity. The alterations of the body dramatically transformed their gender identity, particularly in how they view themselves as a "woman." Treatment for breast cancer in terms of chemotherapy and surgery led informants to experience tremendous disparity and unfamiliarity with their body. This resulted in a shattered sense of their sexual identity as well as physical limitation or inability to enact their role of being a mom. Thus, the disconnect of embodiment was so deeply experienced that it commonly shattered their sense of self and gender identity. Further, the majority of the informants reject this "new" version of herself. Although the informants express reaching the actualization of liminality, they have not reached aggregation (Schouten 1991; van Gennep 1960). Rather, they reject the revised self, which results in extreme dissonance and emotional turmoil. This is consistent with prior work that has shown periods of liminality are associated with shock, confusion, and disorientation (McCracken 1997; Schouten 1991), or at times a damaged sense (Turner 1967).

Another emergent theme was using specific consumption practices in marketplace performance to express female gender identity. Turner (1967, 1969) argues that during liminality, persons become structurally invisible (lost between and betwixt) and socially ambiguous. The use of specific products to enact gender in public was a common theme, and is consistent with literature that has examined interactions in the marketplace as social performances affiliated with cultural roles and scripts (Üstüner and Thompson 2015). These women described wearing wigs, jewelry, and makeup during a liminal period to manage the expression of female gender identity when embodiment could no longer serve this purpose.

In sum, consumer research, studies have investigated bodies that do not conform to normative consumption spaces, idealized body images, and cultural representations of gender. However, these have tended to involve a relatively empowered or emancipated consumer who has come to terms with their embodiment. Our informants provide unique insights into the under examined area of liminality (Thomassen 2016; Turner 1967, 1969), and the reflexive realization that they no longer fit with cultural notions of gendered discourse and habitus (Bourdieu 2001). Findings from this study show that the intersecting facets of embodiment, illness, and gender created profound rippling effects in identity which the women had not yet reconstructed. Future research should explore the paths and means by which women alter, integrate and reconstruct identities that express gender outside cultural representations

REFERENCES

- Bourdieu, Pierre (1986), "The Forms of Capital," In *Handbook of Theory and Research for the Sociology of Education*. Edited by: Richardson J."
- Bourdieu, Pierre (1997), "Bodily Knowledge," in *Pascalian Meditations*, Stanford, CA: Stanford University Press: 128-163.
- Coskuner-Balli, Gokcen, and Craig J. Thompson (2013), "The Status Costs of Subordinate Cultural Capital: At-home Fathers' Collective Pursuit of Cultural Legitimacy through Capitalizing Consumption Practices." *Journal of Consumer Research* 40 (1), 19-41.
- Illouz, Eva (2012), *Why Love Hurts: A Sociological Explanation*, Malden, MA: Polity.
- Leigh, Susan (1994), "Cancer Survivorship: A Consumer Movement," *Seminars in Oncology*, 21 (6), 783-786.
- McCracken, Grant (1987). Culture and Consumption Among the Elderly: Three Research Objectives in an Emerging Field," *Aging and Society*, 7(2), 203-224.
- Pavia, Teresa M. and Marlys J. Mason (2004), "The Reflexive Relationship Between Consumer Behavior and Adaptive Coping," *Journal of Consumer Research* 31 (2), 441-454.
- Scaraboto, Diane and Eileen Fischer (2013), "Frustrated Fatshionistas: An Institutional Theory Perspective on Consumer Quests for Greater Choice in Mainstream Markets." *Journal of Consumer Research*, 39 (6), 1234-1257.
- Schouten, John W. (1991), "Selves in transition: Symbolic consumption in personal rites of passage and identity reconstruction." *Journal of Consumer Research* 17(4), 412-425.
- Spiggle, Susan. "Analysis and Interpretation of Qualitative Data in Consumer Research." *Journal of Consumer Research* 21 (3), 491-503.
- Thomassen, Bjorn (2016), *Liminality and the Modern: Living Through the In-Between*, NY: Routledge.
- Thompson, Craig J. and Elizabeth C. Hirschman (1995), "Understanding the Socialized Body: A Poststructuralist Analysis of Consumers' Self-Conceptions, Body Images, and Self-care Practices." *Journal of Consumer Research* 22 (2), 139-153.
- Thompson, Craig J., William B. Locander and Howard R. Pollio (1989), "Putting Consumer Experience Back into Consumer Research: The Philosophy and Method of Existential-Phenomenology," *Journal of Consumer Research*, 16 (2), 133-146.
- Thompson, Craig J. and Tuba Üstüner (2015), "Women Skating on the Edge: Marketplace Performances as Ideological Edgework." *Journal of Consumer Research*, 42 (2), 235-265.
- Turner, Victor (1967), "Betwixt and Between: The Liminal Period in Rites de Passage." In *The Forest of Symbols: Aspects of Ndembu Ritual*, Ithaca, NY: Cornell University Press, 93-111.
- Turner, Victor (1969), "Liminality and Communitas," in *The Ritual Process, Structure and Anti-Structure*. Chicago: Aldine, 94-130.
- van Gennep, Arnold (1960), *The Rights of Passage* (M. B. Vizedom & G. L. Caffee, Trans.). Chicago: University of Chicago Press.
- Young, Iris Marion (2014). "Breasted experience: The look and the feeling." In *The Politics of Women's Bodies: Sexuality, Appearance, and Behavior*. Edited by Weitz, Rose, and Samantha Kwan. New York: Oxford University Press, pgs. 107-119.

Examining the Effect of Gender on Thinking Style, Price-Quality Perceptions, and the Actual Prices that Consumers Pay

Vahid Rahmani, Rowan University, USA

Elika Kordrostami, Humboldt State University, USA

John Ford, Old Dominion University, USA

EXTENDED ABSTRACT

Consumers' generally associate higher prices with higher levels of quality (e.g., Dawar and Parker 1994). Nevertheless, the relationship between price and objective quality in the marketplace is not always strong or even positive (e.g., Boyle and Lathrop 2009). This could be explained by either consumers' lack of access to product information (which is unlikely as we live in the age of information) or their reluctance/inability to assimilate the available information to modify their price-quality judgments (ELM; Petty and Cacioppo 1986). The current research is built on this latter assumption and attempts to answer the following question: What is the effect of gender on consumers' price-quality perceptions?

Selectivity Model (Meyers-Levy and Maheswaran 1991) suggests that women (men) have a systematic (schematic) thinking style, and they have a higher (lower) tendency to search for more details in the decision-making process. Therefore, it could be posited that men should be more likely to use price-quality heuristics to make product judgments; whereas, women should be more prone to make their quality judgments based on a wider range of available information. Furthermore, if the price has a stronger effect on men's than on women's perception of quality, the average prices of men's products should be higher than the average prices of comparable women's products.

In nine studies, which employed survey research, experimental research, and observational research methods to achieve methodological triangulation, we investigated the effect of gender on consumers' motivation/ability to process the information (studies 1 and 2), their price-quality perceptions (studies 3 and 4), and the actual prices that they pay for similar products (studies 5a-5e). Next, the findings of these studies are briefly reported next.

Study 1 was designed to measure the effect of gender on consumers' ability to pay attention to readily available information and form accurate judgments in the context of the print advertisement. Respondents were randomly assigned to one of two advertisement conditions, one of which had a manipulative ad claim. Results showed that type of ad affected women's attitude towards advertisement. But men did not notice the suspicious claim in the manipulative advertisement.

Study 2 was designed to investigate whether gender influences consumers' ability to make accurate judgments of the product quality based on the available product information. Respondents were randomly assigned to one of two conditions that entailed a table of information about 25 brands of digital camera. Next, they evaluated the quality of ten fictitious models of a digital camera based on the information that they had reviewed. Findings suggested that women's judgments of the relationship among product attributes corresponded with the information that they had reviewed; whereas men's judgments did not reflect the presented information in the tables.

Study 3 was designed to provide an initial examination of the potential effect of gender on the general-price-quality perceptions. Respondents answered several questions in a survey. Results showed that the price-quality perception was significantly stronger in men than in women. Furthermore, the average price-quality perception score was significantly above the midpoint value of 4.0 for men, but not for women.

Study 4 was designed to establish the generalizability of the findings of study 3 by employing a more rigorous research method. Partici-

pants were randomly assigned to one of two conditions in which they reviewed the information of three brands of digital camera. One of them was the target brand, Rumax, and the other two (i.e., Nikon and Canon) provided baseline price information. The presented information in both conditions was identical except for the price of the target camera which was either \$80 or \$130. After reviewing the brand information, participants were asked to examine two photos ostensibly taken by Rumax. Findings showed that price created a placebo effect in men and they had a more positive judgment of the pictures that they thought were taken by a more expensive camera. Whereas, the effect of price on women's judgment was not statistically significant.

In study 5a-5e, we collected the available information of 4200 athletic shoes, 3800 formal shoes, 781 suits, 909 jackets, and 597 socks, from Amazon.com. Findings of studies 5a-5e alongside the findings of 5 pretest studies suggested that regardless of the product type, men always paid a higher price to buy comparable products than women did. The price premiums that men paid ranged from 17% in the socks product category to 84% in the formal shoes product category. Furthermore, findings showed that the observed price difference in men's versus women's product categories was not attributable to consumer involvement, shopping frequency, type of product, manufacturing cost, online review information, available product information, and brand name.

General Discussion

Current study makes several substantive contributions to theory and practice. First, to our knowledge, this paper is the first to show that gender influences consumers' price-quality perceptions (studies 3 and 4). Second, this paper provides further empirical support for selectivity model (studies 1 and 2). Third, this research contributes to the advertising literature by showing that gender affects the target audience's attitude towards the deceptive advertisement (study 1). Fourth, this paper contributes to the digital marketing literature by showing that the effect of online review valence is greater than the effect of online review volume on a product's price (studies 5a-5e). Finally, this paper offers important practical implications. Findings suggest that opposite pricing strategies could be used for men and women product categories to increase the profitability (studies 5a-5e).

REFERENCES

- Boyle, Peter J. and E. Scott Lathrop (2009), "Are Consumers' Perceptions of Price-Quality Relationships Well Calibrated?" *International Journal of Consumer Studies*, 33(1), 58-63.
- Dawar, Niraj and Philip Parker (1994), "Marketing Universals: Consumers' Use of Brand Name, Price, Physical Appearance, and Retailer," *Journal of Marketing*, 58(2), 81-95.
- Meyers-Levy, Joan and Durairaj Maheswaran (1991), "Exploring Differences in Males' and Females' Processing Strategies," *Journal of Consumer Research*, 63-70.
- Petty, Richard E., and John T. Cacioppo (1986), "The Elaboration Likelihood Model of Persuasion," *Communication and Persuasion*, 1-24.

The Begging Game: On the Power of the Ask in Charitable Exchange

Mark Ratchford, Tulane University, USA

Ethan Pew, Stony Brook University, USA

Bart Victor, Vanderbilt University, USA

EXTENDED ABSTRACT

Much of charitable giving results from formal solicitations. However, asking has been largely ignored in the altruism and generosity literature, which relies heavily on the dictator and ultimatum games. Through the begging game (a variant of the dictator game) we offer insights on the role asking plays in charitable exchange.

An extensive literature in the social sciences describes a systematic variation from rational self-interest in which relatively resource rich individuals have been shown to give more than absolutely required to those with fewer resources. For example, in the two-player dictator game (Kahneman, Knetsch, and Thaler, 1986; Forsythe et al., 1994), a proposer (dictator) offers a split of an endowment to a recipient who is entirely passive. The recipient gets whatever the proposer offers to them and cannot reject or counter-propose the endowment. A purely rational dictator should propose nothing to the recipient. However, findings typically suggest the majority allocate at least some money to the passive recipient. Only about 40% keep the entire sum, while the average amount given (by the other 60%) is about 20% of the sum (Guala and Mittone, 2010), with modal allocations at 50% and zero (Fehr and Schmidt, 2006). Researchers have attempted to explain this tendency toward “irrational” giving by focusing on social and psychological influences such as altruism, warm glow giving, social pressure (e.g., experimental observation), or some combination of those motivations (e.g., Andreoni, 1989, 1990; DellaVigna, List, and Malmendier, 2012; Schmitz, 2016). This stream of research has in turn spawned numerous normative models of the impact of “social preferences,” “interdependent preferences,” and “intention based reciprocity” on individual utility functions (Fehr and Schmidt, 2006).

In the present paper, we study the “power of the ask,” and find the mere act of asking for money shifts power to the solicitor. The findings across three studies suggest that while giving in response to a direct solicitation may in part be a function of the altruism of the giver, the ask request itself may prime an aversion to violating an implicit norm of fairness (Forsythe et al., 1994; Hoffman, McCabe, and Smith, 1996). Asking imposes a norm of equitable exchange via the amount requested so long as the request is not unreasonably high (more than half in our studies). We contend that violating this norm of equitable exchange bestows discomfort upon the recipient of the solicitation via felt social pressure. Hence the solicitation or “ask” can alter the nature of the exchange. Overall, this suggests that altruism may be a subordinate driver of economic transfers in the dictator and ultimatum games.

Study 1 (N=160) was conducted at a large university in the United States. Undergraduate students took part in this study in exchange for both course credit and reward-contingent monetary compensation of between \$0 and \$10. Subjects were assigned to play either the begging game (BG) or the dictator game (DG), with 50% of incoming subjects randomly assigned to each. The DG followed the standard protocol. In the begging game, the player who did not receive money (the asker) was provided a chance to ask the player who did receive funds (the owner) for a portion of that money. Owners could then accept or reject the ask. On average askers requested \$5.33 (SD=2.18) of the owner’s \$10, and owners accepted 52.5% of asker’s requests overall. As expected, whether or not an offer was accepted was a function of the asked for amount ($\chi^2(7)=13.93, p=.05$).

More than half (52.5%) of “askers” requested \$5 of the “owner’s” endowment. Those asks were accepted 61.9% of the time. Asking for \$4 was accepted 75% of the time, and asking for \$3 was accepted 80% of the time. In the DG conditions, dictators transferred \$3.50 (SD=2.79) to the passive recipient, while keeping \$6.50 of the \$10 sum. This result is in line with the findings of prior DG experiments (e.g., Engel, 2011; Hoffman, McCabe, and Smith, 1996), albeit slightly more generous in giving than in prior studies. The more generous DG outcome is largely the result of three (of 40) “dictators” who transferred the entire \$10 sum.

Study 2 (N=404) was conducted using an online panel. Participants completed this online study in exchange for reward-contingent monetary compensation of between \$0 and \$10. The average age of respondents was 51.9 (range 18 to 84), 52% were female, average income was just over \$60,000 per year and 84.8% had at least some college education. Subjects were randomly assigned to one of two conditions, either owner or asker in the BG, with approximately 70% of incoming subjects randomly assigned to the “owner” condition. All participants received the same instructions and overview for the BG as in Study 1. However, for this online study participants played against a computer with a pre-programmed decision strategy. On average askers requested \$4.71 (SD=1.59) of the owner’s \$10, with no significant effects of age, gender, income, or other demographics. In all, 51.3% of askers requested \$5, while another 28.3% asked for \$4. For those assigned to the owner condition, requests of \$3 or less tended to be accepted (73.8% overall acceptance rate for offers in this range). In comparison, requests of \$4 and \$5 were substantially more likely to be rejected (42.3% acceptance rate for offers in this range).

Study 3 (N=80) was conducted at a large university in the United States. Undergraduate students took part in this study in exchange for both course credit and reward-contingent monetary compensation of between \$0 and \$10. The protocols were identical to the BG condition in Study 1 with the exception that owners could transfer any amount to the asker. They were not bound by the binary “accept” or “reject” options that appeared in Study 1. In this study askers requested an average of \$6.48 (SD=2.48), which is significantly greater than the average ask in Study 1 ($M_1=5.33; t(78)=2.2, p=.03$) and Study 2 ($M_2=4.71; t(151)=5.17, p<.001$). The average amount transferred was \$3.03 (SD=1.98), which is directionally higher than the average of transfer in Study 1, but not significantly so ($t(78)=1.65, p=.10$).

REFERENCES

- Andreoni, J. (1989). Giving with impure altruism: Applications to charity and Ricardian equivalence. *Journal of political Economy*, 97(6), 1447-1458.
- Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The economic journal*, 100(401), 464-477.
- DellaVigna, S., List, J. A., & Malmendier, U. (2012). Testing for altruism and social pressure in charitable giving. *The quarterly journal of economics*, 127(1), 1-56.
- Engel, C. (2011). Dictator games: A meta study. *Experimental Economics*, 14(4), 583-610.

828 / The Begging Game: On the Power of the Ask in Charitable Exchange

- Fehr, E., & Schmidt, K. M. (2006). The economics of fairness, reciprocity and altruism – experimental evidence and new theories. *Handbook of the economics of giving, altruism and reciprocity, 1*, 615-691.
- Hoffman, E., McCabe, K., & Smith, V. L. (1996). Social distance and other-regarding behavior in dictator games. *The American Economic Review, 86*(3), 653-660.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986). Fairness and the assumptions of economics. *Journal of business, S285-S300*.
- Schmitz, J. (2016). Is Charitable Giving a Zero Sum Game? An Experimental Investigation of Why People Give to Charity. (November 1, 2016). Available at SSRN: <https://ssrn.com/abstract=2862479>

I'm Not Your Friend, Buddy: Friendliness Without Friendship Hinders Consumer-Firm Relationship Development

Suzanne Rath, Queen's University, Canada
Laurence Ashworth, Queen's University, Canada
Nicole Robitaille, Queen's University, Canada
Matthew Philp, Université de Montréal, Canada

EXTENDED ABSTRACT

Although the literature on consumer-brand interactions has identified a variety of different ways in which firms can forge relationships with their customers, one of the central, practical suggestions is to treat consumers with friendship. Several consistent characteristics of friendship have been identified by previous research to help define the friendship role, including "opening up" and sharing personal information (Price & Arnould, 1999; Grayson, 2007). Friendship is one of the most common forms of relationship (Chan & Cheng 2004; Hartup 1975; Hays 1985, 1988) and seems highly relevant to the context of consumer-brand and consumer-firm relationships (e.g., Aggarwal 2004). Being friendly and engaging in friend-like behaviors is commonly prescribed in the practitioner literature (e.g., Cummings 2015; Martin 2010; Turnali 2014) and in textbooks (Baron 1997). Moreover, a number of studies support the idea that friendliness, at least in a service context, leads to higher levels of satisfaction (Brown & Sulzer-Azaroff 1994; Pugh 2001; Tsai 2001; Tsai & Huang 2002; Barger & Grandey 2006).

While friendly behaviors are clearly symptomatic of friendship, it is less clear that they are causally responsible for friendship or that they are even appropriate in the early stages of friendship (i.e., when there is no friendship). Studies of relationship development, for example, show that relationship "initiation" behaviors are very different than latter-stage behaviors (Fox, Warber, & Makstaller 2013; Knapp 1978). Other work has shown that behaviors that conflict with the expectations for the relationship, such as whether it is business or friendship (Grayson, 2007), can elicit discomfort or unease (Clark & Mills, 1993) or even undermine relationships entirely (Fletcher et al. 2000). Thus, to the extent that friendly behaviors are not characteristic of the behaviors people generally engage in at the beginning of a relationship, it seems possible, contrary to common wisdom, that friendly behaviors may cause discomfort and might even harm the firm's chances of establishing a friendship.

We conducted four studies to test various elements of our prediction. Study 1 tested the basic idea that consumers may react negatively to overtly friendly behavior by a firm representative. Friendly vs. neutral scenarios for each study were designed based on the conceptualization of friendly behaviours described by prior research (Price & Arnould, 1999; Grayson, 2007). We found initial evidence that friendly firm encounters were less favorable to consumers than neutral firm encounters. Studies 2 and 3 examined possible boundary conditions to the negative effect of friendliness documented in Study 1, and statistically ruled out perceived ulterior motives as a possible alternative explanation. Specifically, study 2 examined whether the negative effect might be mitigated or reversed when consumers could anticipate a future relationship with the firm. Not only did the negative effect found in study one replicate, we also found that the observed negative effect of friendliness was not simply an artifact of our manipulation – we saw a positive effect of friendliness in a context where friendliness should have been normative. Also, we found the same negative effect of friendliness in the context where consumers might anticipate a future relationship. Study 3 examined whether the effect was moderated by the desirability of the firm. We found that the negative effect found in the previous two studies replicated,

and a (marginally) significant interaction suggested that the negative effect of friendliness was greater in desirable stores than in undesirable stores. Although somewhat surprising at first glance, examination of the means indicated the desire to stay in the undesirable store was universally low and that the nature of the interaction did little to change that. In contrast, in a desirable store, friendliness reduced an otherwise strong desire to stay in the store. The final study examined whether friendliness was really most appropriate in the context of a pre-existing friendship, rather than at the beginning of a possible relationship. We found a negative effect of friendliness on desire to stay when participants had no prior relationship with the salesperson, and in contrast, a positive effect of friendliness when participants had a prior relationship with the salesperson. These results were consistent with the idea that friendly behaviours are a consequence of friendship, rather than a cause of it. Therefore, it seems that friendliness in the absence of friendship appears to backfire. The results of these four studies demonstrate a consistent pattern that when firms act like friends, consumers react less favorably compared to when the firm acts neutrally.

The current research contributes to the consumer-brand relationship literature by demonstrating that acting like a friend at firm touchpoints may not be the best way for firms to develop a relationship with consumers. While the literature seems to imply that consumers view firms and brands as meaningful relationship partners, our studies suggest that, in fact, consumers may not characterize their relationships with firms and brands in this way. In four studies, we demonstrate a robust, counter-intuitive effect: acting like a friend can hinder relationship development efforts between firms and consumers. Evidence from four studies demonstrates that friendly encounters reduce consumers' perceived comfort such that they would rather not stay or continue the interaction, thus impeding the relationship development process. So, acting like a friend reflects a customer service strategy that may unintentionally do more harm than good.

REFERENCES

- Aggarwal, Pankaj (2004), "The Effects of Brand Relationship Norms on Consumer Attitudes and Behaviour," *Journal of Consumer Research*, 31 (June), 87-101.
- Barger, Patricia. B. and Alicia A. Grandey (2006), "Service with a Smile and Encounter Satisfaction: Emotional Contagion and Appraisal Mechanisms," *The Academy of Management Journal*, 49 (6), 1229-1238.
- Baron, Gerald. R (1997), "Friendship Marketing: Growing Your Business by Cultivating Strategic Relationships," Grants Pass, OR: The Oasis Press.
- Brown, Carolyn. S. and Beth Sulzer-Azaroff (1994), "An Assessment of the Relationship Between Customer Satisfaction and Service Friendliness," *Journal of Organizational Behaviour Management*, 14 (2), 55-75.
- Chan, Darius. K. S. and Grand H. L. Cheng (2004), "A Comparison of Offline and Online Friendship Qualities at Different Stages of Relationship Development," *Journal of Social and Personality Relationships*, 21, 305-320.

- Clark, Margaret S. and Judson Mills (1993), "The Difference Between Communal and Exchange Relationships: What it is and is Not," *Personality and Social Psychology Bulletin*, 19 (6), 684-691.
- Cummings, Carrie (2015, October 11), "Infographic: Brands Should Treat Consumers as Friends, Not Age Groups," Retrieved September 11, 2016, from <http://www.adweek.com/brandmarketing/infographic-brands-should-treat-consumers-friends-not-age-groups-167492/>
- Fletcher, Garth. J. O., Jeffrey A. Simpson, and Geoff Thomas (2000), "Ideals, Perceptions, and Evaluations in Early Relationship Development," *Journal of Personality and Social Psychology*, 79 (6), 933-940.
- Fox, Jesse, Katie M. Warber, and Dana C. Makstaller (2013), "The Role of Facebook in Romantic Relationship Development: An Exploration of Knapp's Relational Stage Model," *Journal of Social and Personal Relationships*, 30 (6), 771-794.
- Grayson, Kent (2007), "Friendship versus Business in Marketing Relationships," *Journal of Marketing*, 71 (4), 121-139.
- Hartup, W. W (1975), "The Origins of Friendships," In *Friendship and Peer Relations*, ed. M. Lewis and L. A. Rosenblum, New York, NY: John Wiley & Sons, 11-26.
- Hays, Robert. B (1988), "Friendship," In *Handbook of Personal Relationships*, ed. S.W. Duck, New York: John Wiley & Sons, 391-408.
- Hays, Robert. B (1985), "A Longitudinal Study of Friendship Development," *Journal of Personality and Social Psychology*, 48 (4), 909-924.
- Knapp, Mark. L (1978), "Social Intercourse: From Greeting to Goodbye," Needham Heights, MA, USA: Allyn & Bacon.
- Martin, Steve. W (2010, October 13), "Persuasion Tactics of Effective Salespeople," Retrieved September 11, 2016, from <https://hbr.org/2010/10/persuasion-tactics-of-effectiv>
- Price, Linda. L. and Eric J. Arnould (1999), "Commercial Friendships: Service Provider-Client Relationships in Context." *Journal of Marketing*, 63(4), 38-56.
- Pugh, S. Douglas (2001), "Service with a Smile: Emotional Contagion in the Service Encounter," *Academy of Management Journal*, 44 (5), 1018-1027.
- Solomon, Michael. R, Carol Surprenant, John A. Czepiel, and Evelyn G. Gutman (1985), "A Role Theory Perspective on Dyadic Interactions: The Service Encounter," *Journal of Marketing*, 49 (winter), 99-111.
- Tsai, Wei-Chi (2001), "Determinants and consequences of employee displayed positive emotions," *Journal of Management*, 27 (4), 497-512.
- Tsai, Wei-Chi, and Yin-Mei Huang (2002), "Mechanisms linking employee affective delivery and customer behavioural intentions," *Journal of Applied Psychology*, 87 (2), 1001-1008.
- Turnali, Kaan (2014, December 14), "4 Reasons Why Excellent Customer Service Should Start With A Smile," Retrieved September 11, 2016, from <https://www.forbes.com/sites/sap/2014/12/14/4-reasons-why-excellent-customer-service-should-start-with-a-smile/#6980746129db>

Customers' Magnitude Perception for Letters Versus Numbers

Shelly Rathee, University of Utah, USA

Arul Mishra, University of Utah, USA

Himanshu Mishra, University of Utah, USA

EXTENDED ABSTRACT

Prior research in marketing has shown that cues do not need to be diagnostic, and over time relying on cues becomes so habitual that people do so even without awareness (Payne, Bettman, and Johnson 1991, 1994). Although prior work has not provided explicit distinctions, cues encountered in everyday life can have quantitative or qualitative features.

Quantitative cues embed numeric information (Thomas and Morwitz 2005; Monga and Bagchi 2012) with inherent cardinal properties (e.g., numbers), whereas qualitative cues embed verbal information with ordinal properties (Svenson and Karlsson 1986). For example, attribute information can be communicated in terms of numeric information such as volume, density, or price. Estimating magnitude from quantitative cues is easy because of their cardinal properties (e.g., 250 lbs is 100 lbs more than 150 lbs). However, on many occasions people need to infer magnitude from qualitative cues, such as the terror/safety levels ranging from green to red, stores using colors to indicate crowd density, or the distance to walk between airport exit gates numbered with letters. In this research, we focus on numbers (1, 2, 3...) to characterize quantitative cues and letters (A, B, C...) to characterize qualitative cues. Both letters and numbers are ordered left to right, are single digit, and are commonly used as labels. We examine whether providing letters versus numbers to estimate magnitude, such as distance or time, can produce differing outcomes for consumers. Consider, for example, a person exercising on a treadmill-using letters (e.g., "completed level A, B, C...") rather than numbers (e.g., "completed level 1, 2, 3..."), appearing on the monitor as milestones to evaluate the exercise level. Would a number cue lead to greater perceived and actual effort? Would there be a difference between estimates before and after performing the action? The aim of this research is to answer these questions in everyday consumer contexts.

Theoretical Background

We focus on findings that letters and numbers will affect judgments differently depending on whether people are contemplating taking an action or are actually performing the action. For ease of reference, we refer to these two stages as the estimation stage and the performance stage. When people are contemplating an action with a letter cue, they are likely to generate a lower estimate (i.e., effort and time) than when they make the decision with a number cue. However, a counter-intuitive reversal occurs when people perform an action. They perceive expending more effort with letters than with numbers. We predict differences between the estimation and performance stages using prior work on alphabet subgrouping (Jou 2003; Fulbright et al. 2003) and expectation violation (Tzur and Berger 2008).

Regarding our theoretical mechanism, we propose that when contemplating an action (estimation stage), individuals are likely to estimate less magnitude with letters because such cues do not have clear magnitude information. Unlike numbers that possess both ordinal and cardinal properties, letters possess only ordinal properties (Gevers, Reynvot, and Fias 2003; Kara, Gunasti, and Ross 2015). Therefore, the lack of clear magnitude information from letters influence people to depend on subgrouping properties of letters. Work on letter cognition suggests that there are subgroupings of letters in alpha-

beta because people learned them that way as children (e.g., *A-B-C*, *L-M-N-O-P*), influencing how letters come to mind more fluently. Therefore, people use the fluency with which letters come to mind (arising from subgrouping structures) as a heuristic to estimate magnitude. The heuristic is that if letters flow fluently in their minds, they believe that the task using the letter cues would be similarly fluent, and thus the magnitude required to perform the task would be less.

Importantly, we predict that such a pattern will reverse in the performance stage because individuals translate the fluency with letters into an expectation of low magnitude estimates. However, on actually performing the act using letters that contain little magnitude information, they will experience a violation of their expectations of ease and perceive that they are expending greater effort and taking more time performing an action than if they were using number cues.

Data Analysis & Results

Studies 1a–2 tested our theoretical predictions in the estimation stage, study 3 the performance stage, and study 4 tested both stages.

We designed Studies 1a and 1b to demonstrate the proposed effect in a retail store and seating domain setting respectively. In study 1a – participants were shown a store picture with five aisles labeled as 1 to 5 (A to E) and were asked to imagine scenario in which they were shopping in aisle 8 (or H) and realized that they had forgotten to pick up a product in aisle 1 (or A). We then asked them, "Would you be willing to walk back to the aisle to pick up the product, considering that you could collect the item on the next visit?" Participants responded on a seven-point scale (1 = highly unlikely, 7 = highly likely). Consistent with our theorizing that individuals estimate less magnitude with letters, we found that participants were more willing to go back for the product they had forgotten if the aisles were labeled with letters than with numbers ($M_{\text{letter}} = 5.90$ versus $M_{\text{number}} = 4.35$; $F(1, 72) = 14.843$, $p < .01$, $\eta^2 = .170$).

Study 1b showed used seat-selection domain, whereby consumers evaluate seats of a flight from the seating arrangement chart. As part of the cover story, we showed participants the seating-plan of an airplane and asked the participants to provide subjective distance and effort (1 = far too little, 7 = far too much) estimates they thought it would take them to walk to designated seats. Further, to measure fluency, we asked individuals how easy or difficult was it to make seat-selection with letters versus numbers. As expected, we found that those in the letter cue condition provided a lower estimate than those in the number ($M_{\text{letter}} = 3.01$ vs. $M_{\text{number}} = 3.39$; $t(200) = -3.36$, $p < 0.001$). Further, the results of the mediation analysis confirmed the mediating role of fluency in the relationship between the type of cues and magnitude estimates ($\beta = -0.032$; 95% CI [-0.069, -0.006]).

Study 2 manipulated fluency through providing broken subgroups of letters that reduced the reliance on fluent subgroup in letters; this subsequently reduced the difference in magnitude estimates between letters and numbers. This paper-and-pencil study was a 2 (fluency: fluent vs. non-fluent) \times 2 (cues: letters vs. numbers) design. Participants were asked to place a mark on a 120-millimeter line, indicating how much distance they believed they would have walked from the start to the target row in the theater. The results of Study 2 showed that fluency played an important role in magnitude underestimation with letter cues compared with number cues ($M_{\text{number/fluent}} = 55.15$ mms vs. $M_{\text{number/non-fluent}} = 55.71$ mms; $t(96) = 0.1$, $p = 0.91$;

$M_{\text{letter/fluent}} = 41.74$ mms vs. $M_{\text{letter/non-fluent}} = 55.07$ mms; $t(94) = 2.61$, $p < 0.01$).

We conducted Study 3 in a local gym to measure people's perceptions of effort expended depending on whether letters versus numbers marked the laps completed on a treadmill. It was demonstrated that in performance stage individuals who exercised using letters perceived that they expended greater effort compared to those exercising using numbers ($M_{\text{letter}} = 2.31$, $M_{\text{number}} = 1.62$, $F(1, 134) = 8.531$, $p = .004$, $\eta^2 = .06$).

Finally, in Study 4 we examined both estimation and performance stages for the same individuals by using process evidence and video recording them as they walked from a start to an end location. Results revealed that in the estimation stage, participants in the number cue condition estimated a greater magnitude than those in letter cue condition ($M_{\text{number}} = 0.21$ vs. $M_{\text{letter}} = -0.20$; $F(123) = 8.27$, $p = 0.005$, $\eta^2 = 0.06$). We obtained process evidence for our feedback-related negativity hypothesis and demonstrated using walk-time that individual using letter (versus number) cues slowed down while performing the task ($T_{\text{letter}} = 14.09$ seconds vs. $T_{\text{number}} = 11.34$ seconds, $F(1, 122) = 17.57$, $p < .0001$). Furthermore, we demonstrated the downstream influences on marketing variables such purchase postponement, impulsive choice, and preference for hedonic products.

Conclusion

In this research we demonstrate that qualitative versus quantitative cues (letters and numbers) produce differing estimates (of time, distance and effort). Moreover, we suggest that individuals underestimate magnitude with letter cues in the estimation stage but take longer to perform the task with letter cues. Across three laboratory experiments and two-field studies, we test our predictions in domains such as health, shopping, and seat-selection. We also document downstream effects of effort estimation with number and letter cues on purchase postponement, impulsive choice, and preference for hedonic products.

REFERENCES

- Fulbright, Robert K, Manson, Stephanie C, Skudlarski, Pawel, Lacadie, Cheryl M, and Gore, John C. (2003). "Quantity determination and the distance effect with letters, numbers, and shapes: a functional MR imaging study of number processing." *American journal of neuroradiology*, 24(February), 193-200.
- Gevers, W., Reynvoet, B., & Fias, W. (2003). The mental representation of ordinal sequences is spatially organized. *Cognition*, 87(March), B87-B95.
- Jou, Jerwen. (2003). "Multiple number and letter comparison: Directionality and accessibility in numeric and alphabetic memories." *The American journal of psychology*.
- Kara, S., Gunasti, K., & Ross, W. T. (2015). Is it the 'alpha' or the 'numeric'? Consumers' evaluation of letter versus number changes in alphanumeric brand names. *Journal of Brand Management*, 22(June), 515-533.
- Monga, A., & Bagchi, R. (2012). Years, months, and days versus 1, 12, and 365: The influence of units versus numbers. *Journal of Consumer Research*, 39(January), 185-198.
- Payne, J., Bettman, J. R., & Johnson, E. J. (1991). Consumer decision making. *Handbook of consumer behaviour*, 50-84.
- _____. (1994). The adaptive decision maker. *Journal of the Operational Research Society*, 45(July), 850-850.
- Svenson, O., & Karlsson, G. (1986). Attractiveness of decision alternatives characterized by numerical and non-numerical information. *Scandinavian Journal of Psychology*, 27(January), 74-84.
- Thomas, M., & Morwitz, V. (2005). Penny wise and pound foolish: the left-digit effect in price cognition. *Journal of Consumer Research*, 32(January), 54-64.
- Tzur, G., & Berger, A. (2007). When things look wrong: Theta activity in rule violation. *Neuropsychologia*, 45(December), 3122-3126.

Ritualistic Meal Consumption and the Temporal Reduction of Divisions Due to Economic Disparity

Ateeq Abdul Rauf, Information Technology University, Pakistan
Ajnesh Prasad, Tecnologico de Monterrey, Mexico

EXTENDED ABSTRACT

In this paper, we illuminate how a social consumption practice in an ephemeral religious organization subverts systems of social inequality that otherwise prevail in and structure society. Specifically, drawing on a rich ethnographic study in Pakistan, we show how sharing food in the Tablighi Jamaat (TJ)—a religious organization originating in South Asia that is practiced intermittently by its followers—represents temporal spaces of egalitarianism. Within these temporal spaces, entrenched social hierarchies that are salient in organizing Pakistani society are deconstructed. We found that although the fundamental principles of the Tablighi Jamaat advocate for transgression from the social hierarchies that propagate myriad inequalities by demarcating local Muslims into spheres of different social and economic classes, it is in the practice of food consumption when challenges to these hierarchies become the most conspicuous.

With burgeoning social inequalities—which are only consecrated by growing income and wealth disparities—we respond to recent calls from scholars in the field to identify trajectories by which to disrupt systems that create, maintain, and reify stratification between individuals in a society (Fotaki and Prasad 2015). We demonstrate how a seemingly inconsequential social practice—in this case, meal sharing (Belk 2010)—can function as a powerful mechanism by which to destabilize entrenched social hierarchies that have historically structured the society in which the consumption practice occurs. Notwithstanding this point, we do not intend to romanticize our argument. Indeed, we appreciate the fact that the temporal nature of the TJ and the ingrained nature of the cultural codification of social hierarchies in Pakistan should not be negated. We equally acknowledge that these realities of Pakistani society raise the question concerning the extent to which an apparently innocuous phenomenon such as food consumption transforms how individuals relate to one another following the religious experience in spaces not governed by the TJ. While these remain fair points, we contend that, at the very minimum, egalitarian food consumption practices in the TJ symbolically reveal alternative tenets by which to organize individuals in society—principles based more on equality than on inequality. The present study extends prior literature by highlighting how social inequality can be challenged through a consumption practice in a less-industrialized country context.

Methodology

This study uses multi-sited ethnography and in-depth interviews to understand how a consumption practice can collapse social boundaries that maintain systems of inequality. Specifically, we analyze food consumption by participants of the orthodox Islamic religious group Tablighi Jamaat (TJ).

Research Site

We use the context of TJ to illustrate the phenomenon of food consumption as a normalizing social force. TJ forms a traditional reformist approach to Islam that developed in late colonial India. The movement follows an approach accessible to the common Muslim, focusing on making participants lay preachers with periodic commitments that involve staying away from their residences, families, and workplaces. According to one estimate, TJ today has 80 million followers (Taylor 2009) in more than 200 countries.

Data Collection

The data for this study was collected from 2012–2016. As part of a more formal ethnography, the first author then undertook a 40-day sojourn with 10 other TJ participants. After the sojourn, purposive sampling was used to choose an additional 13 informants to interview to achieve better triangulation (Ritchie et al. 2013).

Findings

From the data, we found that food consumption in TJ sojourns subverts the everyday social and economic hierarchies present in Pakistani life. Our analysis yields two thematic explanations behind this temporary collapse in social boundaries: changing causes (religious cause versus the everyday routine of earning to sustain and consume); and bringing everyone to the same consumption lifestyle. While these themes are exposed during TJ activities, they are temporal in their effect to linger on post-TJ and differ by the socio-economic profiles of the participants and their connection with the movement.

Discussion

From the results of this study, we can derive some contributory notes for existing literature. First, food consumption can be a social bridging activity. It has been previously established that where you eat, how you eat, and with whom you eat signifies social power or lack of it (Bourdieu 1984). Organizations in Pakistan like government institutes, corporations, and schools (where teacher and student separation is evident) use differing meal consumption practices (place, style, and group) to signal their social superiority. TJ participation challenges the strongly embedded social stratification prevalent in Pakistani society. Food consumption appears to be an exemplar of this practice.

Second, changing ideological causes can help lessen social divides. The foundation stone for driving the motivation of TJ travelers is their belief for success in a Hereafter which is accomplished through sacrificing and working for a higher spiritual cause in this world. We learn that a cause that is promoted to be larger than the everyday routines of working to earn, providing and caring for the family, and consuming to live can be a means to displace the social understandings that govern world citizens. In this regard, an egalitarian-motivated social cause, can aid in reducing barriers due to economic divides.

Third, while the concept of sharing has already been noted to be a means of bringing people closer (Belk 2010), this study illuminates that sharing can be a means of solving a cardinal social problem.

We additionally note that this study is limited in its focus to address economic disparity, while not considering other forms of inequality (religious, gender, etc.).

REFERENCES

- Belk, Russell W. (2010), "Sharing," *Journal of Consumer Research*, 36 (February), 715–34.
- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.

Fotaki, Marianna and Ajnesh Prasad (2015), "Questioning Neoliberal Capitalism and Economic Inequality in Business Schools," *Academy of Management Learning and Education*, 14 (4), 556-575.

Ritchie, Jane, Jane Lewis, Carol M. Nicholls, and Rachel Ormston (2013), *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, London: Sage.

Taylor, Jenny (2009), "What is the Tablighi Jamaat?" The Guardian, <http://www.theguardian.com/commentisfree/belief/2009/sep/08/religion-islam-tablighi-jamaat>

Made by Mistake: When Mistakes Increase Product Preference

Taly Reich, Yale University, USA
Daniella Kupor, Boston University, USA
Rosanna Smith, Yale University, USA

EXTENDED ABSTRACT

Imagine a pastry chef is making a new batch of chocolate. Not paying attention, the chef leaves the chocolate in the oven for an extra five minutes by mistake, resulting in the chocolate having a different taste than the chef had intended. Would learning of the chef's mistake increase or decrease consumer preference for the chocolate?

Intuition and past research suggest that the knowledge of a mistake (i.e., careless action) involved in the making of a product would decrease consumer preference. Indeed, prior work reveals that mistakes are perceived as undesirable and often result in negative inferences about the person or company that made the mistake (Chesney and Su 2010; Michael 1976; Palmer, Simmons, and de Kervenoael 2010). Consequently, individuals and companies tend to avoid sharing information about their mistakes with others (Edmondson 1996; Michael 1976; Stefaniak and Robertson 2010; Uribe et al. 2002). Despite this previous literature, we propose that knowledge of a mistake in the creation of a product can ironically enhance consumer preference for that product. We propose that this preference for products "made by mistake" is not limited to mistakes that enhance a product, but also extends to mistakes that detract from a product.

We posit that this preference results from how consumers reason about the relationship between intention and action. Specifically, we draw from a large body of work on the intentionality bias (Begue et al. 2010; Kana et al. 2015; Rosset 2008; Rosset and Rottman 2014; Spunt, Meyer and Lieberman 2015), which has found that people tend to assume that actions by agents (e.g., individuals, companies, etc.) are done intentionally. We propose that a product made by mistake deviates from this assumption, and thus, is perceived as more improbable than when the same product is made with full intent. In turn, this perceived improbability (for both products that are improved or worsened by a mistake) leads consumers to perceive the product as more unique and thus to prefer it. We test these predictions in a dataset of eBay auction sales, nine lab studies, and an additional study conducted in the field. We outline four of these studies below.

Conceptualization Of Mistake

The current research examines consumer preference for products made by mistake versus otherwise identical products made with full intent. We define a mistake as "an error in action, calculation, opinion, or judgment caused by poor reasoning, carelessness, insufficient knowledge, etc." (Random House Webster's Unabridged Dictionary 2001). Importantly, a mistake is defined by an outcome's cause (e.g., a careless deviation from intent) but not its valence (e.g., whether the outcome is positive or negative). For instance, returning to the example of the chef who mistakenly left the chocolate in the oven for five extra minutes, this mistake could have a positive outcome (the chocolate could be enhanced), negative outcome (the chocolate could be worsened), or neutral outcome (the chocolate could not be affected). Regardless of the outcome's valence, the extra cooking time is a mistake because it is both a deviation from the chef's intent and the result of carelessness. Thus, in our conceptualization of a mistake, consumers have to perceive the product as a result of an action that both deviates from the creator's intent and is careless in nature.

Empirical Evidence

Study 1

Study 1 examined the preference for products made by mistake in a consequential choice setting. Participants learned about a new chocolate that either was (or was not) the result of a mistake. They were then given the choice of receiving either the chocolate or extra monetary compensation. A chi-square analysis revealed that the chocolate made by mistake was chosen (88.6%) more often than the chocolate that was made intentionally (70.3%), $\chi^2(df = 2, N = 144) = 7.31, p = .007$.

Study 2

Study 2 examined whether people still prefer a product made by mistake even when the mistake detracts from a product (i.e., a drawing of a face that is tarnished by a pen scribble). To examine this prediction, participants viewed a drawing of a face with a scribble, and either read information about the artist which included the fact that the artist made a mistake while making the drawing (in the mistake condition), read information about the artist which included the fact that the artist did not make a mistake while making the drawing (in the no mistake condition), or did not read anything about the artist (in the control condition). Thus, this design also examined our theorizing that people still prefer products made by mistake even after they experience them. As we predicted, participants were more likely to purchase the drawing in the mistake condition ($M = 2.61, SD = 1.73$) compared to both the intention condition ($M = 2.05, SD = 1.44$; Fisher's LSD: $p = .014$; $d = 0.35$) and the control condition ($M = 2.13, SD = 1.53$; Fisher's LSD: $p = .031$; $d = 0.29$), which did not differ from each other (Fisher's LSD: $p = .734$). Willingness to pay data revealed the same pattern, $F(2,98) = 5.25, p = .006$. Planned contrasts followed the same pattern, wherein participants were willing to pay more for the drawing in the mistake condition ($M = 3.11, SD = 3.28$) compared to both the intention condition ($M = 1.81, SD = 2.54$; Fisher's LSD: $p = .002$; $d = 0.44$), and the control condition ($M = 2.28, SD = 2.79$; Fisher's LSD: $p = .041$; $d = 0.27$), which did not differ from each other (Fisher's LSD: $p = .257$).

Study 3

Study 3 provided converging evidence for the proposed mechanism via a moderation and mediation approach. Specifically, we predicted that if consumers are made aware that a particular product creator is likely to make a mistake, perceptions of the improbability of that creator making a mistake will decrease and the preference will attenuate. We tested this prediction in a 2 (Expertise: Novice vs. Expert) \times 2 (Creation Process: Mistake vs. Intention) between-subjects design. In the expert conditions, participants read that the creator was a hip-hop producer who works in the recording industry. In the novice conditions, participants read that the creator was a community college administrator taking a music production class, and that the class assignments included doing recording sessions. We adapted this expertise manipulation from Karmarkar and Tormala (2010). Participants then learned that during a recent recording session, the sound of the creator's breath was added to a song. This addition was either intentional (in the intention condition) or made by mistake (in the mistake condition) and it enhanced the overall sound and flow of the song.

As predicted, the interaction between expertise and creation process on choice was significant ($b = 1.29, p = .029$). In the expert conditions, participants preferred the song when it was made by mistake (67.4%) compared to when it was made intentionally (39.5%; $b = 1.15, p = .012$). In the novice conditions, there was no difference in song preference when it was made by mistake (49.1%) versus intentionally (52.4%; $b = .13, p = .721$). Further analysis revealed a significant interaction between expertise and creation process on perceived improbability, $F(1, 198) = 3.93, p = .049$. Consistent with participants' song decisions, the song was perceived as more improbable when an expert made it by mistake ($M = 4.37, SD = 1.77$) compared to when the song was made intentionally ($M = 3.47, SD = 1.41$; Fisher's LSD: $p = .013; d = .56$). In contrast, when a novice made the song, there were no differences between the mistake ($M = 4.26, SD = 1.75$) and intention ($M = 4.29, SD = 1.55$) conditions, $F < 1$. The analysis also revealed the predicted interaction between expertise and creation process on uniqueness, $F(1, 198) = 7.67, p = .006$. The song was perceived as more unique when an expert made it by mistake ($M = 4.45, SD = 1.03$) compared to when the song was made intentionally ($M = 3.96, SD = 1.16$) (Fisher's LSD: $p = .047; d = .45$). In contrast, when a novice made the song, the opposite was the case—when the novice made the song intentionally it was deemed as marginally more unique ($M = 4.44, SD = 1.22$) than when it was made by mistake ($M = 4.04, SD = 1.08$; Fisher's LSD: $p = .055; d = .35$).

To test our proposed process, we ran a serial mediation model at each level of the expertise condition, with improbability and uniqueness as sequential mediators. As predicted, the model revealed that when an expert made a mistake (vs. made the song intentionally), the song was perceived to be more improbable, which increased perceived uniqueness, resulting in greater song choice (95% CI for the indirect effect: $[-.7446, -.0465]$). Importantly, we tested the reverse model with uniqueness preceding perceptions of improbability, and we found no mediating path from uniqueness and improbability leading to song choice (95% CI for the indirect effect: $[-.2560, .0562]$). Lastly, as predicted, for novices, there was no significant indirect effect from improbability to uniqueness leading to song choice (95% CI for the indirect effect: $[-.1157, .0264]$).

Study 4

Study 4 examined the preference for products made by mistake in a real market setting. We examined eBay auction sales of original photographs—some of which were made by mistake and some of which were not. The mistakes originated from a variety of causes, including double exposure, blurriness, and the photographer's finger in the exposure (i.e., finger bombing). Critically, all photographs were advertised as original, with no copies and reproductions of any kind available. In other words, all photographs (both those with mistakes and those without) were one-of-a-kind and hence equally rare. The photographs were sold on eBay to the consumer who submitted the highest bid. We ran a regression on the price data with the mistake dummy code as a predictor variable, and the sale date and photograph size as control variables. The regression revealed a significant effect of photograph size on sale price, such that larger photographs sold for more money ($b = .529, p < .001$). There was no effect of sale date on sale price ($b = -.008, p = .292$). Most relevant to our focal theorizing, the regression also revealed that photographs with mistakes (vs. without mistakes) sold for more money ($b = 6.08, p < .001$). In other words, photographs with a mistake sold for a premium controlling for both photograph size and sale date.

Thus, we observe in an actual market context a premium for products with a mistake over products without a mistake. We posit, in line with our experimental evidence, that this preference is driven

by the perception that a photograph with a mistake is a more improbable occurrence than a photograph made with full intent, and thus is conferred with more uniqueness and value. It is interesting to note that photographs containing arguably negative properties (i.e., blurriness) received a premium relative to those containing no such negative property. Thus, along with Study 2, these results may provide converging evidence that the preference for products made by mistake emerges not only in cases in which the mistake enhances the product, but also when it detracts from it.

General Discussion

Individuals and companies often avoid advertising their mistakes (Edmondson 1996; Michael 1976; Stefaniak and Robertson 2010; Uribe et al. 2002). However, we find that consumers sometimes prefer products made by mistake to otherwise identical products made intentionally. We identify the conditions under which this preference emerges, and find that this preference is driven by the perception that a product made by mistake is more improbable than a product made without mistake. This perceived improbability increases product uniqueness perceptions and subsequent preference.

In support of this process, we find that the preference for products made by mistake manifests both when the mistake enhances (Study 1 & Study 3) and detracts from (Study 2 & Study 4) the product. Study 3 provided moderation support for this process: When the creator had a high likelihood of making a mistake (a novice), the preference for products made by mistake was attenuated. Study 3 also found full process evidence, wherein perceptions of the improbability of the product's creation enhanced perceptions of product uniqueness and preference. Finally, Study 4 documented the external validity of the current results—consumers pay more for products made by mistake in a real market setting.

Theoretical Implications

The current research is the first to reveal that consumers prefer products made by mistake, and that this preference emerges because mistakes are perceived to be improbable and the resulting product more unique. Beyond documenting a new phenomenon, our findings illuminate a novel mechanism through which information about the creation process influences consumer preference. We find that consumers differentially prefer identical products depending on the improbability of their creation. Further, we find that a typically negative occurrence (a mistake) actually increases product preference. This finding contributes to a growing body of work showcasing the positive effects of negative information (Berger, Sorensen, and Rasmussen, 2010; Ein-Gar, Shiv and Tormala, 2012; Reich and Tormala, 2013; Reich and Wheeler, 2016).

Second, our work contributes to the underexplored role of intentions in consumer preference. By focusing on mistakes in particular, we reveal a novel process by which intentionality plays a role in consumer preference. A product made by mistake deviates from the intentionally bias (Begue et al. 2010; Rosset 2008; Rosset and Rottman 2014; Spunt et al. 2015), and consumers thus perceive the process of making a product by mistake as more improbable and hence more unique than the same product made with full intent. Future work could examine other potential consequences of the intentionality bias in the context of how consumers assess the actions of individuals and companies.

Finally, our findings also contribute to work on the role of uniqueness in consumer preference. Prior work has focused on individual differences in consumers' need for uniqueness (Simonson and Nowlis 2000; Tian et al. 2001) or on how uniqueness is distinct from other dimensions of value (Bhattacharjee and Mogilner 2014;

Keinan and Kivetz 2011). The present work illuminates a conceptual antecedent of perceptions of product uniqueness. Specifically, we find that product uniqueness stems from the improbability of the product's creation. Our work suggests that these process features do not necessarily have to positive, but rather unlikely. We encourage future research to examine other antecedents that might enhance product uniqueness.

REFERENCES

- Bègue, Laurent, Brad J. Bushman, Peter R. Giancola, Baptiste Subra, and Evelyn Rosset (2010), "There is No Such Thing as an Accident: Especially When People are Drunk." *Personality and Social Psychology Bulletin*, 36(10), 1301-04.
- Berger, Jonah, Alan T. Sorensen, and Scott J. Rasmussen (2010), "Positive Effects of Negative Publicity: When Negative Reviews Increase Sales." *Marketing Science*, 29(5), 815-27.
- Bhattacharjee, Amit, Jonathan Z. Berman, and Americus Reed (2013), "Tip of the Hat, Wag of the Finger: How Moral Decoupling Enables Consumers to Admire and Admonish." *Journal of Consumer Research*, 39(6), 1167-84.
- Bhattacharjee, Amit, and Cassie Mogilner (2014), "Happiness from Ordinary and Extraordinary Experiences." *Journal of Consumer Research*, 41(January), 1-17.
- Chesney, Thomas, and Daniel KS Su (2010), "The Impact of Anonymity on Weblog Credibility." *International Journal of Human-Computer Studies*, 68(October), 710-18.
- Edmondson, Amy C. (1996), "Learning from Mistakes is Easier Said than Done: Group and Organizational Influences on the Detection and Correction of Human Error." *The Journal of Applied Behavioral Science*, 32(January), 5-28.
- Ein-Gar, Danit, Baba Shiv, and Zakary L. Tormala (2012), "When Blemishing Leads to Blossoming: The Positive Effect of Negative Information." *Journal of Consumer Research*, 38(5), 846-59.
- Fuchs, Christoph, Martin Schreier, and Stijn MJ van Osselaer (2015), "The Handmade Effect: What's Love Got to Do with It?" *Journal of Marketing*, 79(March), 98-110.
- Gilbert, Daniel T., and Patrick S. Malone (1995), "The Correspondence Bias." *Psychological Bulletin*, 117(1), 21-38.
- Haberstroh, Kristina, Ulrich R. Orth, Stefan Hoffmann, and Berit Brunk (2015), "Consumer Response to Unethical Corporate Behavior: A Re-Examination and Extension of the Moral Decoupling Model." *Journal of Business Ethics*, 1-13.
- Hassin, Ran R., Henk Aarts, and Melissa J. Ferguson (2005), "Automatic Goal Inferences." *Journal of Experimental Social Psychology*, 41(2), 129-40.
- Heider, Fritz (1958), *The Psychology of Interpersonal Relations*, New York: Wiley.
- Hong, Sung-Tai, and Robert S. Wyer (1989), "Effects of Country-of-Origin and Product-Attribute Information on Product Evaluation: An Information Processing Perspective." *Journal of Consumer Research*, 16(2), 175-87.
- Inesi, M. Ena, Simona Botti, David Dubois, Derek D. Rucker, and Adam D. Galinsky (2011), "Power and Choice: Their Dynamic Interplay in Quenching the Thirst for Personal Control." *Psychological Science*, 22(August), 1042-48.
- Kana, Rajesh K., Carla J. Ammons, Constance F. Doss, Megan E. Waite, Bhumika Kana, Abbey J. Herringshaw, and Lawrence Ver Hoef (2015), "Language and Motor Cortex Response to Comprehending Accidental and Intentional Action Sentences." *Neuropsychologia*, 77(October), 158-64.
- Keinan, Anat, and Ran Kivetz (2011), "Productivity Orientation and the Consumption of Collectable Experiences." *Journal of Consumer Research*, 37(June), 935-50.
- Knobe, Joshua (2003), "Intentional Action and Side Effects in Ordinary Language." *Analysis*, 63(279), 190-4.
- Kruger, Justin, Derrick Wirtz, Leaf Van Boven, and T. William Altermatt (2004), "The Effort Heuristic." *Journal of Experimental Social Psychology*, 40, 91-8.
- Levin, Irwin P., and Gary J. Gaeth (1988), "How Consumers Are Affected by the Framing of Attribute Information Before and After Consuming the Product." *Journal of Consumer Research*, 15(3), 374-78.
- Malle, Bertram F., and Joshua Knobe (1997), "The Folk Concept of Intentionality." *Journal of Experimental Social Psychology*, 33(2), 101-21.
- Michael, Donald N. (1976), *On Learning to Plan and Planning to Learn*, San Francisco: Jossey-Bass.
- Morales, Andrea C. (2005), "Giving Firms an "E" for Effort: Consumer responses to High-Effort Firms." *Journal of Consumer Research*, 31(March), 806-12.
- Newman, George E., Margarita Gorlin, and Ravi Dhar (2014), "When Going Green Backfires: How Firm Intentions Shape the Evaluation of Socially Beneficial Product Enhancements." *Journal of Consumer Research*, 41(3), 823-39.
- Nisbett, Richard E., and Timothy D. Wilson (1977), "Telling More than We Can Know: Verbal Reports on Mental Processes." *Psychological Review*, 84(3), 231-59.
- Palmer, Mark, Geoff Simmons, and Ronan de Kervenoael (2010), "Brilliant Mistake! Essays on Incidents of Management Mistakes and Mea Culpa." *International Journal of Retail & Distribution Management*, 38(March), 234-57.
- Pizarro, David, Eric Uhlmann, and Peter Salovey (2003), "Asymmetry in Judgments of Moral Blame and Praise: The Role of Perceived Metadesires." *Psychological Science*, 14(3), 267-72.
- Random House Webster's Unabridged Dictionary (2001), New York: Random House Reference.
- Reich, Taly, and Zakary L. Tormala (2013), "When Contradictions Foster Persuasion: An Attributional Perspective." *Journal of Experimental Social Psychology*, 49(3), 426-39.
- Reich, Taly, and S. Christian Wheeler (2016), "The Good and Bad of Ambivalence: Desiring Ambivalence When the Outcome is Uncertain." *Journal of Personality and Social Psychology*, 110(4), 493-508.
- Roberts, Royston M. (1989), *Serendipity: Accidental Discoveries in Science*, New York: John Wiley & Sons.
- Roe, Brian, Alan S. Levy, and Brenda M. Derby (1999), "The Impact of Health Claims on Consumer Search and Product Evaluation Outcomes: Results from FDA Experimental Data." *Journal of Public Policy and Marketing*, 18(1), 89-105.
- Rosset, Evelyn (2008), "It's No Accident: Our Bias for Intentional Explanations." *Cognition*, 108(3), 771-80.
- Rosset, Evelyn, and Joshua Rottman (2014), "The Big 'Whoops!' in the Study of Intentional Behavior: An Appeal for a New Framework in Understanding Human Actions." *Journal of Cognition and Culture*, 14(1-2), 27-39.
- Rucker, Derek D., and Adam D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption." *Journal of Consumer Research*, 35(August), 257-67.

- Ruvio, Ayalla, Aviv Shoham, and Maja Makovec Brenic (2008), "Consumers' Need for Uniqueness: Short-Form Scale Development and Cross-Cultural Validation." *International Marketing Review*, 25(1), 33-53.
- Shiv, Baba, Ziv Carmon, and Dan Ariely (2005), "Placebo Effects of Marketing Actions: Consumers May Get What They Pay For." *Journal of Marketing Research*, 42(4), 383-93.
- Simonson, Itamar, and Stephen M. Nowlis (2000) "The Role of Explanations and need for uniqueness in consumer decision making: Unconventional choices based on reasons." *Journal of Consumer Research*, 27(1 (2000): 49-68.
- Smith, Rosanna K., and George E. Newman (2014), "When multiple creators are worse than one: The bias toward single authors in the evaluation of art." *Psychology of Aesthetics, Creativity, and the Arts*, 8(March), 303-10.
- Smith, Rosanna K., George E. Newman, and Ravi Dhar (2016), "Closer to the Creator: Temporal Contagion Explains the Preference for Earlier Serial Numbers." *Journal of Consumer Research*, 42(5), 653-68.
- Spunt, Robert P., Meghan L. Meyer, and Matthew D. Lieberman (2015), "The Default mode of human brain function primes the intentional stance." *Journal of Cognitive Neuroscience*, 27(6), 1116-24.
- Stefaniak, Chad, and Jesse C. Robertson (2010), "When Auditors Err: How Mistake Significance and Superiors' Historical Reactions Influence Auditors' Likelihood to Admit a Mistake." *International Journal of Auditing*, 14(March), 41-55.
- Tian, Kelly Tepper, William O. Bearden, and Gary L. Hunter (2001), "Consumers' Need for Uniqueness: Scale Development and Validation." *Journal of Consumer Research*, 28(1), 50-66.
- Uribe, Claudia L., Sharon B. Schweikhart, Dev S. Pathak, Gail B. Marsh, and R. Reed Fraley (2002), "Perceived Barriers to Medical-Error Reporting: An Exploratory Investigation." *Journal of Healthcare Management*, 47(April), 263-79.

Active Consumption: How the Architecture of the Experience Activates Consumer Engagement and Enjoyment

Taly Reich, Yale University, USA
Rosanna K. Smith, University of Georgia, USA
Ernest Baskin, Saint Joseph's University, USA

EXTENDED ABSTRACT

Prior work has established the benefits of experiential over material consumption on consumer wellbeing (Nicolao, Irwin and Goodman 2009; Gilovich, Kumar and Jampol 2014), however, little attention has been devoted to the factors that enhance *the very same* experience. For instance, two individuals may attend the same art show or listen to the same song, but one might enjoy these experiences immensely, while the other feels disengaged. Holding constant the experience, what factors influence the extent to which consumers more or less enjoy it?

In this article, we focus on the role of providing the architecture of the experience on subsequent consumer engagement and enjoyment. Past research suggests two competing intuitions about the influence of prior information more generally on consumer enjoyment of an experience. On the one hand, revealing information could attenuate the enjoyment by both disrupting flow and reducing potential for surprise (Csikszentmihalyi, 1975). On the other hand, other work has suggested that prior knowledge can increase enjoyment by enhancing consumer involvement (Bloom 2010; Humphrey, Thomas, and Joshua Gutwill 2005).

To reconcile these competing hypotheses, we propose that certain *kinds* of knowledge (as opposed to knowledge more generally) can enhance experiences. Specifically, we propose that information about the architecture of an experience uniquely enhances enjoyment relative to other forms of knowledge. Architectural information is defined as knowledge about the structure, arrangement, and/or framework of the experience (adapted from Fischer, Winter and Aier 2010; Winter, Buckl, Matthes, and Schweda 2010). For instance, in a song, the architectural information would be the arrangement of the chords and verses, but not the actual lyrics. In this way, architectural information is not about the content per se of the experience, but specifically about the organization or outline of it. Further, architectural information is embedded within the experience itself.

We propose that this combination of features leads architectural information to enhance experience in contrast to other kinds of knowledge. Because architectural information is embedded within the experience itself, consumers are cued to seek it as the experience unfolds, at the same time, because only architectural information, and not content, has been revealed, the potential for surprise is maintained. In some sense, architectural information is in a "sweet spot" where it is just enough information to induce engagement but not enough to induce boredom.

In the following studies, we test the basic hypothesis that architectural information enhances an experience relative to the same experience without prior architectural information. We then test people's intuitions about the influence of architectural information on their experience. The last two studies employ a mediation and a moderation approach respectively in order to test our proposed process. Specifically, we test whether exposure to architectural information increases active participation and subsequent enjoyment of the experience. Finally, we contrast the effect of architectural information to other forms of knowledge about the experience.

Empirical Evidence

Study 1

Study 1 examined the basic effect by varying whether architectural, neutral, or no information was provided prior to the same experience. We predicted that the same experience would be enhanced by the architectural information relative to the other two conditions. Specifically, in all three conditions, participants read that they would listen to the song "Don't Forget Me" by the Red Hot Chili Peppers. In the architecture condition, before listening to the song, participants read about the structure of the song (i.e., the chords). To control for cognitive load, participants in the neutral information condition, prior to listening to the song, read a paragraph of equivalent length on a neutral topic. Finally, in the control condition, participants proceeded to listen to the song with no further information provided. Participants in all three conditions then listened to the song and reported how much they had enjoyed listening to it. As predicted, planned contrasts revealed that participants enjoyed the song more when they were given information about the architecture of the song ($M = 5.56, SD = 1.41$) compared to when they were given unrelated information ($M = 4.80, SD = 1.85$) and when they were given no additional information ($M = 5.12, SD = 1.75$), $t(300) = -2.86, p = .004, d = 0.38$. Further, the neutral information and control condition not differ from each other, $t(300) = 1.38, p = .17$. Of note, the effect of condition on enjoyment did not interact with prior familiarity with the song ($p = .23$).

Study 2

In Study 2, we were interested in examining whether people intuit that information about the architecture of the experience will enhance their consumption experience. To test this, we asked participants to predict how information about the architecture of a song would influence how others would enjoy the song. Specifically, participants were asked to indicate whether people who were provided with information about the structure of a song would enjoy it more relative to those who were given no information about the structure. Consistent with our hypothesis, most participants (68%) predicted that the song would be enjoyed more in the no information condition compared to the architecture information condition ($\chi^2(1) = 29.42, p < .001$). In addition, this pattern of results did not vary as a function of familiarity with the song ($\chi^2(1) = .86, p = .355$). Thus, we find that people do not intuit that architectural information will enhance enjoyment.

Study 3

Study 3 had two aims. The first was to test our proposed process. Specifically, we proposed that information about architecture enhances enjoyment because it prompts consumers to actively seek it within the experience itself. This "structure-seeking" increases active participation in the experience and subsequently enhances enjoyment. The second aim was to test whether this active participation is uniquely related to architectural information as opposed to general knowledge about the experience. To do so, we also manipulated the type of knowledge about the experience (structure vs. general knowledge).

Participants were randomly assigned to one of three conditions: architecture, general song information and control. As in Study 1, in all conditions participants read that they would listen to the song “Don’t Forget Me” by the Red Hot Chili Peppers. In the architecture condition, participants were provided with the same structure information as in Study 1. In the general song information condition, participants read information about the band. In the control condition participants listened to the song with no further information provided. Next, participants listened to the song and reported how much they enjoyed it using the same measure as in Study 1. To directly test our proposed process, participants then completed three randomized items. To capture structure-seeking, participants were asked to rate the extent to which they looked for structure when listening to the song (on a scale from 1: *Not at all*; 7: *Very much*). To assess active engagement, participants responded to the following two items: “When you were listening to the song, to what extent did you feel you were an active participant?” (1: *Passive* - 7: *Active*); “When you were listening to the song, to what extent did you feel you were an active listener?” (1: *Not at all* - 7: *Very much*). These two items were then combined into an active engagement composite ($\alpha = .69$).

Consistent with our theorizing, planned contrasts revealed that participants enjoyed the song more in the architecture condition ($M = 5.67$, $SD = 1.43$) compared to both the general information ($M = 4.82$, $SD = 1.64$) and the control ($M = 4.98$, $SD = 1.63$) conditions, $t(167) = -3.04$, $p = .003$, $d = .51$, which did not differ from each other, $t(167) = .54$, $p = .59$. Further, in line with our proposed mechanism, participants in the architecture condition reported seeking structure more ($M = 5.24$, $SD = 1.54$) compared to both the general information ($M = 4.18$, $SD = 1.69$) and the control ($M = 4.24$, $SD = 1.69$) conditions, $t(167) = -3.89$, $p < .001$, $d = .64$, which did not differ from each other, $t(167) = .18$, $p = .86$. Further, active engagement paralleled the structure-seeking pattern, with participants in the architecture condition indicating higher active engagement with the song ($M = 5.71$, $SD = 1.13$) compared to both the general information ($M = 5.03$, $SD = 1.39$) and the control ($M = 4.72$, $SD = 1.66$) conditions, $t(167) = -3.70$, $p < .001$, $d = .62$, which did not differ from each other, $t(167) = -1.17$, $p = .25$.

Finally, we conducted a serial mediation model with bootstrapping (Hayes 2013), to test whether structure seeking and subsequent active engagement mediate the relationship between condition and enjoyment. We predicted that participants who were given the architecture before the song would enjoy the song more because they would be more likely to seek the structure, subsequently increasing their engagement. The model revealed that indeed, participants in the architecture condition sought structure more, which led them to be more actively engaged with the song, resulting in greater enjoyment (95% CI for the indirect effect: [.0478, .2730]). Thus we confirm our process and show that active participation is uniquely related to structure seeking as opposed to exposure to prior knowledge more generally.

Study 4

In Study 4, we tested our process using a moderation approach by having participants learn about architecture either before or after the experience. Specifically, participants were randomly assigned to one of three conditions: architecture before song, architecture after song, and control. Further, for this study, we created an original song in order to ensure that participants would have no prior familiarity or association with the song. The new song was created using a software called JamStudio (<http://www.jamstudio.com/Studio/indexStudio.htm>), which is an online interface that allows the user to select chords and vary the instruments to create a song. In all three conditions, participants were told that they were going to listen to a song

entitled “Summer Strut.” To directly measure our proposed process, we again asked participants to complete the structure-seeking item as in Study 3. Further, participants also completed the same two active engagement items ($\alpha = .80$).

As predicted, planned contrasts revealed participants enjoyed the song more in the architecture before song condition ($M = 4.13$, $SD = 1.49$) compared to both the architecture after song ($M = 3.69$, $SD = 1.47$) and the control ($M = 3.58$, $SD = 1.28$) conditions, $t(242) = -2.60$, $p = .01$, $d = .35$, which did not differ from each other, $t(242) = .51$, $p = .61$. Replicating the results of Study 3, participants in the architecture before song condition reported seeking structure more ($M = 3.94$, $SD = 1.91$) compared to both the architecture after song ($M = 3.28$, $SD = 1.84$) and the control ($M = 3.45$, $SD = 1.76$) conditions, $t(242) = -2.33$, $p = .02$, $d = .31$, which did not differ from each other, $t(242) = -.56$, $p = .57$. Similarly, active engagement mirrored the structure-seeking pattern, with participants in the architecture before song condition indicating higher active engagement with the song ($M = 4.16$, $SD = 1.53$) compared to both the architecture after song ($M = 3.80$, $SD = 1.54$) and the Control ($M = 3.67$, $SD = 1.34$) conditions, $t(242) = -2.13$, $p = .03$, $d = .29$, which did not differ from each other, $t(242) = .54$, $p = .59$.

We conducted a serial mediation model with bootstrapping (Hayes 2013), to test whether structure seeking and subsequent active engagement mediate the relationship between condition and enjoyment. The model revealed that indeed, participants in the architecture before song condition sought structure more, which led them to be more actively engaged with the song, resulting in greater enjoyment (95% CI for the indirect effect: [.0236, .2895]).

General Discussion

Across four studies, we find that the very same experience is enjoyed differently depending on what information people are exposed to prior to consumption. Specifically, we find that architectural information (as opposed to general knowledge or no knowledge) enhances enjoyment. Because this information is embedded within the experience itself, consumers are prompted to seek the structure of the experience as it unfolds. This, in turn, increases active participation in the experience and subsequent enjoyment.

Our work has several theoretical and practical implications. While prior research has focused on the contrast between experiential versus material consumption or on comparing different kinds of experiences (Bhattacharjee and Mogilner 2013; Nicolao, Irwin and Goodman 2009; Gilovich, Kumar and Jampol 2014), little attention has been devoted to what factors differentially enhance *the very same* experience. While experiences maybe more enjoyable relative to material goods, consumers do not always find experiences engaging. Our work explores a novel antecedent to enhancing experiential consumption—prior information about the architecture of the experience. Future work could further unpack other antecedents of active engagement in experiences.

Companies and marketers can use this work to be more cognizant of what kinds of information to reveal to consumers prior to consumption. Our work suggests that consumers do not always have the most accurate intuitions about what information or knowledge will enhance their experiences. Understanding what facilitates consumers to move from passive to more active consumption is a fruitful area for researchers and practitioners alike.

REFERENCES

- Bhattacharjee, Amit, and Cassie Mogilner (2014), “Happiness from Ordinary and Extraordinary Experiences.” *Journal of Consumer Research*, 41(June), 1-17.

- Bloom, Paul (2010), *How Pleasure Works: The New Science of Why We Like What We Like*, New York: W.W. Norton & Company.
- Csikszentmihalyi, Mihaly (1975), "Play and Intrinsic Rewards." *Journal of Humanistic Psychology*, 15(3), 41-63.
- Fischer, Christian, Robert Winter, and Stephan Aier (2010), "What is an Enterprise Architecture Principle?" In *Computer and Information Science 2010*, 317, 193-205.
- Gilovich, Thomas, Amit Kumar, and Lily Jampol (2015), "A Wonderful Life: Experiential Consumption and the Pursuit of Happiness." *Journal of Consumer Psychology*, 25(1), 152-65.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. New York: Guilford Press.
- Humphrey, Thomas, and Joshua Gutwill (2005), *Fostering Active Prolonged Engagement: The Art of Creating APE Exhibits*, San Francisco, CA: Exploratorium.
- Nicolao, Leonardo, Julie R. Irwin, and Joseph K. Goodman (2009), "Happiness for Sale: do Experiential Purchases Make Consumers Happier than Material Purchases?" *Journal of Consumer Research*, 36(2), 188-98.
- Winter, Katharina, Sabine Buckl, Florian Matthes, and Christian M. Schweda (2010), "Investigating the State-of-the-Art in Enterprise Architecture Management Methods in Literature and Practice." in 5th Mediterranean Conference on Information Systems, Tel Aviv, Israel: MCIS 2010 Proceedings, 90.

Praise for Blame: Consumer Inferences following Cause Marketing

Brandon Reich, University of Oregon, USA

Troy Campbell, University of Oregon, USA

Robert Madrigal, California State University at Chico, USA

EXTENDED ABSTRACT

Companies often engage in cause marketing (CM), defined here as any corporate communication of a company's prosocial activities. A substantial literature is dedicated to exploring how CM produces positive consumer outcomes (see Pelozo and Shang 2011), with recent focus on consumers' inferences of the company's motives (Reich and Armstrong Soule 2016; Sen, Du, and Bhattacharya 2016). We diverge from extant research in this regard, examining consumer inferences around blame. We propose and show that CM may be implicitly communicating blame for several blame targets around the issue. Crucially, the extent to which consumers perceive this blame may benefit or harm to the company depending on how well it fits with consumers' own blame for the same issue (i.e., consumer-company "blame fit").

In establishing these effects, we contribute to several relevant literatures. First, we reconceptualize and apply blame in novel ways. Specifically, we show that blame may be communicated through CM and inferred by consumers, irrespective of a company's intent to blame. Second, we introduce a novel construct, blame fit, and establish its positive relationship with praise for the company. To our knowledge, this is the first demonstration of blame as a praiseworthy action. Last, we extend the scope of theoretical models of blame (e.g., Alicke 2000; Folkes, 1984; Klein and Dawar 2004; Malle, Guglielmo, and Monroe 2014), showing that an observer (e.g., consumer) may infer blame from another blame agent (e.g., company).

In a pilot study (N=75 undergraduate business students; $M_{Age}=21.24$, $SD_{Age}=2.34$; 33.3% female), participants viewed an ad for an environmentally-friendly Toyota model, and reported whether they thought Toyota was blaming someone or something for environmental problems (0=No; 1=Yes). More than half of the sample (n=45, 60.0%, $t(74)=1.756$, $p=.083$) responded affirmatively. The company did not explicitly blame anything, but the ad led a substantial proportion of consumers to infer blame.

Study 1A (N=200 MTurk workers; $M_{Age}=38.99$, $SD_{Age}=13.06$; 58.0% female) tested the blame fit hypothesis, i.e., that greater fit between inferred blame and consumers' own blame increases praise for the company. Participants viewed a fictional Ben & Jerry's ad depicting their cow mascot holding a sign with a twisted gun and reading "Stop the Violence." On nine-point semantic differential scales, they rated (1) perceptions that Ben & Jerry's was blaming four separate targets (violent media, the NRA, Congress, and violent individuals) for gun violence, (2) their own blame for these four targets, and (3) their praise for the company. Measured covariates were pre-existing attitudes toward Ben & Jerry's, urge to help, issue seriousness, and political orientation.

We first tested interactions between inferred company blame and corresponding consumer blame for the four blame targets, with praise as the dependent variable. Results supported the blame fit hypothesis via significant interactions on praise when treating the NRA ($b=.07$, $SE=.02$, $p<.001$), Congress ($b=.09$, $SE=.02$, $p<.001$), and violent individuals ($b=.07$, $SE=.04$, $p=.060$) as the blame target (see the figure, panel A), but not when violent media was the blame target ($p=.881$). As an alternative test, we created an index of overall blame fit by calculating the absolute value of the difference between inferred blame and consumer blame for each target, and averaging these four difference scores ($\alpha=.653$) such that lower

scores represented greater fit. Regressing praise on blame fit showed the predicted negative relationship ($b=-.69$, $SE=.10$, $p<.001$), which remained significant ($p<.001$) when controlling for the covariates. These results suggest that inferred blame may determine praise for the company depending on how well it fits consumers' own blame judgments.

Study 1B (N=92 MTurk workers; $M_{Age}=36.70$, $SD_{Age}=12.60$; 47.8% female) was identical to study 1A, except that blame measures were dichotomized (0=Congress, 1=Violent Individuals). We tested an inferred blame \times consumer blame interaction on praise, and results further supported the blame fit hypothesis ($b=2.22$, $SE=1.23$, $p=.074$; see the figure, panel B). We also created a new blame fit variable, coded as 1 when participants selected the same target for both blame questions, and 0 when they did not. As expected, praise was greater among those who perceived blame fit (n=53, $M=6.47$, $SD=2.73$) than among those who did not (n=39, $M=4.77$, $SD=2.78$, $t(90)=2.935$, $p=.004$). This relationship held ($p=.014$) while controlling for the covariates.

Study 1C (N=185 MTurk workers; $M_{Age}=33.01$, $SD_{Age}=8.61$; 42.2% female) used a manipulation of explicit blame, testing whether blame fit effects would manifest similarly as in cases of inferred blame. The procedure was similar to studies 1A and 1B, except the ad included an additional block of text reading either "Unregulated sale of guns harms us all" (blame Congress condition) or "Gang violence harms us all" (blame violent individuals condition). Perceived blame (as manipulation checks) and consumer blame for these two targets were measured as in study 1A. Supporting the effectiveness of the manipulation, those in the blame Congress (individuals) condition perceived greater company blame for Congress (violent individuals; $p<.001$). Moreover, a condition \times consumer blame interaction on praise was observed when treating consumer blame for Congress as the moderator ($b=.21$, $SE=.11$, $p=.057$; see the figure, panel C), but not when consumer blame for individuals was the moderator ($p=.844$). This study demonstrated that inferred blame may function as though it were explicit blame from the company, and that blame fit affects praise similarly in both cases.

A pilot study established the existence of inferred blame in response to CM, and three follow-up studies showed that the relationship between blame fit and praise appears robust. Pragmatically, this implies that CM may be communicating more than intended. Rather than leaving blame perceptions to consumers' inferences, companies may benefit from explicitly blaming one target or another, depending on the target audience. This research also expands blame theory to include novel constructs ("inferred blame" and "blame fit"), outcomes (blame as a praiseworthy action), and perspectives (beliefs about another agent's blame). Additional research may build on the present findings by examining boundary conditions to the observed effects. For instance, the presence or absence of a possible causal agent (Malle et al. 2014) may determine whether any blame is inferred.

REFERENCES

- Alicke, Mark D. (2000), "Culpable Control and the Psychology of Blame," *Psychological Bulletin*, 126 (4), 556-574.

- Folkes, Valerie S. (1984), "Consumer Reactions to Product Failure: An Attributional Approach," *Journal of Consumer Research*, 10 (4), 398-409.
- Klein, Jill G., and Niraj Dawar (2004), "Corporate Social Responsibility and Consumers' Attributions and Brand Evaluations in a Product-Harm Crisis," *International Journal of research in Marketing*, 21 (3), 203-217.
- Malle, Bertram F., Steve Guglielmo, and Andrew E. Monroe (2014), "A Theory of Blame," *Psychological Inquiry*, 25 (2), 147-186.
- Peloza, John, and Jingzhi Shang (2011), "How can Corporate Social Responsibility Activities Create Value for Stakeholders? A Systematic Review," *Journal of the Academy of Marketing Science*, 39 (1), 117-135.
- Reich, Brandon J., and Catherine A. Armstrong Soule (2016), "Green Demarketing in Advertisements: Comparing "Buy Green" and "Buy Less" Appeals in Product and Institutional Advertising Contexts," *Journal of Advertising*, 45 (4), 441-458.
- Sen, Sankar, Shuili Du, and Chitra Bhanu Bhattacharya (2016), "Corporate Social Responsibility: A Consumer Psychology Perspective," *Current Opinion in Psychology*, 10, 70-75.

Using a Neural Network Model to Assess Advertising Effectiveness: A Validation of the Strategy Assessment (Strata) Model

Thomas Reynolds, (Emeritus) University of Texas, Dallas, USA

EXTENDED ABSTRACT

In this paper we draw a parallel between means-end decision theory and neural network analysis and apply this common perspective to empirically validate an advertising strategy assessment model with respect to predicting purchase intent. The results of the meta-assessment of 240 television ads offer strong support for the neural network-based model.

Introduction

Neuroscience is an emerging field of consumer research that has garnered much interest among advertising researchers in the hope that neuroscience tools can help them better understand why customers prefer some products over others (Nobel, 2012; Plassmann et al., 2012). This ambitious goal relies on several neuro-, or *brain imaging*, techniques deployed to reveal the hidden elements of the consumer decision process to better understand how a product or an ad engages the pleasurable reward center in consumers' brains (Karmarkar 2011; Nobel 2012; Smidts et al., 2014). Advantages of neuromarketing approaches are that they are potentially faster and cheaper than traditional advertising research tools that ask customers directly for their thoughts, feelings, and decision-making strategies (Ariely and Berns, 2010). Although cost savings is one possible outcome of this evolving area of research, most experts believe that the potential contribution of neuroscience to advertising is its ability to guide theory generation that can be used to shape new models of consumer decision making, and its ability to assess and/or supplement traditional models of consumer responses to advertising currently in practice (Ariely and Berns, 2010; Plassmann et al., 2012; Smidts et al., 2014; Yoon et al., 2012).

Although the importance of neuroimaging studies of advertising is expected to increase, to date neuroimaging's relevance for practice has been limited (Ariely and Berns, 2010; Smidts et al., 2014). Studies that have used neuroimaging to predict consumer choice in response stimuli have not been found to be more predictive than consumers' own self-reports (Knutson et al., 2007; Plassmann et al., 2012).

One area of neuroscience that has advanced our understanding of consumer decision making is neural network research which was inspired by the neural architecture of the human brain (West et al., 1997). The strength of this approach is its ability to mimic the brain's function. From a cognitive perspective, neural network models are consistent with a spreading activation model of memory making neural network models well-suited for representing judgment and decision making that involves the processing of information (Bhatt, 2012; Chowdhury and Samuel, 2014; Payne et al., 1993; West et al., 1997). Therefore, we posit that neural network research is a particularly apt approach to better understand advertising effectiveness (Briesch and Rajagopal, 2010; Curry and Moutinho, 1993).

In this paper we apply a neural network approach to assess a theoretical model of consumer decision making used in advertising research, the Strata model (Reynolds, Gengler and Howard, 1995; Reynolds and Rochon, 1991). Specifically, we report on a meta-assessment of 240 television ads across a variety of product categories and levels of finish (finished ads and animatics) that served as stimuli for diverse samples of consumers. Study participants responded to questions via a computer-driven, tailored interviewing system such that the order of questioning reflected the spreading activation mod-

el underlying neural network theory. That is, to validate the neural network-based Strata model, we empirically assess if the neural connecting linkages caused by a given advertisement are related to an increase in the likelihood of purchase.

Background

Neural Networks

A neural network is a "connectionist" model of brain behavior often used to understand human cognition (West et al., 1997). The interconnections, or linkages between neurons, are referred to as "synapses." Neural network models resemble the brain's decision-making process where input neurons receive stimuli which are then fed into a pattern matching process yielding a decision (Bhatt, 2012; Curry and Moutinho, 1993). The fundamental principle of a neural network is that when a neuron is activated, or fired, it can then cross a synapse gap to activate another 'connected' neuron. Put simply, neural networks models are computational models intended to represent biological neural networks in the brain and are used by researchers to solve certain kinds of problems (e.g., Briesch and Rajagopal, 2010; Chowdhury and Samuel, 2013). The basic logistical calculus of a neural network is that a neuron receives inputs, processes those inputs, and generates an output (McCulloch and Pitts, 1943). In general, neural networks do not follow a linear path as it is believed that information is processed collectively throughout the entire network of neurons, also called nodes.

It is worth noting that with respect to decision making Hebb's (1949) synaptic plasticity postulate suggests that one's neural network is strengthened over time, becoming more efficient and efficacious as a result of repeated activation (i.e., stimuli exposure) and personal experience. Thus, neural network analysis can be used to understand consumer decision making with respect to a problem that a product or service solves and subsequently offers the potential to assess advertising effectiveness.

In the next section we introduce a well-known consumer decision-making model, means-end theory (Gutman, 1982) and draw parallels to a neural network model of decision making.

Means-End Theory and Research Methods

A commonly utilized and frequently-referenced framework of consumer decision making is means-end theory (Gutman, 1982) and its associated research methodology, laddering (Reynolds and Gutman, 1988; Reynolds and Phillips, 2009). The laddering methodology begins with a trained interviewer asking a series of questions to a consumer with the goal of abstracting to the higher-order meanings that drive the consumer's decision making. The first questions of a laddering interviewer usually elicit a distinction between two stimuli, or choice options, (e.g., Most preferred brand [Starbucks] vs. Second choice [Illy]), with regard to a stated preference (i.e., why do you prefer Starbucks to Illy?) or actual consumption (i.e., why do you drink more Starbucks than Illy?). Then the interviewer probes the consumer's answers with some version of the question, *Why is that important to you?* The interviewer uses each answer as the basis for the subsequent probe moving the consumer up the "ladder of abstraction" from [1] Attribute distinction to [2] Functional Consequences to [3] Psycho-Social Consequences to [4] Personal Values.

The laddering methodology's levels of abstraction are isomorphic to the neural network approach of obtaining the relevant connec-

tions both between and across the decision-based nodes. The result of a laddering interview is a complete means-end chain consisting of four concepts (i.e., nodes) and three adjacent, direct connections (i.e., linkages) [1-2; 2-3; 3-4] as well as indirect connections [1-3; 1-4; 3-4]. The end result of a laddering study is a directed graph depicting the “network” of direct and indirect connections across nodes for a given sample of consumers. This graphical network is called a Consumer Decision Map (CDM) as it illustrates the consumers’ key decision nodes and their dominant associative connections.

It is worth noting that means-end theory may be viewed as a top-down approach to understanding consumer decision making, while the laddering methodology is bottom-up whose goal is to identify the end-state that defines the motivating dynamic of the decision structure. That is, the lower levels develop their importance by satisfying the respective, adjacent higher levels, while the laddering methodology is initiated by a distinction that is typically at the lowest, attribute level. Thus, the goal of the laddering methodology is to uncover a network of meanings, which also defines the association network of connections, or linkages. Thus, the CDM may be viewed as a special case of neural network model: one that focuses on only the aggregate, relevant decision-making elements assuming that the levels of abstraction reflect the underlying decision-making process.

Advertising Effectiveness

Reynolds and Rochon (1991) draw a meaningful distinction between traditional copy testing methods and advertising strategy assessment which they operationalize as a neural network between the means-end levels of the MECCAS framework (Reynolds and Craddock, 1988). They suggest a model which is driven by a computer presentation of questions relating to what the ad caused them to think about that are tailored to the respondent depending on their prior answers that is comprised of: [1] affect-related questions (both Product and Ad), [2] assessment of the strength of communication of ‘nodes’ by level (the statements are developed from prior laddering research) and [3] the level of association between the adjacent-level nodes that were ‘clearly communicated’. During this tailored interview each ad is viewed four times. Noteworthy is that the Strata methodology requires that two ads are assessed by the respondent at the same time during the interview session to avoid the respondent over-analyzing a given ad (thereby avoiding the ‘expert effect’). The summary quantitative output provided for a given advertisement across a sample of respondents.

- Average node (0-100) strength with a two-step rating [a] if the node concept is ‘clearly communicated’ or not, and [b] if the node concept is determined to be ‘clearly’ communicated the respondent is asked if it is ‘perfectly communicated’ or (just) ‘clearly’ (Perfectly is scored as a 100, Clearly is scored as 62 and Not Clearly is 0). (Note: for the predetermined key strategic elements if the concept was ‘clearly communicated’, the respondent is asked what specifically in the ad was communicated that led to endorsing that concept statement. Analysis of this qualitative data has used to understand what executional cues activate the higher level meanings.)
- Linkage strength is computed by asking for only those nodes that are ‘clearly communicated’ between adjacent levels the degree of ‘associative meaning’ caused by the ad. A Venn diagram defines the graphical rating scale. The computation of the summary index is based upon a probabilistic function derived from multiplicative model of Node i x Node ii x Linkage i-ii, which is computed from

a 0,1 or 2 score for each node and their linkage, meaning the maximal linkage score possible for each connection is 8. The likelihood of possible scores is used to convert the multiplicative score to a 0-9 connection score.

- The Affect ratings are scored in the same manner as the node ratings (0-100 scale), with a slightly modified question format.

Meta-Assessment Framework

The Strata model permits the assessment of the validity of interpreting the linkage connectivity as a neural network, both in relation to the correspondence of an individual level and overall combining all three linkages (Low=Product Bridge; Middle=Personal Relevance Bridge; Highest=Value Bridge), to the advertising effectiveness dependent measure of ‘Motivates Purchase’.

Sample

The 240 ads in the sample were from eight countries with roughly half from the United States. There were 131 finished ads and 109 animatics in the sample. Overall, the respective number of ads for each of the four general ‘product’ categories of ads were: n=131 beverages (including both alcoholic and non-alcoholic); 56 automobiles; 27 trade organizations; and, 26 ads across a diverse variety of consumer goods. The average number of the sample for each ad assessment was 42. The respondent sample composition was typically a combination of ‘most often’ brand users and ‘competitive brand most often’ users, balancing for gender and age. For the trade organization samples only gender and age were used.

Findings: Correlations and R² with Purchase Motivation

Table 1 summarizes the zero order correlations with Purchase Motivation for 240 ads with respect to the three linkage scores levels (L→M→H) representing the largest nodes-in-common ‘ladder’ connecting from Lowest (Message Element) to Highest (Personal Value) and the simple sum of the three levels, which represents a ‘neural-based’ strategy model s[L+M+H], compared to the traditional copy testing proxy of Ad Affect. The square of the correlation representing the variance accounted for can be viewed to contrast the magnitude of the difference between the neural-based approach to quantifying overall strategy assessment to traditional copy testing. The likelihood of the statistical difference between the correlations can be summarized by a z-score reflecting likelihood, z-[S-A], based upon the ad sample size.

Table 1. Correlations of Connections and Ad Affect with Purchase Intent (Motivation)

	#Ads	<u>L</u> owest	→ <u>M</u> iddle	→ <u>H</u> ighest	S[L+M+H]	Ad Affect	z-[S-A]
Overall	240	r .70	.68	.61	.78	.45	6.1
		r ² .49	.47	.37	.62	.21	

The correlations by linkage level with Purchase Motivation are, of course, all statistically significant. And, the difference between the Lowest level of .70 and the Highest of .61 is not statistically different. The key overall model correlational contrast of the s[L+M+H] of .78 to Ad Affect of .45 reveals that the neural-based strategy model accounted for almost three times the variance as the traditional copy testing approach. The likelihood of that difference is represented by the z-score of 6.1. In sum, the neural framework underlying the decision process is validated.

Research Implications and Future Directions

Given that the Strata advertising assessment measures of neural connection are validated in terms of quantifying their effect on decision making, the general means-end approach grounded in under-

standing the consumer bases of competitive preferences to develop advertising strategy is also validated. There are several implications of these findings.

Formalizing the Advertising Creative Development Challenge

Given that these analyses strongly suggests the key to effective advertising is to cause the associative connections between the four nodes, asking the creative team to specify as precisely as possible what exactly in a proposed execution will result in the linkages being made provides a process to focus meaningful discussion and ongoing learning. (Gengler and Reynolds, 1995).

Advances in Laddering Methods

The central role of preference-based laddering to develop strategic positioning options, as well as the development of product-specific statements to be used in Strata for decades has involved one-on-one in-depth interviews. This significant time and cost limitation of this standard approach to laddering has been addressed by an internet-based, one-on-one interviewing system termed Stream, which has been shown to produce significantly higher quality data in a significantly more efficient manner (Reynolds and Phillips, 2009). The Stream software also contains an on-line coding function which greatly facilitates this tedious process, along with a decision segmentation methodology (Reynolds, 2006) which permits straight forward contrasts with traditional types of marketing research classification data and facilitates the strategy development process (Phillips, Reynolds, and Reynolds, 2010).

The likely next research advance will be the use of artificial intelligence (AI) software to conduct decision-based laddering interviews. The author is aware of one such system which has shown promise. Interestingly, because the software teaches the respondent how means-end-based decision making functions, including how choice trade-offs are framed (Reynolds, 2005), the AI approach to laddering results in very high respondent involvement with the questioning process.

Summary

To assess the neural theoretic underlying the identification of the decision network activated by advertising the Strata model (Reynolds and Rochon, 1991) was used. A meta-analysis of 240 ads was analyzed yielding data measuring the strength of cognitive association linkages (neuroscience) between levels abstraction (Means-end theory) caused by advertising stimuli. This aggregate data is seen to be highly related on a correlational basis to advertising effectiveness, operationalized as the level of Purchase Motivation for the advertised product.

The critical finding of this meta-analysis is that a decision-based methodological platform for understanding advertising effectiveness defined by directional changes in Purchase Motivation has been validated.

REFERENCES

- Ariely, D. and G.S. Berns. "Neuromarketing: the hope and hype of neuroimaging in business." *Nature Reviews*, 11 (2010): 284-292.
- Bhatt, M.A. "Evaluation and associations: A neural-network model of advertising and consumer choice." *Journal of Economic Behavior & Organization*, 82(2012): 236-355
- Briesch, R. and P. Rajagopal. "Neural Network Applications in Consumer Behavior." *Journal of Consumer Psychology*, 20 (2010): 381-389
- Chowdhury, P. and M.S. Samuel. "Artificial neural networks: a tool for understanding green consumer behavior." *Marketing Intelligence & Planning*, 32, 5 (2014): 552-566
- Curry, B. and L. Moutinho. "Neural Networks in Marketing: Modeling Consumer Responses to Advertising Stimuli." *European Journal of Marketing*, 27, 7 (1993): 5-20.
- Gengler, C. and T.J. Reynolds. "Consumer Understanding and Advertising Strategy, Analysis, and Strategic Translation of Laddering Data." *Journal of Advertising Research*, 35 (1995): 19-33.
- Gutman, J. (1982). "A Means-end Chain Model based on Consumer Categorization Processes." *Journal of Marketing*, 46 (1982): 60-72.
- Hebb, D. *The Organization of Behavior*. New York: Wiley & Sons, 1949.
- Karmakar, U.A. *Note on Neuromarketing*. Harvard Business School, 2011.
- Knutson, B., S. Rick, G.E. Wimmer, D. Prelec, and G. Loewenstein. "Neural predictors of purchases." *Neuron*, 53, 1 (2007): 147-156.
- McCulloch, W.S. and W.H. Pitts. "A Logical Calculus of the Ideas Immanent in Nervous Activity." *Bulletin of Mathematical Biophysics*, 5 (1943): 115-133.
- Nobel, C. *What Neuroscience Tells Us About Consumer Desire*. HBS Working Knowledge, 2012
- Payne, J.W., J.R. Bettman, and E.J. Johnson. *The Adaptive Decision Maker*. New York: Cambridge University Press, 1993
- Phillips, J.M., T.J. Reynolds, and K. Reynolds. "Decision-Based Voter Segmentation: An Application for Campaign Message Development", *European Journal of Marketing*, 44 (2010): 310 – 330.
- Plassmann, H., T.Z. Ramsoy, and M. Milosavljevic. "Branding the Brain: A Critical Review and Outlook." *Journal of Consumer Psychology*, 22 (2012): 18-36.
- Reynolds, T.J. "LifeGoals: The Development of a Decision-Making Curriculum for Education." *Journal of Public Policy and Marketing*, 24 (2005): 75-81.
- Reynolds, T.J. and A. Craddock. "The Application of the MECCAS Model to the Development and Assessment of Advertising Strategy: A Case Study." *Journal of Advertising Research* 28 (1988): 43-54.
- Reynolds, T.J. and C. Gengler. "The Strategic Assessment of Advertising: The Animatic Versus Finished Issue." *Journal of Advertising Research*, 31 (1991): 61-71.
- Reynolds, T.J., Gengler, C. and D. Howard. "A Means-end Analysis of Brand Persuasion in Advertising." *International Journal of Research in Marketing*, 12 (1995): 257-266.
- Reynolds, T.J. and J. Gutman. "Laddering Theory, Method, Analysis and Interpretation." *Journal of Advertising Research*, 28 (1988): 11-31.
- Reynolds, T.J. and J.M. Phillips. "A Review and Comparative Analysis of Laddering Research Methods: Recommendations for Quality Metrics." In *Review of Marketing Research*, N. Malhotra (ed) (2009).
- Reynolds, T.J. and J. Rochon. "Strategy-Based Advertising Research: Copy Testing is not Strategy Assessment." *Journal of Business Research*, 22 (1991): 131-142.
- Smids, A., M. Hsu, A.G. Sanfey, M.A.S. Boksem, R.B. Ebbstein, S.A. Huettel, J.W. Kable, U.R. Karmakar, S. Kitayama, B. Knutson, I.I. Liberzon, T. Lohrenz, M. Stallen, and C. Yoon, *Marketing Letters*, 25 (2014): 257-267.

West, P.M., P.L. Brockett, and L.L. Golden. "A Comparative Analysis of Neural Networks and Statistical Methods for Predicting Consumer Choice." *Marketing Science*, 16, 4 (1997): 370-391.

Yoon C., R. Gonzalez, A. Bechara, G.S. Berns, A.A. Dagher, L. Dubé, S.A. Huettel, J.W. Kable, I. Liberzon, H. Plassmann, A. Smidts, and C. Spence. "Decision neuroscience and consumer decision making." *Marketing Letters*, 23 (2012): 473-485.

The Intent to Persuade: Spontaneous Emotionality in Word-of-Mouth Communications

Matthew D. Rocklage, Northwestern University, USA
Derek D. Rucker, Northwestern University, USA
Loran F. Nordgren, Northwestern University, USA

EXTENDED ABSTRACT

Consumers provide online product reviews for reasons that range from a desire to help others to an effort to boost their own ego (e.g., Hennig-Thurau et al. 2004). One prominent self-serving motive among consumers is an intent to persuade others (Berger 2014). For example, individuals who want a restaurant to succeed might post and share a review to persuade others to dine there. Despite the recognition that people can be driven by the intent to persuade, far less research examines how this motive transforms how people communicate their views to others. To address this gap, we propose that the intent to persuade leads to subtle but detectable shifts in consumers' emotionality. Moreover, we demonstrate people turn to emotionality even when such appeals can backfire.

The Intent to Persuade: A Catalyst for Emotionality

Influential models of emotion posit that emotions evolved not only to provide information to the person experiencing the emotion (Pham 2004), but also to influence others (Van Kleef 2009; Frijda and Mesquita 1994). Although research shows that emotional appeals from others can affect participants' behavior (e.g., Van Kleef, De Dreu, and Manstead 2004; Clark and Taraban 1991), there is a relative lack of research demonstrating whether and when individuals themselves spontaneously increase their emotionality to impact others. In the present work, we propose and explore the idea that the intent to persuade acts as a catalyst for consumers to spontaneously engage in the use of emotionality.

An obstacle to answering this question for consumer communications is that many communications in the modern world occur primarily through text (e.g., online reviews), thereby making the measurement of emotionality difficult. However, Rocklage and Fazio (2015, 2016) have recently developed the Evaluative Lexicon (EL) – a computational linguistic tool that enables researchers to quantify language in terms of its implied emotionality. The EL allows researchers to quantify differences between more emotional adjectives such as “wonderful” and “lovable” versus more cognitive adjectives such as “helpful” and “excellent.” The EL has been validated through in-laboratory experiments as well as in natural, archival text.

The Current Research

Experiment 1 examined the link between the intent to persuade and emotionality. Participants wrote a review for one of 20 products ($n = 778$). To examine the extent of individuals' use of emotionality in persuasion, we utilized topics that varied both in emotionality (hedonic versus utilitarian products) as well as content (books versus non-book products). All participants wrote a 5-star review. However, those in the “Persuade” condition were given the additional instructions to persuade others to purchase the product. Moreover, we compared the emotionality of these reviews to real-world 5-star reviews of the same products from Amazon.com ($n = 840$). These reviews provide a naturalistic baseline for the emotionality expressed toward these products. Across the 20 products, participants with the intent to persuade used greater emotionality compared to both those in the control condition as well as the real-world Amazon.com reviews.

Experiment 2 ($n = 288$) was designed to provide a further test of the relationship between the intent to persuade and emotional-

ity. Moreover, it has been theorized that using emotionality to affect others can often be enacted without much deliberation due to its relatively overlearned association with impacting others' behaviors (Frijda and Mesquita 1994). Therefore, we also manipulated the cognitive load participants experienced. To begin, we ensured that all participants had equal knowledge of the product they would write about. To this end, we had participants recall a novel they had read that they would issue 5 stars. Next, we manipulated cognitive load via a secondary task. Finally, we manipulated the intent to persuade more naturalistically via a referral program. Specifically, we informed half of the participants they would be paid \$1.00 for each future participant who selected their book based on their review. We replicated the results from Experiment 1: individuals with the intent to persuade expressed greater emotionality than those in the control condition. Moreover, these results were not moderated by cognitive load; even under high load individuals used greater emotionality.

The pervasiveness of these effects raise the possibility that consumers may rely on emotional arguments even in situations when such appeals may be suboptimal. Previous work indicates rational appeals are more impactful on audiences with cognitively-based attitudes (Fabrigar and Petty 1999) and that emotional appeals can even backfire with cognitive audiences (Haddock et al. 2008). Will people continue to use more emotional appeals even when emotional appeals could backfire? Experiment 3 tested this possibility.

In Experiment 3, we used a similar procedure to Experiment 2 but we added conditions to test the effect of audience. Based on the results from a pilot study, we conducted a preregistered experiment (<https://osf.io/vbuqn/>). There were four conditions in the experiment ($n = 781$). Two of the conditions (control and “Persuade – No Group”) provided similar instructions as in Experiment 2. However, two additional “Persuade” conditions were given specific groups to persuade. Based on pretesting, those in the “Emotionalists” condition were told their reviews would be shared with artists, dancers, and musicians from a group named “The Emotionalists.” Those in the “Rationalists” condition were told they would be shared with a group of scientists, mathematicians, and economic analysts named “The Society for Applied Rationality and Mathematics.” We replicated the results of Experiment 2: those incentivized to persuade used greater emotionality than the control condition. Most importantly, we found that those in the “Rationalists” condition also used greater emotionality compared to those in the control condition. Thus, despite previous research demonstrating the effectiveness of more rational, unemotional appeals for such individuals, participants continued to utilize emotionality.

Discussion

Although prior work has enumerated the motives consumers have for sharing information, little work has examined the consequences of these motives. We find that the intent to persuade led consumers to spontaneously intensify the emotionality of their language. This result occurred across topics and even in situations where emotional appeals might backfire. We also provide evidence that using emotionality may represent a default approach to persuasion that requires relatively few cognitive resources to implement.

REFERENCES

- Clark, Margaret S and Carolyn Taraban (1991), "Reactions to and willingness to express emotion in communal and exchange relationships," *Journal of Experimental Social Psychology*, 27 (4), 324–36.
- Fabrigar, Leandre R. and Richard E. Petty (1999), "The role of the affective and cognitive bases of attitudes in susceptibility to affectively and cognitively based persuasion," *Personality and Social Psychology Bulletin*, 25 (3), 363–81.
- Frijda, Nico H. and Batja Mesquita (1994), "The social roles and functions of emotions," in *Emotion and culture: Empirical studies of mutual influence*, S. Kitayama and H. R. Markus, eds., Washington, DC, US: American Psychological Association, 51–87.
- Haddock, Geoffrey, Gregory R. Maio, Karin Arnold, and Thomas Huskinson (2008), "Should persuasion be affective or cognitive? The moderating effects of Need for Affect and Need for Cognition," *Personality and Social Psychology Bulletin*, 34 (6), 769–78.
- Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?," *Journal of Interactive Marketing*, 18 (1), 38–52.
- Pham, Michel T. (2004), "The logic of feeling," *Journal of Consumer Psychology*, 14 (4), 360–69.
- Rocklage, Matthew D. and Russell H. Fazio (2015), "The Evaluative Lexicon: Adjective use as a means of assessing and distinguishing attitude valence, extremity, and emotionality," *Journal of Experimental Social Psychology*, 56, 214–27.
- and ——— (2016), "On the dominance of attitude emotionality," *Personality and Social Psychology Bulletin*, 42 (2), 259–70.
- Van Kleef, Gerben A. (2009), "How emotions regulate social life: The Emotions as Social Information (EASI) model," *Current Directions in Psychological Science*, 18 (3), 184–88.
- , Carsten K. W. De Dreu, and Antony S. R. Manstead (2004), "The interpersonal effects of anger and happiness in negotiations," *Journal of Personality and Social Psychology*, 86 (1), 57–76.

Keep Calm and Smell the Roses: The Differential Impact of Low and High Arousal Emotions on Consumption Outcomes

Maria Rodas, University of Minnesota, USA
Rohini Ahluwalia, University of Minnesota, USA

EXTENDED ABSTRACT

Consumption experiences can elicit different emotions (Cohen & Areni, 1991). For example, a consumer can feel energized while consuming a cold, fizzy drink, or calm while consuming a warm cup of tea. While there has been research that explores the impact of the consumption emotions' level of arousal, most of this research has focused on high arousal emotions. For example, high arousal emotions have been found to have a positive effect on information sharing and talking (Berger, 2011), as well as on desire and readiness for action (Rucker & Petty, 2004). And while consumption can also elicit low arousal emotions (Richins, 1997), they have received less examination. In our research we address this gap in the literature by focusing on low arousal emotions (e.g., contentment, peacefulness, relaxation) and identifying their impact on several favorable consumption outcomes. Specifically, we propose and find evidence in four studies that experiencing low (vs. high) arousal emotions during consumption has a positive impact on product liking, willingness to pay, self-brand connection, and desire to continue the consumption experience, as well as slows down hedonic adaptation (or the rate at which utility derived from the consumption erodes). We find that this occurs because low arousal emotions, during a consumption experience, reduce the extent to which the mind wanders to other thoughts and stimuli, increasing the consumer's focus on the consumption experience itself, allowing the consumer to develop stronger connections with the product.

We follow past classifications of emotions (Barrett & Russell, 1999; Mogilner, Aaker, & Kamvar, 2012; Tsai, Knutson, & Fung, 2006) in using level of arousal as a key dimension for categorizing emotions. Low arousal emotions include emotions such as peaceful, calm, and relaxed, whereas high arousal emotions include emotions such as excited, elated, and energized. We propose that high arousal (vs. low arousal) accelerates the speed of people's thoughts. Past research has found that thought speed creates an urge for action that has been compared to that of fight-or-flight (Pronin, 2013). When people experience this type of response, their attention narrows (Skosnik, Chatterton, Swisher, & Park, 2000). Low arousal emotions, on the other hand, are likely to slow down the speed of people's thoughts, broadening their focus of attention.

Based on these findings, we hypothesize that low arousal positive emotions (e.g., contentment, serenity, calmness) will slow down the speed of both actions and thoughts. The reduced action orientation and increased tendency to talk and do less (which comes with quietude and contentment), slows down the mind from jumping to other thoughts and stimuli, instead allowing it to focus on the current experience and increasing the extent to which the consumer absorbs it in, experiences it more fully, and thinks about it. This increased focus on the experience can have several benefits. Past research has shown that merely giving more attention to a target can imbue it with more value and weight (MacKenzie, 1986). Furthermore, Sheldon & Lyubomirsky's (2012) hedonic adaptation prevention model posits the more people keep thinking about the target, the more they continue to derive positive feeling from it, sustaining their initial happiness boost. Thus, we propose low arousal emotions, by allowing people to focus on the consumption experience, will result in consumers feeling a stronger sense of connection with the consumed product, which will in turn have other positive consequences, such as higher

willingness to pay. Additionally, this type of focus on the consumer experience will slow down hedonic adaptation (i.e., the rate at which consumption happiness erodes).

In four experimental studies, we find evidence that low (vs. high) arousal consumption emotions will have a positive impact on product liking (studies 1 and 2), willingness to pay (study 2), desire to continue the consumption experience (study 3), and self-brand connection (studies 2 and 4). We also find that low arousal consumption emotions slow down hedonic adaptation (i.e., the rate at which the happiness derived from the consumption erodes) in a longitudinal study with actual purchases (study 4). Furthermore, we find evidence that the level of emotional arousal impacts the extent to which people's mind wanders off from the consumption experiences (as indicated by participants in study 1) and the extent to which they remember details of the consumption experience (specifically, accurately remembering the name of a slow or fast tempo song in study 2). Our studies span different types of products consumed (pen, song, tea, actual purchases), different types of manipulation of level of arousal (incidental, stimulus-generated, primed with product positioning and communications), and different methodologies (consumption in lab, longitudinal study), adding robustness to our findings.

REFERENCES

- Barrett, L. F., & Russell, J. A. (1999). The structure of current affect: Controversies and emerging consensus. *Current Directions in Psychological Science*, 8(1), 10-14.
- Berger, J. (2011). Arousal increases social transmission of information. *Psychological Science*, 22(7), 891-893.
- Cohen, J. B., & Areni, C. S. (1991). Affect and Consumer Behavior. In T. S. Robertson & H. H. Kassarian (Eds.), *Handbook of Consumer Behavior* (pp. 188-240). Englewood Cliffs, NJ: Prentice-Hall.
- MacKenzie, S. B. (1986). The role of attention in mediating the effect of advertising on attribute importance. *Journal of Consumer Research*, 13(2), 174-195.
- Mogilner, C., Aaker, J., & Kamvar, S. D. (2012). How happiness affects choice. *Journal of Consumer Research*, 39(2), 429-443.
- Pronin, E. (2013). When the mind races: Effects of thought speed on feeling and action. *Current Directions in Psychological Science*, 22(4), 283-288.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24(2), 127-146.
- Rucker, D. D., & Petty, R. E. (2004). Emotion specificity and consumer behavior: Anger, sadness, and preference for activity. *Motivation and Emotion*, 28(1), 3-21.
- Sheldon, K. M., & Lyubomirsky, S. (2012). The challenge of staying happier: Testing the hedonic adaptation prevention model. *Personality and Social Psychology Bulletin*, 38(5), 670-680.
- Skosnik, P. D., Chatterton, R. T., Swisher, T., & Park, S. (2000). Modulation of attentional inhibition by norepinephrine and cortisol after psychological stress. *International Journal of Psychophysiology*, 36(1), 59-68.
- Tsai, J. L., Knutson, B., & Fung, H. H. (2006). Cultural variation in affect valuation. *Journal of Personality and Social Psychology*, 90(2), 288.

Thicker than Water: The Influence of Familism on Consumer Response to Brand Extensions

Maria A. Rodas, University of Minnesota, USA

Michael J. Barone, University of Louisville, USA

Carlos J. Torelli, University of Illinois at Urbana-Champaign, USA

EXTENDED ABSTRACT

Brand extension strategies are widely used by firms to leverage the equity built into their brands. Every year, companies spend billions of dollars introducing new products under established brand names, as exemplified by Apple's iPhone, Arm & Hammer toothpaste, and Jeep baby strollers. Despite firms' reliance and investment on this strategy, many brand extensions fail. In this regard, research has identified a number of key determinants that shape brand extension success. For instance, consumer acceptance of brand extensions may be shaped by their trust toward or liking of the parent brand as well as the perceived fit between the parent brand and extension (see Loken, Joiner, & Houston, 2010, for review). Additionally, the extent to which brand extensions are viewed favorably can be determined by consumers' risk aversion (Yeo & Park, 2006), innovativeness (Völckner & Sattler, 2006), and cultural orientation (e.g., Ng & Houston, 2006).

We explore a novel consumer characteristic that impacts consumers' responses to brand extensions, familism. Familism is defined as a strong identification and attachment of individuals with their families (nuclear and extended) and strong feelings of loyalty, reciprocity and solidarity among members of the same family (Triandis, Marin, Betancourt, Lisansky, & Chang, 1982). We propose and find evidence that familism (either chronic or primed) can improve consumers' evaluations of brand extensions by increasing perceptions of the extensions fit with the parent brand. We theorize that this is the case because familism makes the family schema more accessible, which activates associations of relatedness.

Terminology used in past literature hints at the application of a family schema when discussing brand extensions. For example, this literature constantly refers to a "parent brand" to indicate the brand from which the extension originates, a "brand family" in reference to the group of products and extensions that fall under a given brand, and a "brand offspring" to indicate a brand extension. There is also evidence that consumers use relationships, including family, as metaphors when building bonds with brands (Fournier, 1998). However, the question remains whether consumers use the family schema to guide their attitudes when evaluating brand extensions. We propose that it does, resulting in a perception of greater similarity between the parent brand and offspring, which in turn positively impacts the evaluations of certain brand extensions.

Generally speaking, people value family. However, what distinguishes people high in familism is that they tend to put the needs of their family above their own. This type of ties to family is particularly apparent when family members are in need, or not doing very well. As such, we propose that the effect of familism will only emerge when the brand extension is of lower price and quality than the parent brand. Another reason why we don't expect to see any differences with high price/quality brand extensions is related to the asymmetric effect of quality (Heath & Chatterjee, 1995). When the price and quality of a given product is good, people can appreciate that. It's only when the price/quality is bad that people use other heuristics (e.g., decoys, schemas) to make their evaluations.

Furthermore, we propose the distance from the parent brand as a boundary condition. More specifically, we propose and find evidence that the effect of familism only emerges when evaluating brand extensions that don't stray too far from the parent brand. We argue that when

the extension is too far from the brand (e.g., a calculator as an athletics brand extension), the similarities between the concepts of family and brands will weaken, which will prevent the family schema to be applied.

Across three experimental studies, we show that familism positively impacts consumers' response to brand extensions that don't stray too far from the parent brand and which are lower in price and quality than the parent brand. We observe this effect when familism is measured as a chronic individual difference (study 1), and when it's primed with writing exercised (studies 2 and 3). We also find evidence in studies 1 and 3 that the underlying mechanism is an increase in perceived similarity with the parent brand, providing evidence that family schemas are being mapped onto the brand extension domain. We identify distance from the parent brand as a boundary condition (studies 1 and 2), rule out analytic-holistic thinking as an alternative explanation (study 1), and provide evidence that the effects of familism extend beyond the nuclear family. Furthermore, our studies span different populations (college students, MTurkers) and different categories (electronics, athletics), adding robustness to our findings.

This research aims to contribute to the brand extension literature by empirically investigating a novel consumer characteristic that impacts consumers' responses to brand extensions, namely familism. Furthermore, our work has important managerial implications. Every year companies spend billions of dollars introducing new brand extensions, and many fail. Our research could provide guidance to minimize the risk of failure. For example, if a brand wants to downwardly extend itself by introducing a brand extension that is lower in price/quality, it could consider targeting consumer who are chronically high in familism (e.g., Hispanics) or it could prime familism in its communications (e.g., by portraying families).

REFERENCES

- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-373.
- Heath, T. B., & Chatterjee, S. (1995). Asymmetric decoy effects on lower-quality versus higher-quality brands: Meta-analytic and experimental evidence. *Journal of Consumer Research*, 22(3), 268-284.
- Loken, B., Joiner, C., & Houston, M. J. (2010). Leveraging a brand through brand extension: A review of two decades of research. In B. Loken, R. Ahluwalia & M. J. Houston (Eds.), *Brands and brand management: Contemporary research perspectives* (pp. 11-41).
- Ng, S., & Houston, M. J. (2006). Exemplars or beliefs? The impact of self-view on the nature and relative influence of brand associations. *Journal of Consumer Research*, 32(4), 519-529.
- Triandis, H. C., Marin, G., Betancourt, H., Lisansky, J., & Chang, B.-H. (1982). *Dimensions of familism among Hispanic and mainstream Navy recruits*: DTIC Document.
- Völckner, F., & Sattler, H. (2006). Drivers of brand extension success. *Journal of Marketing*, 70(2), 18-34.
- Yeo, J., & Park, J. (2006). Effects of parent-extension similarity and self regulatory focus on evaluations of brand extensions. *Journal of Consumer Psychology*, 16(3), 272-282.

Preference Refinement After a Budget Contraction

Gretchen Ross, Penn State University, USA
Kurt A. Carlson, Georgetown University, USA
Margaret G. Meloy, Penn State University, USA

EXTENDED ABSTRACT

Most models of consumer choice assume that preferences are independent of budget levels. Specifically, consumers are thought to react symmetrically to increasing and decreasing budgets, landing at their optimal combination of options for any given budget level. Empirically, however, prior research has demonstrated that this is not the case (Carlson, Wolfe, Blanchard, Huber and Ariely 2015; Dargay 2001; Kamakura and Du 2012; Shea 1995). For example, Carlson et al. (2015) showed that rather than making small changes in consumption across all options, consumers who faced a contracting budget cut out entire categories of consumption while maintaining full consumption in others.

In the current work, we examine whether allocations of a given budget for a person are the same before versus after a budget contraction (i.e., when the budget re-expands to pre-contractionary levels). In other words, do the allocations that emerge under budget contractions reflect a temporary shift in preferences akin to transient preference shifts, or are these shifts in preference more stable and lasting? We contend that the trade-offs necessary during a contractionary period persist when the budget re-expands; consumers engage in a process of refining their preferences as they reconcile trade-offs (Hoefler and Ariely 1999) and figure out what really matters to them. We use change in number of unique items selected as our metric of preference refinement. That is, we count the number of unique items to which the re-expanded budget was allocated (X_2) and difference it from the initial budget allocation (X_1) ($M_D = X_1 - X_2$). We then test for a positive difference ($M_D > 0$) to determine if there has been a refinement in preferences.

Studies 1A-1C: Time, Money and Space

Study 1 examines the preference refinement effect across time, money and space. Specifically, study 1A (N=119 students, 43% female, median age=19) examined allocations of a sequence of travel budgets (21 days to 7 days to 21 days) to cities. Study 1B (N=130 MTurkers, 42% female; median age=36) examined allocations of money to holiday gift recipients under a sequence of financial budgets (\$850-\$350-\$850). Study 1C (N=276 students, 30% female; median age=19) measured allocations of vegetable seeds across a budget of planting rows in a garden plot (21-10-21). In all studies, participants exhibited preference refinement (Study 1A: $M_D=0.42$, $SD=1.49$, $t(118)=3.07$, $p=.003$; Study 1B: $M_D=0.31$, $SD=1.10$, $t(129)=3.19$, $p=.002$; Study 1C: $M_D=0.18$, $SD=1.18$, $t(275)=2.51$, $p=.01$). Participants consistently allocated their final budget to fewer unique items than they allocated the same budget before experiencing a contraction (i.e., preference refinement occurred in all three studies).

Study 2: Time Delay

Study 2 was conducted to examine the opposing forces of preference refinement and preference consistency by examining allocations two days apart. Student participants (N=77, 56% female; median age=19) allocated time to travel (as in S1A); 63 completed a follow-up 21 day allocation two days later. Preference refinement appeared in the initial 21-7-21 survey ($M_D=0.33$, $SD=1.15$), $t(62)=2.30$, $p=.03$. Two days later, the 21 day allocation was significantly lower than the initial 21 day allocation ($M_D=0.46$, $SD=1.20$), $t(62)=3.04$,

$p=.003$. There was an additional decline between the second 21 day allocation on the first day and the 21 day allocation two days later, though it was *ns*. Preference refinement that began as a result of contraction outlasted desire to make allocations that were consistent with initial allocations.

Study 3: Strength of Contraction

Study 3 examined different levels of budget contractions (21-7-21 vs 21-14-21) in the domain of time. Those experiencing a more extreme contraction face more trade-offs, which should lead to greater preference refinement. Students (N=200, 49% female; median age=19) exhibited greater preference refinement under an extreme contraction (21-7-21: $M_D=0.64$ ($SD=2.24$, $t(99)=2.86$, $p=.005$)) than under a modest contraction (21-14-21: $M_D=0.28$ ($SD=1.62$, $t(99)=1.73$, $p=.09$)). Extreme contractions led to greater preference refinement.

Study 4: Trade-Offs and Dispelling Anchoring

Trade-offs made during the contractionary period should mediate the relationship between condition and final allocation. To examine this, MTurk workers (N=420, 42% female; median age=36) were randomly assigned to either simple expansion (\$350-\$850) or a contraction re-expansion condition (\$850-\$350-\$850) (using the stimuli from S1B). Three measures of trade-offs were completed after the \$350 allocation: "Were you making trade-offs?" (1="definitely not" to 7="definitely yes"); "Were your decisions governed by trade-offs?" (1="not at all" to 7="extremely"); and "How many trade-offs did you make during the \$350 allocation?" (slider bar from 0 to 10).

For simple expansion, allocations moved from 7.16 to 8.23 as the budget increased. In the contraction re-expansion condition, we observed the standard preference refinement effect ($M_D=0.54$, $SD=2.01$, $t(210)=3.87$, $p<.001$) and directionally less variety in the final allocation under re-expansion (7.84) than under simple expansion (8.23). This result helps dispel anchoring as an alternative explanation for the findings. Additionally, individuals believed trade-offs were more instrumental under re-expansion compared to simple expansion (all $p<.01$). Trade-offs partially mediated the relationship between (re)expansion and the final \$850 allocation (PROCESS, model 4, $b=0.30$, $SE = 0.08$, $BC\ 95\% \text{ CI} = [0.16, 0.47]$).

Study 5: Self- Versus Other-Determined Allocation Variety

Study 5 examines the source of constrained choice in the contraction period as either self- or other-determined. If the contractionary choice is made by another, participants will not need to make trade-offs, and we should not observe preference refinement. Students (N=219, 46% female; median age=18) participated. In the self-determined condition, the 7-day allocation was based on personal preference. In the other-determined condition, a travel partner picked three cities for the 7-day trip. Participants completed trade-off questions.

When self-determined (N=113), preference refinement occurred ($M_D=0.36$, $SD=1.76$, $t(112)=2.19$, $p=.03$). However, when the contraction allocation was driven by another's preferences (N=106), the preference refinement effect did not obtain ($M_D=-0.22$, $SD=1.13$,

$t(105)=1.98, p=.05$). If anything, participants exhibited preference expansion under this condition.

Discussion

When budgets contract, consumers face difficult trade-offs that help them discover what really matters to them. This process leads to non-transient preference refinement – preferences were narrower and more consistent after a contraction. The work has implications for brand relationships that must be reinforced during economic downturns to prevent less-preferred brands from being cut permanently.

REFERENCES

- Carlson, Kurt A., Jared Wolfe, Simon J. Blanchard, Joel C. Huber, and Dan Ariely (2015), "The Budget Contraction Effect: How Contracting Budgets Lead to Less Varied Choice," *Journal of Marketing Research*, 52 (June), 337-48.
- Dargay, Joyce M. (2001), "The Effect of Income on Car Ownership: Evidence of Asymmetry," *Transportation Research Part A: Policy and Practice*, 35 (9), 807-21.
- Hoeffler, Steve and Dan Ariely (1999), "Constructing Stable Preferences: A Look Into Dimensions of Experience and Their Impact on Preference Stability," *Journal of Consumer Psychology*, 8 (2), 113-39.
- Kamakura, Wagner A. and Rex Yuxing Du (2012), "How Economic Contractions and Expansions Affect Expenditure Patterns," *Journal of Consumer Research*, 39 (2), 229-47.
- Shea, John (1995), "Myopia, Liquidity Constraints, and Aggregate Consumption: A Simple Test," *Journal of Money, Credit and Banking*, 27 (3), 798-805.

How Discount Price Negatively Influences Ethical Consumption

Yuhosua Ryoo, University of Texas at Austin, USA
Minette Drumwright, University of Texas at Austin, USA

EXTENDED ABSTRACT

Over the years, the topic of pricing has been of great interest in ethical consumption. In particular, the high price of ethical products has been considered an obstacle for consumers when they want to make an ethical purchase decision. To promote consumers' purchase of ethical products, marketers and scholars have suggested that ethical products need to be offered at a discount price. The current research, however, made a counterargument that a discount price negatively influences consumers' purchase behavior. Guided by the price-product efficacy beliefs, we argued that consumers perceive ethical products with discount prices to be less efficient, which in turn leads them less willing to purchase the discounted ethical products.

To demonstrate the hypothesis, four experiments were conducted. In Experiment 1, 75 participants who were recruited from Amazon's MTurk randomly assigned either to the discount price condition or to the premium price condition. Whereas participants in the discount price condition received information that organic tomatoes are on sale for a dramatically discount price (\$1.89 → \$ 0.89/lb), those in the premium price condition were told that organic tomatoes are selling at a premium price (\$1.89) as usual. Participants then expressed how they are willing to purchase organic tomatoes with five items on a seven point scale (Dodds, Monroe, and Grewal 1991). The findings provided preliminary evidence that organic foods with discount prices ($M = 4.65$) can decrease consumers' willingness to purchase the organic foods (vs. premium price: $M = 6.03$; $F = 18.052$, $p < .001$).

The purpose of Experiment 2 was to demonstrate the moderating role of consumers' ethical mindsets. A total of 125 participants were recruited from Amazon's MTurk and randomly assigned either to the discount price condition or to the premium price condition. Participants were shown an online coupon for a cup of fair trade coffee that is available any grocery store near them. In the discount price condition, the coupon was worth \$0.89, whereas the coupon in the premium price condition was worth \$2.56. After expressing their willingness to purchase the fair trade coffee coupon, participants also measured their moods with the PANAS scale (Watson, Clark, and Tellegen 1988) and ethical mindset with the EMCB scale (Sudbury-Riley and Kohlbacher 2016). After controlling for the mood effects, the results showed that there was a significant interaction effect between the price of a fair trade coffee coupon and consumers' mindset ($\beta = .271$, $t = 3.957$, $p < .001$). The spotlight analysis (Aiken and West 1991) revealed that the boomerang effects of discount prices are prevalent among those have high levels of ethical mindset ($M_{\text{discount}} = 4.97$ vs. $M_{\text{premium}} = 6.54$; $t = -5.82$, $p < .001$), but this relationship was not significant among those with low levels of ethical mindset ($M_{\text{discount}} = 6.3$ vs. $M_{\text{premium}} = 6.39$; $p > .1$).

In the context of the ethical clothes consumption, Experiment 3 aimed to demonstrate how the perceived product efficacy mediates a negative impact of discount prices. A total of 135 participants who were recruited from Amazon's MTurk were randomly assigned to a price condition (premium vs. discounted). They were shown a picture of an ethical T-shirt and hypothetically given a chance to purchase the product. The price was manipulated by indicating different prices on the label of the T-shirt (i.e., \$2.5 for the discount price condition vs. \$5 for the premium price condition). Along with the questions that were measured in Experiment 2, participants then answered

questions concerning the perceived product efficacy with three items on a seven point scale (White, MacDonnell, and Ellard, 2012). Social desirability (Ballard 1992) was also measured and controlled as a confounding variable. The PROCESS analysis (Hayes 2013, Model 8, 5000 bootstrap resamples) showed a significant mediated moderation effect (95% CI, -.39 to -.13). In particular, the price × ethical mindset interaction had a significant effect on perceived product efficacy ($\beta = -.32$, $t = -4.32$, $p < .001$; 95% CI, -.43 to -.17). Perceived product efficacy, in turn, had a significant positive effect on $WTP_{\text{T-shirt}}$ ($\beta = .752$, $t = 7.965$, $p < .001$; 95% CI, .56 to .94). Consistent with the predictions, participants with high levels of ethical mindset in the discounted price condition ($M = 4.83$) were less likely to purchase the ethical T-shirt than those in the premium price condition ($M = 6.32$; 95% CI, -1.01 to -.49) when the perceived product efficacy was included in the model. Participants' willingness to purchase an ethical T shirt was not different among those with low levels of ethical mindset ($M_{\text{premium}} = 5.37$ vs. $M_{\text{discount}} = 5.3$; 95% CI, -.32 to .16).

In the last experiment, we suggested how additional information about product efficacy can prevent the boomerang effects of discount prices. The procedure and measurements were in keeping with those used in Experiment 4. However, in Experiment 4, 117 participants were exposed only to a discount price even if the half of them received information that boosts the efficacy of the discounted ethical products whereas the others did not. The significant additional information × ethical mindset interaction ($\beta = -1.25$, $p < .001$) indicated that participants did not receive information about product efficacy were less likely to purchase the discounted fair trade coffee coupons as their ethical mindset (EMCB) increased ($\beta = -.91$, $p < .05$). However, when the information was presented, the level of ethical mindset (EMCB) did not predict the likelihood of purchasing the discounted coupon ($\beta = .25$, $p > .1$).

The findings collectively indicated that price promotions without a consideration of consumers' belief system would backfire. The present research first demonstrated the boomerang effect of ethical products with discounted prices in the wide range of the ethical consumption contexts (e.g., fair trade coffee, organic foods, and ethical clothes). In addition, the present research provided deeper understandings about consumers' responses to pricing actions by demonstrating a mediating role of the product efficacy. In particular, this research suggested a boundary condition of the boomerang effects of discount prices by examining the moderating role of consumers' ethical mindsets. This highlighted that the individual-related factor plays a vital role in ethical consumption and the boomerang effects are predominant in certain consumer segments.

REFERENCES

- Aiken, Leona S., Stephen G. West, and Raymond R. Reno (1991), *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Ballard, Rebecca (1992), "Short Forms of the Marlowe-Crowne Social Desirability Scale," *Psychological Reports*, 71 (3), 1155-1160.
- Dodds, William B., Kent B. Monroe, and Dhruv Grewal (1991), "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations," *Journal of Marketing Research*, 307-319.

Hayes, Andrew F (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. NY: Guilford Press.

Sudbury-Riley, Lynn and Florian Kohlbacher (2016), "Ethically Minded Consumer Behavior: Scale Review, Development, and Validation," *Journal of Business Research*, 69 (8), 2697-2710.

Watson, David, Lee A. Clark, and Auke Tellegen (1988), "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales," *Journal of Personality and Social Psychology*, 54 (6), 1063.

White, Katherine, Rhiannon MacDonnell, and John H. Ellard (2012), "Belief in a Just World: Consumer Intentions and Behaviors Toward Ethical Products," *Journal of Marketing*, 76 (1), 103-118.

Driven by the Cues: Goal Attainment Makes Consumers More Responsive to Shopping-Related Contextual Cues

Sebastian Sadowski, Maastricht University, The Netherlands

Bob Fennis, University of Groningen, The Netherlands

Koert van Ittersum, University of Groningen, The Netherlands

EXTENDED ABSTRACT

The literature on consumer behavior considers shopping behavior as predominantly goal-oriented (e.g., Kopetz et al., 2012). Nonetheless, shopping goals do not always need to be at the top of consumers' minds and they can sometimes be pushed to the background by other, overriding, more desired goals. To date, scant research has been devoted to the interplay between consumer shopping goals and other salient, concomitantly active goals and the impact of such interference on consumer decision-making. Various goals can accompany consumers in their daily life (e.g., taking a train, arriving at a specific location, going to work) and disparate goals of differing motivational intensity could be active at the same time (Pieters, Baumgartner and Allen, 1995). In this research we focus particularly on the anticipation and the attainment of such highly desired goals, investigating how either having a salient, highly desired goal that needs to be attained in the near future or having attained this particular goal influences responsiveness to shopping-related contextual cues and subsequently location-based preferences, that is, selecting products from specific locations.

We posit that when a shopping goal is pushed to the background, the influence of shopping-related cues on consumer decision-making will be attenuated (Ferguson & Bargh, 2004). Therefore, when other salient, highly desired goals are potent enough to inhibit the goal of shopping, we expect that consumers become less susceptible to the influence of shopping-related contextual cues (i.e., assortment structure). On the other hand, when other, shopping-unrelated goals have already been attained, consumers open up and approach shopping in a more goal-oriented way, dedicating greater processing capacity to their product selection (Gable & Harmon-Jones, 2010). They process not only separate products, but also their global visual configuration. As a result, consumer decision-making is more likely then to be shaped by subtle contextual manipulations in product organizations.

Our expectations are derived predominantly from goal systems theory (Kruglanski et al., 2012). Various goals that are simultaneously activated compete for cognitive resources, pulling mental resources from each other. The more resources are dedicated to a particular goal, the less resources are left for other coinciding goal pursuits (Kruglanski et al., 2002). An important factor determining the allocation of resources across competing goals is motivational intensity. Goals characterized by highest motivational intensity pull the most mental resources, leaving only a limited processing capacity for other, less desired but coinciding goals and associated with them contextual cues (Kruglanski et al., 2002). Therefore, we expect that sensitivity towards goal-irrelevant contextual cues is attenuated when other, more desired goals are concurrently active.

In order to test this proposition, following Bar-Hillel (2015), we expect that when other goals have been attained, consumers will select products located closer to the center of an assortment (i.e., edge aversion) while selecting from equivalent assortments (assortments composed of products varying only across a few attributes), whereas selecting products from nonequivalent assortments (assortments composed of products varying across numerous attributes) will shift consumers' product preferences closer to the edge of an assortment (i.e., edge preference).

Study 1

100 students participated in a 2 (goal state: anticipation vs. attainment) \times 2 (assortment structure: equivalent vs. nonequivalent) mixed design experiment, where goal state was manipulated between-subjects and assortment structure within-subjects.

Participants were invited to play a Tic-Tac-Toe game and were informed that the study examined their performance during games. Five games of Tic-Tac-Toe were played in total by each participant. We varied goal states by either asking participants to make the choice of their most preferred product before (anticipation) or after (attainment) they have played the game. Participants selected products from two different assortments: evidently equivalent (Ice Creams) and nonequivalent (Candy Packages) assortments, consisting of 64 different products. Our focal dependent variable was the centrality of the product choice, coded from 1 to 7, with the higher value representing a more central option chosen.

Results

A repeated measures ANOVA with goal state as a between-subjects factor and assortment structure as a within-subjects factor revealed a significant interaction between goal state and assortment structure ($F(1, 90)=4.04, p=.05$). Additional simple main effects analysis showed that the interaction was predominantly driven by participants in the goal attainment condition. Participants who have already attained monetary rewards and were selecting products from an equivalent assortment were more likely to go to the center of the equivalent assortment ($M=4.44, SD=1.53$) in comparison with those who attained monetary rewards and were choosing products from a nonequivalent assortment ($M=3.42, SD=1.62; F(1,90)=9.86, p<.01$). When the rewards were anticipated assortment structure did not steer participants to choose products from different locations ($F < 1$).

Study 2

100 students participated in a 2 (goal state: anticipation vs. attainment) \times 2 (assortment structure: equivalent vs. nonequivalent) mixed design experiment, where goal state was manipulated between-subjects and assortment structure within-subjects.

Participants were approached with a survey either before they ate in a Burger King restaurant or after they had already eaten there. Participants were presented with two different assortments: evidently equivalent (donuts) and nonequivalent (bread spreads). For each assortment 99 products were shown (9 \times 11 grid).

Akin to study 1, our core dependent variable was the centrality of the choice, coded from 1 to 10, with the higher value representing a more central option chosen.

Results

A repeated measures ANOVA with goal state as a between-subjects factor and assortment structure as a within-subjects factor revealed a significant interaction between goal state and assortment structure ($F(1, 89)=5.07, p=.03$). Additional simple main effects analysis showed that, in line with our expectations, the interaction was predominantly driven by participants in the goal attainment condition. Participants who had already eaten and were selecting products from an equivalent assortment were more likely to go to the center of the equivalent assortment ($M=6.54, SD=2.12$) in com-

parison with participants who had already eaten and were choosing products from a nonequivalent assortment ($M=5.41$, $SD=2.32$; $F(1, 89)=10.67$, $p<.01$). The structure of assortment did not make participants choose products from different locations when they were anticipating to satisfy their hunger ($F < 1$).

REFERENCES

- Bar-Hillel, M. (2015), "Position Effects in Choice from Simultaneous Displays a Conundrum Solved," *Perspectives on Psychological Science*, 10(4), 419-433.
- Baumgartner, H., Pieters, R., Haugtvedt, C., Herr, P., & Kardes, F. (2008), "Goal-directed Consumer Behavior," *Handbook of consumer psychology*.
- Ferguson, M. J., & Bargh, J. A. (2004), "Liking is for Doing: The Effects of Goal Pursuit on Automatic Evaluation," *Journal of Personality and Social Psychology*, 87(5), 557.
- Gable, P., & Harmon-Jones, E. (2010), "The Motivational Dimensional Model of Affect: Implications for Breadth of Attention, Memory, and Cognitive Categorisation," *Cognition and Emotion*, 24(2), 322-337.
- Harmon-Jones, E., Gable, P. A., & Price, T. F. (2013), "Does Negative Affect Always Narrow and Positive Affect Always Broaden the Mind? Considering the Influence of Motivational Intensity on Cognitive Scope," *Current Directions in Psychological Science*, 22(4), 301-307.
- Iyengar, S. S., & Lepper, M. R. (2000), "When Choice is Demotivating: Can One Desire Too Much of a Good Thing?," *Journal of Personality and Social Psychology*, 79(6), 995-1006.
- Keller, C., Markert, F., & Bucher, T. (2015), "Nudging Product Choices: The Effect of Position Change on Snack Bar Choice," *Food Quality and Preference*, 41, 41-43.
- Kopetz, C. E., Kruglanski, A. W., Arens, Z. G., Etkin, J., & Johnson, H. M. (2012), "The Dynamics of Consumer Behavior: A Goal Systemic Perspective," *Journal of Consumer Psychology*, 22(2), 208-223.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., & Chun, W. Y. (2002), "A Theory of Goal Systems," In: MP Zanna (Ed.), *Advances in experimental social psychology*.
- Phillips, L. W., & Sternthal, B. (1977), "Age Differences in Information Processing: a Perspective on the Aged Consumer," *Journal of Marketing Research*, 444-457.
- Pieters, R., Baumgartner, H., & Allen, D. (1995), "A Means-End Chain Approach to Consumer Goal Structures," *International Journal of Research in Marketing*, 12(3), 227-244.
- Raghubir, P., & Valenzuela, A. (2006), "Center-of-Inattention: Position Biases in Decision-Making," *Organizational Behavior and Human Decision Processes*, 99(1), 66-80.
- Salthouse, T. A. (1996), "The Processing-Speed Theory of Adult Age Differences in Cognition," *Psychological Review*, 103(3), 403.
- Valenzuela, A., & Raghubir, P. (2009), "Position-Based Beliefs: The Center-Stage Effect," *Journal of Consumer Psychology*, 19(2), 185-196.

Word of Mouth as Compensatory Consumer Behavior: Can Talking About Brands Restore Consumers' Self-Concepts After Self-Threat?

Christina Saenger, Youngstown State University, USA
 Veronica L. Thomas, Towson University, USA
 Dora Bock, Auburn University, USA

EXTENDED ABSTRACT

Self-threat occurs when a person encounters information that calls into question the positivity of a given self-view (Gao et al. 2009), resulting in psychological discomfort (Festinger 1957). Symbolic self-completion (Wicklund and Gollwitzer 1981) is one strategy (Mandel et al. 2017) consumers deploy in response. As supported by the compensatory consumption literature, products can be consumed for psychological value (Ariely and Norton 2009) and their symbolic associations incorporated into consumers' self-concepts (Belk 1988).

Self-threat also affects consumers' decision to spread WOM. People are more likely to spread WOM about symbolic products (Chung and Darke 2006) that signal identity-related aspects of their self-concepts (Berger 2014), and to spread WOM after self-threat (Packard and Wooten 2013). We propose that WOM can actually resolve specific, self-concept related self-threats when spread about a brand that is symbolically congruent with the threat domain, termed a *restorative brand*. Under self-threat, consumers who spread WOM about a restorative (non-restorative) brand should exhibit higher (lower) self-perceptions on the threatened attribute (H1). Further, psychological discomfort should mediate the interactive effect of threat and brand restorativeness on self-perceptions (H2). Evidence suggests that self-esteem may moderate the proposed effects as low-esteem consumers feel lower self-efficacy (Sherer et al. 1982) and exhibit stronger attachment to symbolic brands (Dommer et al. 2013). Under self-threat, spreading WOM about a restorative (non-restorative) brand will enhance (reduce) self-perceptions on the threatened attribute through psychological discomfort for low self-esteem consumers (H3).

Study 1: Participants ($n = 128$, average age 36, 46% male) were randomly assigned to a condition where they wrote about a time they acted ethically (no self-threat) or unethically (self-threat). Participants were also randomly assigned to a restorative (picture of Brawny paper towels with packaging promoting relationship with the Wounded Warrior Project) or non-restorative (picture of Brawny paper towels with original packaging) brand condition. All participants spread WOM by commenting on a mock Brawny Facebook page. Participants rated self-perceptions of ethics using items adapted from Reed, Aquino, and Levy (2007; $\alpha = .60$).

A two-way ANOVA with threat and brand (IVs) and self-perceptions of ethics (DV) revealed a direct effect of threat ($F(1, 124) = 13.82, p < .001$; no threat: $M = 5.56, SD = .81$; self-threat: $M = 4.97, SD = 1.07$), qualified by a significant threat by brand interaction ($F(1, 124) = 3.77, p = .05$). Probing the interaction reveals that self-threatened consumers exhibit higher self-perceptions on the threatened attribute after spreading WOM about a restorative ($M = 5.21, SD = .96$) versus non-restorative ($M = 4.67, SD = 1.14$) brand ($F(1, 59) = 4.01, p = .05$). Self-perceptions of self-threatened consumers who spread WOM about a restorative brand did not significantly differ from consumers who did not experience self-threat ($p = .18$), supporting H1.

Study 2: Participants ($n = 140$, average age 36, 48% male) completed a fake IQ assessment and were randomly assigned to a self-threat condition. Half were told their IQ was above average (no threat), half were told their IQ was below average (threat). Participants were randomly assigned to a restorative (Special K cereal) or non-restorative (Lucky Charms cereal) brand condition. All participants spread WOM by posting comments to a mock Facebook page

for the brand. Participants reported self-perceptions of intelligence ($\alpha = .79$) using items adapted from Rick and Schweitzer (2012). Psychological discomfort ($\alpha = .81$) was measured with items adapted from Elliot and Devine (1994).

A two-way ANOVA with threat and brand as IVs, covariate age, and self-perceptions as DV resulted in no main effect for brand ($p = .50$) or threat condition ($p = .36$), but the predicted threat by brand interaction emerged ($F(1, 135) = 5.19, p < .05$), replicating the same pattern observed in study 1.

PROCESS model 7 (Hayes 2013; 5,000 bootstrap resamples) supports psychological discomfort as a mediator of the threat by brand interaction self-perceptions (index of moderated mediation: .54, 95% CI = [.1038, 1.054]). The interaction affects psychological discomfort ($b = -1.19, t = -2.47, p < .05$) and psychological discomfort reduces self-perceptions ($b = -.45, t = -9.68, p < .001$). For the non-restorative brand, the indirect effect suggests psychological discomfort explains threat's negative effect on self-perceptions ($-.57, 95\% \text{ CI} = [-.9741, -.2211]$), but was not significant for the restorative brand ($-.03, 95\% \text{ CI} = [-.3378, .2575]$). Self-threat negatively affects self-perceptions through heightened psychological discomfort when WOM is spread about a non-restorative brand, partially supporting H2.

Study 3 mirrors study 1, except all participants ($n = 224$, average age 38, 40% male) were exposed to self-threat and completed three items measuring trait self-esteem ($\alpha = .87$; Rosenberg 1965), along with items measuring self-perceptions ($\alpha = .64$) and psychological discomfort ($\alpha = .82$).

PROCESS model 1 was significant ($R^2 = .17; F(3, 220) = 15.45, p < .001$). Direct effects of brand ($b = 1.20, t = 2.24, p < .05$) and self-esteem ($b = .41, t = 5.85, p < .001$) were qualified by an interaction ($b = -.19, t = 2.02, p < .05$) revealing a significant positive influence of restorative brand WOM on self-perceptions when self-esteem is at or below 4.73 ($b = .29, t = 1.98, p = .05$).

PROCESS model 7 (5,000 bootstrap resamples) supported moderated mediation ($-.05, 95\% \text{ CI} = [-.1111, -.0045]$). The interaction significantly affects psychological discomfort ($b = .24, t = 2.21, p < .05$), reducing self-perceptions ($b = -.21, t = -4.47, p < .001$). For low self-esteem consumers, spreading WOM about the restorative brand positively affects self-perceptions by reducing psychological discomfort (indirect effect: .08, 95% CI = [.0023, .2051]), supporting H3 and clarifying H2.

In closing, the current research reveals that following self-threat, spreading WOM about restorative brands can repair consumers' self-concepts. This effect is shown to be mediated by psychological discomfort and moderated by self-esteem. It would be beneficial for future research to examine how these findings extend to the purchase of restorative brands. Similarly, it would be advantageous for research to examine additional moderators to these effects and to compare the current results to instances where WOM is not spread.

REFERENCES

- Ariely, Dan and Michael I. Norton (2009), "Conceptual Consumption.," *Annual Review of Psychology*, 60, 475-499.
 Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15(2), 139-168.

- Berger, Jonah (2014), "Word of Mouth and Interpersonal Communication: A Review and Directions for Future Research," *Journal of Consumer Psychology*, 24(4), 586-607.
- Chung, Cindy M. Y. and Peter R. Darke, (2006), "The Consumer as Advocate: Self-Relevance, Culture, and Word-of-Mouth," *Marketing Letters*, 17(4), 269-279.
- Dommer, Sara Loughran, Vanitha Swaminathan, and Rohini Ahluwalia (2013), "Using Differentiated Brands to Deflect Exclusion and Protect Inclusion: The Moderating Role of Self-Esteem on Attachment to Differentiated Brands," *Journal of Consumer Research*, 40(4), 657-675.
- Elliot, Andrew J., and Patricia G. Devine (1994) "On the Motivational Nature of Cognitive Dissonance: Dissonance as Psychological Discomfort," *Journal of Personality and Social Psychology*, 67(3), 382.
- Festinger, Leon (1957), *A Theory of Cognitive Dissonance*, Stanford University Press.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford Press.
- Mandel, Naomi, Derek D. Rucker, Jonathan Levav, and Adam D. Galinsky (2017), "The Compensatory Consumer Behavior Model: How Self-Discrepancies Drive Consumer Behavior," *Journal of Consumer Psychology*, 27(1), 133-146.
- Packard, Grant M. and David B. Wooten (2013), "Compensatory Knowledge Signaling in Consumer Word-of-Mouth," *Journal of Consumer Psychology*, 23(4), 434-450.
- Reed, Americus, Karl Aquino, and Eric Levy (2007), "Moral Identity and Judgments of Charitable Behaviors," *Journal of Marketing*, 71(1), 178-193.
- Rick, Scott, and Maurice E. Schweitzer (2012), "The Imbibing Idiot Bias: Consuming Alcohol Can Be Hazardous to Your (Perceived) Intelligence," *Journal of Consumer Psychology*, 23(2), 212-219.
- Rosenberg, Morris (1965), *Society and the Adolescent Self-Image*, Princeton, NJ: Princeton University Press.
- Sherer, Mark, James E. Maddux, Blaise Mercandante, Steven Prentice-Dunn, Beth Jacobs, and Ronald W. Rogers (1982), "The Self-Efficacy Scale: Construction and Validation," *Psychological Reports*, 51, 663-671.
- Wicklund, Robert A. and Peter M. Gollwitzer (1981), "Symbolic Self-Completion, Attempted Influence, and Self-Deprecation," *Basic and Applied Social Psychology*, 2(2), 89-114.

Fight Fire with Fire: Using One Consumer Stereotype to Overcome Another via Contingency Information

Julian Saint Clair, Loyola Marymount University, USA
Mitchell Hamilton, Loyola Marymount University, USA
Delancy Bennett, Clemson University, USA

EXTENDED ABSTRACT

Although progress has been made toward eliminating inequities caused by prejudice and discrimination, underrepresentation is still an important issue in many fields such as Science, Technology, Engineering, Math, and Business (Hoyt & Murphy, 2016; Nosek, et al., 2009; Ong, Wright, Espinosa, & Orfield, 2011). While marketing research supports the intuition that campaigns targeting underrepresented groups have positive effects in general (e.g., a diet soda advertisement featuring an ethnic minority as a spokesperson; Aaker, Brumbaugh, & Grier, 2000; Luna, Ringberg, & Peracchio, 2008; Stayman & Deshpande, 1989), scant research exists that explores diversity marketing in stereotyped domains specifically, where the marketing campaigns are by definition counter-stereotypical (e.g., an ad for a STEM program with a female spokesperson). The present research addresses this gap, regarding counter-stereotypical marketing, by deriving competing predictions and building a novel theoretical model to reconcile them.

Almost two decades of research on exposure to role models (see Stout, Dasgupta, Hunsinger, & McManus, 2011 for a review) suggests that counter-stereotypical advertisements may help by weakening implicit stereotypes (Dasgupta & Asgari, 2004) or by inoculating consumers against the stereotype via a strengthened self-concept (Dasgupta, 2011; Hoyt & Simon, 2011; Lockwood & Kunda, 1997, 1999; Marx & Roman, 2002), both of which suggest a positive effect of counter-stereotypical marketing. Over two decades of research on stereotype threat (for reviews see Pennington, Heim, Levy, & Larkin, 2016; and Spencer, Logel, & Davies, 2016), however, suggests an alternate view: counter-stereotypical advertisements may act as cues that activate stereotype-consistent cognitions (Bargh, Chen, & Burrows, 1996; Jamieson & Harkins, 2012; Lee, Kim, & Vohs, 2011; J. R. Steele & Ambady, 2006), leading to stereotype-consistent behavior and thus suggesting a negative effect of counter-stereotypical marketing.

Drawing on research from information processing including cognitive consistency and categorical learning (e.g., Greenwald, et al., 2002; Nosofsky, Palmeri, & Mckinley, 1994), we build a theoretical model that accounts for both positive and negative effects of counter-stereotypical marketing via conceptual-contingency learning. Consumers may be unable to successfully process counter-stereotypical information because it is inherently cognitively inconsistent with the consumer's prevailing stereotype knowledge (Greenwald, et al., 2002; Heider, 1946). Thus, seeing counter-stereotypical information would only activate the prevailing knowledge structure (e.g., the stereotype; Allen, Sherman, Conrey, & Stroessner, 2009; Cunha, Janiszewski, & Laran, 2008), leading to stereotype-consistent behavior. However, stereotyped social groups are also stereotypically linked to a number of other concepts (e.g., "handsome = male" and "beauty = female"). If consumers are able to successfully link such a second-order concept to the domain (e.g., science is beautiful), this may allow successful incorporation of the counter-stereotypical information by creating a contingency (i.e., exception) rule in the knowledge structure (Nosofsky, et al., 1994). Specifically, the new knowledge structure may be such that the stereotyped group is generally negatively associated with the domain, except in the presence of the second-order concept that serves as the conceptual-

contingency cue. Further, we argue that the process is reliant on the stereotypically positive link between the group and the concept to create the consistent, balanced cognitions necessary for conceptual-contingency learning; simply linking any second concept to the domain (e.g., science is fun) is insufficient. As such, one stereotype (i.e., a group-attribute association) is being utilized to overcome another. The ability of consumers to integrate cognitively inconsistent information in a single exposure via conceptual-contingency learning is inexplicable using current models of associative or categorical learning.

In sum, the present work addresses the research gap surrounding counter-stereotypical marketing. We contribute to theory by deriving predicted positive and negative effects from role models and stereotype threat literatures respectively, and by reconciling the competing predictions with a novel theoretical model of conceptual-contingency learning. The model uniquely identifies conceptual-contingency cues as a moderator of whether counter-stereotypical information helps or hurts. The integration of these alternative theoretical stances has important implications not only for theory on stereotypes and learning, but also for managers and policy makers concerned with diversity.

Empirical Evidence

Three studies across multiple stereotypes provide converging evidence for the impact of conceptual-contingency learning on the processing of counter-stereotypical information. All studies recruit participants from Amazon MTurk in exchange for compensation (Buhrmester, Kwang, & Gosling, 2011). Study 1 ($n = 125$) shows that a stereotype-inconsistent (vs. -neutral) ad for an engineering program containing a quote from a female (vs. unidentified) spokesperson has a positive (null) effect on evaluations when the quote contains a conceptual-contingency (neutral) cue: "I found the beauty [fun] in engineering;" $F(1, 121) = 4.27, p = .041$. This supports the contention that a counter-stereotypical ad only has a positive effect in the presence of a cue that positively links the group to the domain. In the context of the ethnicity-academics stereotype (C. M. Steele, 1997), study 2 ($n = 121$) extends these findings by showing that the effect reverses as the link between the conceptual-contingency cue (street smarts) and the domain (higher education) is perceived to be more negative, as captured by an individual difference measure; $B = -.526; t(121) = -3.36, p = .001$. In the context of the gender-business stereotype (Powell & Butterfield, 1994), study 3 ($n = 138$) directly manipulates the positivity of the cue-domain link with pre-tested ostensible "research articles" stating that social skills may have positive (vs. negative) effects in business. Results show that both positive and negative effects of the cue-domain link occur, but only when the cue is also positively linked to the group (social skills-women); $F(1, 134) = 5.09, p = .026$. This provides further evidence for the proposed cognitive-consistency/balance process.

Taken together, the findings show that counter-stereotypical ads can lead to positive evaluations when they contain a conceptual-contingency cue that positively links the stereotyped group to the domain (e.g., beauty in engineering). Lacking such a cue, results show that counter-stereotypical ads may lead to negative evaluations. These results demonstrate the importance of conceptual-contingency learning in the processing of stereotype-inconsistent stimuli, supporting our

theoretical model and providing important implications for researchers, managers, and policy makers concerned with diversity.

REFERENCES

- Aaker, J. L., Brumbaugh, A. M., & Grier, S. A. (2000). Nontarget markets and viewer distinctiveness: The impact of target marketing on advertising attitudes. *Journal of Consumer Psychology, 9*, 127-140.
- Allen, T. J., Sherman, J. W., Conrey, F. R., & Stroessner, S. J. (2009). Stereotype strength and attentional bias: Preference for confirming versus disconfirming information depends on processing capacity. *Journal of Experimental Social Psychology, 45*, 1081-1087.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology, 71*, 230-244.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality, Data? *Perspectives on Psychological Science, 6*, 3-5.
- Cunha, M., Janiszewski, C., & Laran, J. (2008). Protection of Prior Learning in Complex Consumer Learning Environments. *Journal of Consumer Research, 34*, 850-864.
- Dasgupta, N. (2011). Ingroup Experts and Peers as Social Vaccines Who Inoculate the Self-Concept: The Stereotype Inoculation Model. *Psychological Inquiry, 22*, 231-246.
- Dasgupta, N., & Asgari, S. (2004). Seeing is believing: Exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology, 40*, 642-658.
- Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott, D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychological Review, 109*, 3-25.
- Heider, F. (1946). Attitudes and Cognitive Organization. *Journal of Psychology, 21*, 107-112.
- Hoyt, C. L., & Murphy, S. E. (2016). Managing to clear the air: Stereotype threat, women, and leadership. *Leadership Quarterly, 27*, 387-399.
- Hoyt, C. L., & Simon, S. (2011). Female Leaders: Injurious or Inspiring Role Models for Women? *Psychology of Women Quarterly, 35*, 143-157.
- Jamieson, J. P., & Harkins, S. G. (2012). Distinguishing between the effects of stereotype priming and stereotype threat on math performance. *Group Processes & Intergroup Relations, 15*, 291-304.
- Lee, K., Kim, H., & Vohs, K. D. (2011). Stereotype Threat in the Marketplace: Consumer Anxiety and Purchase Intentions. *Journal of Consumer Research, 38*, 343-357.
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology, 73*, 91-103.
- Lockwood, P., & Kunda, Z. (1999). Increasing the salience of one's best selves can undermine inspiration by outstanding role models. *Journal of Personality and Social Psychology, 76*, 214-228.
- Luna, D., Ringberg, T., & Peracchio, L. A. (2008). One individual, two identities: Frame switching among biculturals. *Journal of Consumer Research, 35*, 279-293.
- Marx, D. M., & Roman, J. S. (2002). Female role models: Protecting women's math test performance. *Personality and Social Psychology Bulletin, 28*, 1183-1193.
- Nosek, B. A., Smyth, F. L., Sriram, N., Lindner, N. M., Devos, T., Ayala, A., Bar-Anan, Y., Bergh, R., Cai, H. J., Gonsalkorale, K., Kesebir, S., Maliszewski, N., Neto, F., Olli, E., Park, J., Schnabel, K., Shiomura, K., Tulbure, B. T., Wiers, R. W., Somogyi, M., Akrami, N., Ekehammar, B., Vianello, M., Banaji, M. R., & Greenwald, A. G. (2009). National differences in gender-science stereotypes predict national sex differences in science and math achievement. *Proceedings of the National Academy of Sciences of the United States of America, 106*, 10593-10597.
- Nosofsky, R. M., Palmeri, T. J., & Mckinley, S. C. (1994). Rule-Plus-Exception Model of Classification Learning. *Psychological Review, 101*, 53-79.
- Ong, M., Wright, C., Espinosa, L. L., & Orfield, G. (2011). Inside the Double Bind: A Synthesis of Empirical Research on Undergraduate and Graduate Women of Color in Science, Technology, Engineering, and Mathematics. *Harvard Educational Review, 81*, 172-208.
- Pennington, C. R., Heim, D., Levy, A. R., & Larkin, D. T. (2016). Twenty Years of Stereotype Threat Research: A Review of Psychological Mediators. *Plos One, 11*.
- Powell, G. N., & Butterfield, D. A. (1994). Investigating the Glass Ceiling Phenomenon - an Empirical-Study of Actual Promotions to Top Management. *Academy of Management Journal, 37*, 68-86.
- Spencer, S. J., Logel, C., & Davies, P. G. (2016). Stereotype Threat. *Annual Review of Psychology, Vol 67, 67*, 415-437.
- Stayman, D. M., & Deshpande, R. (1989). Situational Ethnicity and Consumer-Behavior. *Journal of Consumer Research, 16*, 361-371.
- Steele, C. M. (1997). A threat in the air - How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613-629.
- Steele, J. R., & Ambady, N. (2006). "Math is Hard"! The effect of gender priming on women's attitudes. *Journal of Experimental Social Psychology, 42*, 428-436.
- Stout, J. G., Dasgupta, N., Hunsinger, M., & McManus, M. A. (2011). STEMing the Tide: Using Ingroup Experts to Inoculate Women's Self-Concept in Science, Technology, Engineering, and Mathematics (STEM). *Journal of Personality and Social Psychology, 100*, 255-270.

Understanding Chat Perceptions in a Customer Assistance Channel

Marion Sanglé-Ferrière, ESCP Europe, France
Benjamin Voyer, ESCP Europe, UK

EXTENDED ABSTRACT

The development of self-service technologies, in an attempt to make customers autonomous, have paradoxically created new situations in which individuals may need help, for instance in the case of technological failure or customer mistakes (Bitner, Ostrom, and Meuter 2002; Meuter et al. 2000). A traditional response from companies has been to offer assistance via chat on websites, as a mean to assist and humanize websites. Thanks to its dialogical form, chat has also been presented as a way to alleviate the higher level of perceived risk encountered within e-service (Kumar and Benbasat 2002; Xu 2016).

The concept of customer assistance has not been clearly defined in the literature. We define it as the encounter between a customer acknowledging a problematic situation with a product or service, and a proposal for assistance by the company. Studies investigating chat as an assistance channel have relied on two main assumptions. First, the fact that e-retail and e-service need to be humanized (e.g. Hassanein and Head 2007; Park, Chung, and Rutherford 2011). Second, the fact that it is perceived as more risky by consumers than face-to-face interactions (Paluch and Wunderlich 2016; Featherman and Pavlou 2003). Moreover the limited studies looking at chat have taken a company's point of view, rather than a consumer one. As a result, the research field lacks an understanding of customers' perceptions of chat. This research addresses this gap and aims at i) understanding perceptions of chat as an assistance channel, and ii) explore customers' motivations and limiting factors for the use of chat in an assistance context. Doing so, it addresses recent calls for research on customer experience in context (Klaus 2013) and on customer-initiated communications, which go beyond a purchasing context (Polo and Sese 2016).

This research investigates customers' perceptions of online chat as an assistance channel in their own real-life assistance context. We adopt a service and consumer-centred point of view to study chat and customer's need for assistance, relying on Human Computer Interaction (HCI) theories. We adopt a qualitative research design using semi-structured interviews. Our findings identify key criteria, which determine the need for assistance and willingness to use chat as perceived by customers.

Literature Review: Live Chat vs. Virtual agents, Technology Acceptance, and Perceived Risks

Chat has been defined in the service literature as the "sending and receiving of short text-based messages where the sender and the recipient communicate usually with no (or minimal) delays" (Froehle 2006). A main limitation of this definition is that it does not consider the nature of the interlocutor – whether the interlocutor is a human being or a virtual agent. Customers, however, may not be aware, before starting a conversation, whether their interlocutor will be of a human or virtual nature. Chat, in a customer assistance context, generally comes in two distinct forms. First, live chat refers to chat between humans. Live chat is often assimilated to a generic form of computer-mediated communication, and scholars draw from theories such as media richness theory (e.g. Froehle 2006; Graetz et al. 1998) or social presence theory (e.g. Verhagen et al. 2014) to study it. Live chat is considered synchronous text and a rather low media in terms of its richness (Froehle 2006). Second, virtual agents, which are artificial-intelligence-operated chat-robots (or chatbots), and have

been studied in great detail in the field of HCI (Yee, Bailenson, and Rickertsen 2007).

Customer's decision to use chat in an assistance context can be framed using HCI. First, Davis' (1989) Technology Acceptance Model (TAM) provides an effective way to predict whether a user will be likely to use a given technological tool. His model puts forward two factors that predict this intention: the first one being the "perceived usefulness" and the second one being the "perceived ease of use" of the tool. This model has been largely applied to analyse customer's adoption of new technological tools, and has been refined over the last decades. For instance, e-service adoption studies have added the notion of perceived risk to the initial dimensions (Featherman and Pavlou 2003), leaning on categories of risk identified by Cunningham (1967) such as performance risk and psychological risk. Assistance-seeking situations typically entail a certain degree of uncertainty and various degrees of stake, which is representative of risky situations. In their study on channel choice in customer-initiated communication, Polo and Sese (2016, 278) argue that amount of perceived risk, which differs depending on the nature (channel) of the interaction, will "determine customer channel preferences". Perceived risk is thus also likely to play a role in a customer assistance channel decision.

Methodology: Semi Structured Interviews Investigating "Life Stories"

This research adopts a qualitative approach to explore and understand customers' perceptions. We conducted 23 semi-structured interviews (totalling to 1165 minutes), using a purposive sampling strategy. Diversity was sought in terms of age, gender and type of occupation, in order to obtain the most diverse customer experiences. 17 interviewees recalled having used chat for online assistance. These were asked to recall one (or more) chat experience with a customer service representative online – whether live chat or virtual agent. They were encouraged to generate "life stories", based on a narrative introspection (Carù, Cova, and Pace 2014). Six did not recall ever using chat as an online assistance channel. For these, interviews focused on their experiences of customer assistance (e.g. trying to solve a service failure). In addition, they were called out to imagine how assistance by chat might have been helpful – or not – in these situations. The use of a projective technique facilitate customers' verbalisation of the obstacles that he / she imagines concerning the use of chat (Lavorata, Nilles, and Pontier 2005). Interviews, transcripts, and analyses were conducted in French, and subsequently translated in English by the first author. Interviews were coded separately using thematic analysis, and categories emerged thanks to constant comparison over the data (Corbin and Strauss 2015).

Findings: Heterogeneity of Customer's Perceptions and Appreciations of Chat usage in Assistance Situations

Respondents point out the perceived nature of the interlocutor as key in their perceptions and interpretations. They characterize chat features according to two dimensions: a performance one and a relational one. We also identified four main types of motivations, which guide respondents through their assistance experience. *The importance of the nature of the chat interlocutor*

The question of the nature of the interlocutor lies at the heart of the perception of chat in an assistance context. As summarised by one of the respondent:

It is somehow mysterious, I am not sure whether it is like Siri in a written manner or if real people write themselves. When I see these chat proposals, I wonder: "Is there really someone behind?" Maybe it depends on websites. (Mathilde, 25)

Respondents often express doubts about the true nature of their interlocutor – i.e. human vs. computer – when discussing a past chat experience. When the interlocutor is perceived as being a virtual agent, participants elaborate on the fact that companies may not be willing to use humans either because it would be too costly or because companies are not genuinely willing to help customers. Chat interlocutors identified as virtual agents generated mostly negative appreciations. When chat interlocutor is identified as a human, participants describe the interaction as “flowing freely”, they feel considered as dealing with a dedicated interlocutor.

The perceived performance of customer assistance via chat

Interviewees perceived the overall performance of chat in terms of two main dimensions: i) the outcome of the conversation, and ii) the time required to find a solution.

When reflecting on the outcome of a chat experience, most customers assessed the performance and usefulness of chat based on their perceptions of the nature of their interlocutor and of the company’s perceived intention to help or not. A chat interlocutor perceived as a virtual agent, does not, typically, seem useful to some:

I feel it [chat] is not going to be of any use, I still believe chat is a machine. If a machine with the picture of a woman asks me « What are you looking for? » and that you get ready made answers like FAQs... I would rather look by myself. (Nelly, 40)

Respondents also reported a perceived need to have some specific abilities or skills – for instance being able to use specific terms - when chatting with a virtual agent. Conversely, chatting with a human is generally perceived as easier. Some respondents reported communication failures, mostly when interacting with virtual agents, when they did not succeed to receive valuable information.

In terms of the time dimension, overall, respondents put forward a series of performance characteristics of chat, in comparison to other assistance channels: its free nature, its immediacy, ease of access and initiation – especially the fact that, compared with phone customer assistance, a representative can be reached directly, without having to listen to an option menu first – and its flexibility allowing multitasking.

The relational dimension of chat

Chat is predominantly seen as less spontaneous and less warm than a conversation on the phone or face-to-face, as it conveys fewer emotional cues. Some respondents paradoxically perceived this distance as an asset in an assistance context:

Chat is perfect, you have all advantages of email, like being more anonymous than phone, not to have to discuss with someone, but it is more immediate and you can react to it live (Florent, 28).

More specifically, for some customers, the lack of richness of chat as an assistance channel means that customers tend i) not to feel judged by a perceived condescending tone of voice, ii) not to be directly exposed to a representative’s disengagement, iii) not to feel

influenced (e.g. feeling obliged to buy a product or service), and iv) to feel in control over the course of the interaction (e.g. being able to interrupt it easily). Thus, chat alleviates risks traditionally associated with interacting with a representative.

For respondents who dealt with virtual agents, the evaluation of relational features of chat were overall negative. In this case, participants perceive virtual agents to lack the capacity to understand customers. This was often interpreted as a lack of consideration from the company. On some occasions, when participants reported a sudden realisation that they had been conversing with a virtual agent rather than a human representative, they generally felt deceived.

Chat as a customer assistance channel: customers’ motivations

As for the motivations that led customers to choose a specific assistance channel, four main categories emerged: *assistance request avoidance, impression of having no choice, performance seeking* and *minimum direct contact*. The *assistance-request avoidance customer* is deferring as much as possible the moment where they will look for assistance, trying to solve problems autonomously first. The other three categories gather customers, who more readily accept to look for assistance. Some customers report an *impression of having no choice*. For these, chat might be the only option offered (e.g. those on a low cost mobile phone contract) or they might have become used to using a specific channel (phone or chat) as a default option to contact companies. In sum, some respondents do not feel that they are making a conscious channel choice. The *performance-seeking customer* is consciously setting up a performance-oriented strategy, based on former positive experiences, what they know about the company and what they anticipate about the complexity, importance and emergency of the situation. Finally, *the minimum direct contact seeking customers*, though willing to be assisted, drive their contact strategy towards minimizing direct interactions, sometimes at the expense of performance.

Overall, some customers feel genuinely motivated by the avoidance of direct interaction with the company. Chat seems to somehow address this concern by offering a more distant and customer-controlled form of communication. However chat also raises heterogeneous evaluations from customers, these differing mostly based on their interlocutors’ perceptions (human vs. virtual agent, see above).

Discussion, Limitations, Future research and Conclusion

Discussion

The contribution of this article to this emerging field of research is threefold. First, and paradoxically, results suggest that some respondents put forward the lack of richness of chat as one of its main assets. Two properties of chat appear beneficial to customers: i) the fact that chatting communicates fewer cues in the conversation, which lessens the risk of negative emotions. This can be seen as an illustration of the ‘neutrality effect’ (Byron 2008), which refers to the fact that a media providing less non-verbal cues generally creates less arousal. This neutrality effect, seen as positive feature in the context of assistance, appears to challenge the assumption that humanisation and social richness should always be sought for within customer-company relationships. And ii), the fact that chat is a less formalized way of communicating, which gives back some control and freedom to customers. This, in turn, contributes to reducing threats associated with assistance situations, such as losing face. In sum, customers seeking assistance via chat may do so because of the fact that chat offers a way to focus on a specific problem, without caring about the form or richness of the interaction.

Second, chat can be perceived as a way to lessen some of the performance and psychological risks associated with assistance seeking. In terms of performance risk, chat is perceived as a way to reduce time spent on assistance. Following Bellman, Lohse, and Johnson (1999) time consideration is an important driver for e-services usage. In terms of psychological risks, the neutrality and specific form of interaction of chat alleviates the risk of losing face in an interaction. One of the contributions of this research is thus to better understand consumers who are seeking to avoid contacts in an assistance situation. This statement challenges the idea that e-service is necessarily perceived as riskier than services implying direct interaction.

Third, this study shows that the nature of the chat interlocutor in an assistance context can be elusive albeit of the greatest importance for customers. The perceived nature (human or artificial intelligence) is critical to understand the adoption of this technological media. Thus, this study contributes to the technology acceptance literature by confirming perceived risk as a factor influencing channel/technology choice (Featherman and Pavlou 2003; Polo and Sese 2016).

Limitations and future research

This study carries two main limitations. First, experiences and representations of chat are likely to evolve rapidly, as consumers get additional opportunities to experience chat in a customer assistance context. Second, the artificial intelligence used by virtual agents is likely to improve dramatically in the coming years, which could eventually also change perceptions and representations.

Future research should focus on a wider non-chatters population to better understand the barriers to the use of chat. Moreover, it would be interesting to investigate chat perceptions in specific contexts (e.g. pre-purchase, after sale, technological failure, etc.) as they may vary accordingly. Finally, the concept of “need for customer assistance” appears pivotal to understand assistance seeking behaviours, and could be further explored and operationalized in order to evaluate customers’ propensity to seek assistance, and engage with chat.

REFERENCES

- Bellman, Steven, Gerald L. Lohse, and Eric J. Johnson (1999), “Predictors of Online Buying Behavior.” *Communications of the ACM* 42 (12): 32–38.
- Bitner, Mary Jo, Amy L. Ostrom, and Matthew L. Meuter (2002), “Implementing Successful Self-Service Technologies.” *The Academy of Management Executive* 16 (4): 96–108.
- Byron, Kristin (2008), “Carrying Too Heavy a Load? The Communication and Miscommunication of Emotion by Email.” *Academy of Management Review* 33 (2): 309–27.
- Carù, Antonella, Bernard Cova, and Stefano Pace (2014), “Combining Qualitative Methods in Practice: A Contextualized Account of the Evolution of Consumer Studies.” Edited by Professor Simone Guercini. *Management Decision* 52 (4): 777–93.
- Corbin, Juliet M., and Anselm L. Strauss (2015), *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 4. ed. Los Angeles: SAGE.
- Cunningham, Scott M. (1967), “The Major Dimensions of Perceived Risk.” *Risk Taking and Information Handling in Consumer Behavior* 1: 82–111.
- Davis, Fred D. (1989), “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology.” *MIS Quarterly* 13 (3): 319–40.
- Featherman, Mauricio S., and Paul A. Pavlou (2003), “Predicting E-Services Adoption: A Perceived Risk Facets Perspective.” *International Journal of Human-Computer Studies* 59 (4): 451–74.
- Froehle, Craig M. (2006), “Service Personnel, Technology, and Their Interaction in Influencing Customer Satisfaction.” *Decision Sciences* 37 (1): 5–38.
- Graetz, Kenneth A., Edward S. Boyle, Charles E. Kimble, Pamela Thompson, and Julie L. Garloch (1998), “Information Sharing in Face-to-Face, Teleconferencing, and Electronic Chat Groups.” *Small Group Research* 29 (6): 714–43.
- Hassanein, Khaled, and Milena Head (2007), “Manipulating Perceived Social Presence through the Web Interface and Its Impact on Attitude towards Online Shopping.” *International Journal of Human-Computer Studies* 65 (8): 689–708.
- Klaus, Philipp (2013), “The Case of Amazon.com: Towards a Conceptual Framework of Online Customer Service Experience (OCSE) Using the Emerging Consensus Technique (ECT).” *Journal of Services Marketing* 27 (6): 443–57.
- Kumar, Nanda, and Izak Benbasat (2002), “Para-Social Presence and Communication Capabilities of a Web Site: A Theoretical Perspective.” *E-Service Journal* 1 (3): 5–24.
- Lavorata, Laure, Jean-Jacques Nilles, and Suzanne Pontier (2005), “La Méthode Des Scénarios: Une Méthode Qualitative Innovante Pour Le Marketing. Application Au Comportement Éthique Du Vendeur En B to B.” *Décisions Marketing*, no. 37: 67–75.
- Meuter, Matthew L., Amy L. Ostrom, Robert I. Roundtree, and Mary Jo Bitner (2000), “Self Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters.” *Journal of Marketing* 64 (July): 50–64.
- Paluch, Stefanie, and Nancy V. Wunderlich (2016), “Contrasting Risk Perceptions of Technology-Based Service Innovations in Inter-Organizational Settings.” *Journal of Business Research* 69 (7): 2424–31.
- Park, JungKun, HoEun Chung, and Brian Rutherford (2011), “Social Perspectives of E-Contact Center for Loyalty Building.” *Journal of Business Research* 64 (1): 34–38.
- Polo, Yolanda, and F. Javier Sese (2016), “Does the Nature of the Interaction Matter? Understanding Customer Channel Choice for Purchases and Communications.” *Journal of Service Research* 19 (3): 276–90.
- Verhagen, Tibert, Jaap van Nes, Frans Feldberg, and Willemijn van Dolen (2014), “Virtual Customer Service Agents: Using Social Presence and Personalization to Shape Online Service Encounters.” *Journal of Computer-Mediated Communication* 19 (3): 529–45.
- Xu, Jingjun (David) (2016), “Retaining Customers by Utilizing Technology-Facilitated Chat: Mitigating Website Anxiety and Task Complexity.” *Information and Management* 53 (5): 554–69.
- Yee, Nick, Jeremy N. Bailenson, and Kathryn Rickertsen (2007), “A Meta-Analysis of the Impact of the Inclusion and Realism of Human-like Faces on User Experiences in Interfaces.” In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1–10. ACM. <http://dl.acm.org/citation.cfm?id=1240626>.

Do Financial Restrictions Deteriorate or Improve Self-Control? The Role of Mindfulness

Gülen Sarial Abi, Bocconi University, Italy
Sadaf Mokarram Dorri, Bocconi University, Italy

EXTENDED ABSTRACT

Perception that your monetary situation does not let you to consume what you desire or want is something prevalent that each individual might experience in life. This paper examines how the duration of financial restrictions influence self-control behavior of individuals.

One stream of research on financial constraints demonstrate different coping strategies that people might use such as considering opportunity costs (Spiller 2011), efficiency or priority planning (Fernbach et al. 2015) or preferring material goods over experiences (Tully et al. 2015). All these findings suggest that those who are financially constrained are somewhat mindful (i.e., being aware of the present-moment and accept it non-judgmentally) of their current situation which helps them in controlling themselves from engaging in activities that might have positive consequences now but do not lead to long-term benefits. However, another stream of research suggest the negative effect of financial restrictions on self-control performance, as those who have scarce resources (e.g., financial resources) focus single-mindedly on managing the scarcity at hand and they might neglect other and even more important things (Mullainathan and Shafir 2013).

In this paper, we provide a solution to these conflicting results about the effects of being financially restricted on self-control. We differentiate between duration of financial restrictions and suggest that these different findings actually refer to either having short-term or long-term financial restrictions. More specifically, we suggest that when someone perceives him/herself to be financially restricted for a short period of time, the person would not be mindful about the situation, which would deteriorate self-control. However, we suggest that the results would not be the same for those who perceive financial restrictions for a longer period of time. Imagine you go out for shopping. You like several items, having in mind that you have financial restrictions (i.e., you have mortgage bills to make, your expenses for the month are over your budget, etc.). Hence, you are mindful of your current financial situation. You control yourself and go to the cashier with the items that you would like to purchase (self-control task 1). You make the payment and then the cashier suggests you an offer with a discount on an item (self-control task 2). In this case, because you are mindful of your current financial situation, you would simultaneously experience the second self-control task with the first one and you would be better off resisting the offer. Hence, we suggest that you would be better in self-control.

We first preliminary tested our prediction using archival data of Bank of Italy for a period between 2006 and 2014. More specifically, using the archival data, we demonstrated that those who have financial restrictions for a longer period of time (a) spend less for both durable and non-durable goods ($\beta = -.02$, $p < .001$) and (b) have more deposit savings ($p = .069$), controlling for the income and liabilities.

In study 1, using an online panel, we randomly assigned participants to short-term or long-term financial restrictions writing-task conditions. The result demonstrated that those who have financial restrictions only for a short-period of time are more willing to pay for products that are offered to them impulsively compared to those who have financial restrictions for a longer period of time ($t(130) = 1.86$, $p = .065$).

In study 2, we replicated the findings of study 1 using again an online panel. After the financial restrictions manipulation as in study 1, we asked participants to imagine themselves in two situations taken from Dewitte, Bruyneel and Geysken (2009), where they need to decide between ordering a healthy versus unhealthy option in order to measure their self-control performance. In this study, we demonstrated that those who have short-term financial restrictions also behave impulsively in an unrelated domain compared to those who have long-term financial restrictions ($t(143) = 2.105$, $p = .037$).

In study 3, we tested our predictions again in an unrelated domain by comparing preference for healthy versus unhealthy products in eating domain for both short-term and long-term financial restriction conditions. The result showed that those who have financial restrictions for a shorter period of time prefer more unhealthy food over healthy food compared to those who have financial restrictions for a longer period of time ($t(109) = -1.668$, $p = .098$). Furthermore, we asked participants to complete the Mindful Attention Awareness Scale (Brown and Ryan 2003). We have also demonstrated mindfulness as the underlying mechanism explaining the effect of stage of financial restriction on self-control ($\beta = -.1855$, 90% confidence interval [CI] = $[-.43, -.04]$).

In study 4, we demonstrated the effects in a behavioural context. Upon arrival to the lab, participants were randomly assigned to the mindfulness or control conditions; we manipulated mindfulness by asking participants to meditate following the instructions of the mindfulness app for fifteen minutes on a yoga mat. Participants in both meditation and control conditions were assigned randomly to short-term or long-term financial restrictions conditions. After reading two scenarios adapted from Spiller (2011), participants engaged in a writing task, to reinforce the duration of the financial restriction (i.e., short-term versus long-term) manipulation. Next, participants were shown the menu of the bar and they were asked to choose the items that they would purchase. For each item, participants were provided with calories and cost information. In this study, we demonstrated that while in the control condition, we replicated our key findings so that those who have financial restrictions for a shorter period of time engage in behaviour that is low in self-control compared to those who have financial restrictions for a longer period of time ($F(1, 93) = 20.94$, $p < .001$), the results were not the same for those who were in the mindfulness condition ($p = .218$). In the mindfulness condition, the effect attenuated so that self-control behaviour did not significantly differ among the different stages of financial restrictions.

The results of this paper have implications for self-control, financial restrictions, and mindfulness literature by demonstrating the effect of stage of the financial restrictions on self-control.

REFERENCES

- Brown, Kirk Warren and Richard M. Ryan (2003), "The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being," *Journal of Personality and Social Psychology*, 84(4), 822-48.
- Dewitte, Siegfried, Sabrina Bruyneel, and Kelly Geyskens (2009), "Self-Regulating Enhances Self-Regulation in Subsequent Consumer Decisions Involving Similar Response Conflicts," *Journal of Consumer Research*, 36, 394-405.

866 / Do Financial Restrictions Deteriorate or Improve Self-Control? The Role of Mindfulness

- Fernbach, Philip M., Christina Kan, and John G. Lynch Jr. (2015), "Squeezed: Coping with Constraint through Efficiency and Prioritization," *Journal of Consumer Research*, 41, 1204-1227.
- Mullainathan, Sendhil and Eldar Shafir (2013). *Scarcity: Why Having Too Little Means So Much*. Time Books: Henry Holt & Company LLC. New York: NY.
- Spiller, Stephen A. (2011), "Opportunity Cost Consideration," *Journal of Consumer Research*, 38, 595-610.
- Tully, Stephanie M., Hal E. Hershfield, and Tom Meyvis (2015), "Making Your Discretionary Money Last: Financial Constraints Increase Preference for Material Purchases by Focusing Consumers on Longevity," *Journal of Consumer Research*, 42, 1, June, 59-73.

Those Who Have Financial Restrictions Cannot Buy but Can Save Time: I Have to Do Everything by Myself BUT with One Product Fits it All

Gülen Sarial Abi, Bocconi University, Italy
Zeynep Gürhan Canli, Koc University, Turkey

EXTENDED ABSTRACT

Although previous research investigates how having one's monetary situation as scarce influences one's behaviour or how having one's time as scarce influences one's behaviour, previous research is silent on how these two scarce resources might interact. In this research, we investigate how those who are financially restricted perceive their time and how their perception of time influences their product preferences.

How do people who have financial restrictions perceive time? Previous research signals that those who have financial restrictions would perceive their time as restricted as well. On one hand, previous research suggests that because those who have financial restrictions would perceive stress (Sarial-Abi et al. 2016), they would perceive their time as limited, which would result as paying more for time-buying activities (e.g., expedited shipping; Etkin, Evangelidis, and Aaker 2015). Another stream of research suggests that because one focuses single-mindedly on the scarce resource (i.e., money), one cannot consider other important resources (Mullainathan and Shafir 2013). As a result, those who have financial restrictions might end up not efficiently managing their time, resulting in neither time-buying nor time-saving activities. In this paper, we suggest that those who have financial restrictions perceive the time as being more restricted than those who have no financial restrictions when they experience more stress and anxiety compared to those who do not have financial restrictions. When individuals perceive time as restricted, they might engage in activities to save time. We show that those who have financial restrictions might save time by purchasing and using multi-purpose products.

In study 1 (N = 129), we examine whether having financial restrictions makes consumers feel time as limited. We manipulated salience of financial restrictions and measured subjective time perceptions. We have asked participants in the financial restrictions condition to think about the factors that contribute to their financial restrictions (Tully et al. 2015). More specifically, participants in the financial restrictions condition read:

Everyone has financial constraints in their lives, but the factors that contribute to these constraints tend to vary. What are the factors that require you to be careful with how you spend your money? What limits your monthly discretionary income? Include the aspects of your current situation that most contribute to your financial constraints (e.g., mortgage or rent, family expenses, uncertainty of future income, health care costs, student loans, lack of income, limited savings, bills that need to be paid, expensiveness of entertainment . . .).

Participants were asked to write minimum of 250 characters and write in detail as much as possible.

To provide a similarly demanding task for the participants in the control condition, we asked them to list 10 facts that they knew to be true (Tully et al. 2015).

Next, we measured subjective time perceptions. Participants reported their perception that time was expanded (reverse-scored), boundless (reverse-scored), constricted, and that they do not have enough time on seven-point scales (1 = "not at all," and 7 = "very much"; adapted

from Etkin et al. 2015). We combined these measures to form a time perceptions index ($\alpha = .55$).

As predicted, a one-way analysis of variance (ANOVA) on subjective time perceptions showed that having financial restrictions made people to feel that their time is restricted ($M_{financial} = 4.82$, $SD = 1.39$ versus $M_{control} = 4.08$, $SD = 1.21$, $t(127) = 3.22$, $p = .002$).

In study 2 (N = 123), we replicate the results of study 1 and test the effect of stress and anxiety as the mechanism that explains the effect of financial restrictions on time perceptions. First, we manipulated salience of financial restrictions as in study 1. Second, we measured feelings of stress and anxiety as in Etkin et al. (2015). More specifically, participants reported their current stress and anxiety levels on seven-point scales (1 = "very little" and 7 = "a lot."). The measures were highly correlated ($r = .85$) and combined. Third, we measured subjective time perceptions. To increase the generalizability of our findings, we added more items to the questions from those in Study 1. Other than the measures that we had in study 1, we also asked participants to indicate their agreement with four other statements (Etkin et al. 2015; Rudd et al. 2012): "I am in a rush," "I don't have enough time," "Time is slipping away" and "I am pressed for time" on different seven-points scales (1 = "not at all" and 7 = "very much"). All items were then combined to form a time perceptions index ($\alpha = .76$).

As predicted, a one-way analysis of variance (ANOVA) on time perceptions showed that those who have financial restrictions perceived the time as more restricted ($M_{financial} = 4.19$, $SD = 1.19$) than those in the control condition ($M_{control} = 3.82$, $SD = 1.13$, $t(121) = 1.78$, $p = .078$). To test the proposed underlying process, we also used bias-corrected bootstrapping to generate 95% confidence interval around the indirect effect of stress and anxiety. The analysis revealed a significant indirect effect ($ab = -.36$, 95% confidence interval [CI] = $[-.69, -.05]$).

In study 3, we tested our prediction using the results of The Survey on Household Income and Wealth (SHIW) that is conducted by Bank of Italy since 1960. For the purposes of this study, we analysed the data starting from 2006 until the most recent one (i.e., 2014). The survey reports consumption of several types of insurance options. More specifically, it asks respondents whether they possess any of the following insurance funds: a) life products with profits, b) unit-linked insurance funds, c) index-linked insurance funds, d) capitalization products, e) multi-branch insurance funds, f) open pension fund, and g) death insurance and other pure risk. Based on the characteristics of each of the previous insurance funds, we classified them into single-purpose use or multi-purpose use. Our dataset includes 5,992 observations from 2006 to 2014. As a proxy for multi-purpose insurance consumption, we used a dummy variable which takes the value 1 if individuals have chosen a multi-branch insurance, general life products insurance, or an open pension fund, and zero if they have chosen a single-purpose insurance option (i.e., unit-linked insurance, index-linked insurance, capitalization products insurance, death insurance and other pure risk insurance). We controlled for the individual income with the logarithm of net income. As a measure for financial restrictions we used the total sum of liabilities that individuals have. To test our hypothesis, we estimated the following panel regression:

$$MP = \beta_0 + \beta_1 z + \beta_2 inc + \beta_3 fr + \varepsilon$$

Where MP is the indicator of multi-purpose choice, z is a vector of socio-demographic variables, inc is the log of financial income, fr is the log of liabilities of the respondent, and ε is a standard normal random error.

We tested our prediction using a probit model utilizing data from 5,992 observations over an 8-years period. The probability of choosing multi-purpose insurance options was higher than the probability of choosing single-purpose insurance options, when individuals have higher financial restrictions ($\beta = .04$, $p = .054$), controlling for the net income level of individuals and their demographic characteristics.

In study 4 ($N = 206$), we randomly assigned participants to financial restrictions and control conditions and tested the effects on preference of several multi-purpose items. Results supported the predicted effects (for multi-purpose shampoo: $M_{financial} = 4.42$, $SD = 3.11$ versus $M_{control} = 3.76$, $SD = 2.17$, $t(204) = -1.67$, $p = .096$; multi-purpose printer: $M_{financial} = 110.01$, $SD = 120.023$ versus $M_{control} = 79.34$, $SD = 64.17$, $t(204) = -2.10$, $p = .037$; cake mix: $M_{financial} = 3.44$, $SD = 3.00$ versus $M_{control} = 2.56$, $SD = 2.61$, $t(204) = -2.16$, $p = .032$; acne treatment: $M_{financial} = 7.02$, $SD = 5.95$ versus $M_{control} = 5.54$, $SD = 4.41$, $t(204) = -1.92$, $p = .057$; multi-purpose cooker: $M_{financial} = 71.69$, $SD = 49.21$ versus $M_{control} = 57.60$, $SD = 67.91$, $t(204) = -1.72$, $p = .086$; multi-purpose detergent: $M_{financial} = 7.02$, $SD = 5.95$ versus $M_{control} = 5.54$, $SD = 4.41$, $t(204) = -1.92$, $p = .057$).

Results of this paper contribute to the literature on financial restrictions, time, and product preferences. First, we contribute to the literature on financial restrictions by demonstrating the relation-

ship between financial restrictions and time perceptions. More specifically, we demonstrate that those who have financial restrictions perceive the time as more scarce compared to those who have no financial restrictions. Second, we demonstrate that stress and anxiety are the underlying mechanism that explains the effect of financial restrictions on time perceptions. Third, we demonstrate that those who have financial restrictions cannot buy time when they perceive the time as scarce. Rather, they save time to cope with their scarce time perceptions. We show that they save time by preferring multi-purpose items compared to those who have no financial restrictions.

REFERENCES

- Etkin, Jordan, Ioannis Evangelidis, and Jennifer Aaker (2015), "Pressed For Time? Goal Conflict Shapes How Time is Perceived, Spent, and Valued," *Journal of Marketing Research*, 52 (June), 394-406. [11]
- Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why having too little means so much*. Macmillan.
- Sarial-Abi, Gülen, Zeynep Gürhan-Canli, Tarcan Kumkale, and Yeosun Yoon (2016), "The Effect of Self-Concept Clarity on Discretionary Spending Tendency," *International Journal of Research in Marketing*, 33(3), 612-623.
- Tully, S. M., Hershfield, H. E., & Meyvis, T. (2015). Seeking Lasting Enjoyment with Limited Money: Financial Constraints Increase Preference for Material Goods over Experiences. *Journal of Consumer Research*, 42(1), 59-75.

Monsters in Our World: Narrative Transportation in Pokémon GO's Mixed Reality

Joachim Scholz, Cal Poly, USA
Andrew Smith, Suffolk University, USA

EXTENDED ABSTRACT

Storytelling is a central part of the consumption experience (van Laer et al. 2014). Traditionally, consumers are exposed to brand stories through advertisements (e.g., Phillips and McQuarrie 2010) and social media (e.g., van Laer and de Ruyter 2010). Recent innovations in augmented reality (Scholz and Smith 2016) and geo-media (Lapenta 2011) have provided marketers with additional opportunities to tell their brand stories: ones that are emplaced in consumers' everyday environments. For example, transit riders might find themselves in the presence of zombies as part of an augmented reality campaign to promote the TV show *The Walking Dead*.

While emerging spatial media offer tremendous potential for telling brand stories, the ways in which consumers respond to these geo-mediated narratives are little understood. Previous research has introduced narrative transportation theory (Green and Brock 2002) to explore how consumers are drawn into a narrative and enjoy a story. However, as we will describe below, central assumptions of narrative transportation theory are called into question when the story is told through a nexus of GPS-enabled mobile devices, location-based content, and augmented reality technologies that create multiple realities through "the subjective coming together in time and space of material and virtual experiences" (Graham, Zook and Boulton 2012, p. 465).

Pokémon GO is a well-known story situated in this type of mixed reality. In this research, we explore the mechanics of narrative transportation when a story is told and experienced through geo-media that create a mixed reality. We present findings from a qualitative study on Pokémon GO and contribute understanding about narrative transportation in the context of this new storytelling approach.

Narrative Transportation

The role of stories in consumer behavior has frequently been explored through the concept of narrative transportation (Gerrig 1993; Green and Brock 2002), which describes the process of getting lost in a story. This detachment from reality and immersion in a narrative world has been shown to affect consumers' attitudes and intentions (van Laer 2014), as well as their enjoyment and engagement with a story (Green, Brock and Kaufman 2004).

Previous research has predominantly explored narrative transportation in the context of audio and/or visual media, while interactive media such as computer games have received comparatively less attention (Green and Jenkins 2014). Some studies have explored narrative transportation in completely virtual environments such as computer games (Elson et al. 2014) and virtual reality (Ahn, Le and Bailenson 2013), but no study, to our knowledge, has thus far examined narrative transportation in the context of mixed realities that emplace the story in the physical environment of the story receiver.

Geo-mediated stories are similar to stories told via digital games and virtual environments by virtue of their highly interactive and social nature (Biocca 2002). However, the glaring difference is that geo-mediated stories are emplaced in the physical environment of the receiver. Unlike digital games or virtual environments where the story is told on digital screens or in self-contained heads-up displays, respectively, geo-mediated stories unfold in the everyday spaces of consumers.

The emplacement of story content in consumers' physical surroundings is at odds with core assumptions of narrative transportation theory, which posit the story world as entirely separate from the physical and social reality of everyday life (van Laer et al. 2014). Furthermore, the act of transporting is typically described as creating a narrative in the story receiver's head. While this emphasizes the agency of the story receiver, it also characterizes the task of narrative transportation as a purely cognitive and emotive process of creating mental imagery associated with the story's text. The paradox of geo-mediated storytelling is thus that the world of origin, which is supposed to be left behind through a cognitive process, is exactly the same place where the story unfolds, and where story receivers create a narrative while being embodied in the mixed reality of the story-world/world-of-origin hybrid.

Given the emplaced nature of stories told via geo-media, and the embodied nature of how these stories are consumed, our research aims to explore how narrative transportation is experienced in mixed realities. In particular, we are interested in how story elements such as characters and plot lines are experienced as "real", and more generally how the story world becomes stabilized in the physical world and accepted as part of everyday life.

Conceptual Lens: Mixed Realities

Mixed realities describe hybridized experiences in which virtual content is inexorably linked with physical materialities through a mutual constitution of media, content and space (Farman 2012; Graham et al. 2012). Human geographers and communications scholars have suggested "geo-media" (Lapenta 2011) and "spatial media" (Leszczynski 2015) as terms that describe the nexus of location-aware devices, geo-coded content, and augmented reality technologies that gives rise to mixed realities, in - for example - large-scale games such as Pokémon GO and Ingress that constantly interweave the story of the game with the actuality of the physical world where the game is played (Chess 2014).

Mixed realities research thus recognizes the important role of (narrative) content, for example, when exploring how "code blends content and place" (Graham et al. 2012, p. 468). In particular, previous mixed realities research has detailed how geo-mediated content produces unstable representations of space that are always 'of-the-moment' and remade through the embodied, social, and technological practices of those that produce these mixed realities. Content shapes the meaning of certain places, for example, when global infrastructure is made invisible in Ingress, and patterns of social relations, for example, when Ingress players need to interact with strangers to achieve certain game-related goals (Chess 2014).

Context & Methods

We investigate geo-mediated narrative transportation in the context of Pokémon GO. Pokémon is a narrative brand centered around the adventures of Ash — the Pokémon trainer — and an assortment of monsters. The entire Pokémon experience — collecting, training, and battling against other Pokémon — has been confined to this fictional world, until the release of Pokémon GO in July 2016. Pokémon GO uses geo-location technology to merge consumers' real-world environments (e.g., the city they are walking through) with game-relevant content such as landmarks (i.e., "Pokéstops"), activ-

ity zones (i.e., “gyms”), and most crucially brand story characters (i.e., Pokémon). It allows consumers to take on the role of Ash, the trainer, and live out the Pokémon experience in real life.

We study narrative transportation in the context of Pokémon GO through unstructured, in-depth interviews. We interviewed 13 respondents in August and September, 2016, and focused our discussion, broadly, on understanding consumer experience with Pokémon GO. The interviews lasted, on average, 60-90 minutes, and were transcribed, coded, and analyzed. It was through the iterative coding and analysis process that we came to focus analytically on narrative transportation. To further inform our understanding of the phenomenon and data, we also actively played the game and read media coverage.

Findings

Geo-media enable storytellers to emplace narratives in the physical world amidst a nexus of spatial and social relations. Under these conditions, transportation morphs from being a mental journey in an imaginary, external world into a joint cognitive and embodied process that interacts with the lifeworld of the consumer. In our findings, which are visually represented in Figure 1, we explore the experience of narrative transportation with geo-media, along with the factors that support it.

Dual-Move Narrative Transportation

Geo-media enable a form of dual-move transportation: the narrative moves into the physical lifeworld of the consumer, just as the consumer moves into the story world. We find that consumers speak of story world elements and physical world entities interchangeably as if they co-exist with each other in the same reality. They visit story world Pokéstops and Pokémon gyms, just as they would visit bus stops or brick-and-mortar gyms (*Quote 1.1*). They imbue the Pokémon monsters with agentic qualities, describing how they live out in the world as independent entities that possess the will and ability to evade capture (*Quote 1.2*). Consumers are deeply immersed in the story and internalize the role of Pokémon trainers as they go on organized day long ‘hunts,’ as well as plan their schedule and travel routes around their participation in the narrative.

These attitudes and behaviors provide compelling evidence that consumers experience transportation into the Pokémon story world, even as it is integrated in their own physical world. This dual move stands in contrast to traditional conceptualizations of narrative transportation in which the consumer, only, is cognitively transplanted into a separate, imaginary world. The question with transportation through geo-media becomes: how do stories come to be stabilized in the physical world and accepted as a part of everyday life?

Narrative Emplacement in the Physical World

Geo-media facilitated stories are spatialized. The characters are in one’s home and the plot plays out around the consumer amidst day-to-day activities. These are not the ethereal worlds of fictional books and movies. We find that perceptions of, and movement through, space is shaped by this location-based story content (*Quote 2.1*). Consumers seek out and express excitement about areas that feature a high concentration of Pokéstops, or that are rumored to be home to rare Pokémon. They also make pilgrimages to new places and move deliberately (e.g. zig-zagging, travelling in loops, etc.) through space as a result of this narrative content. The impact of locative content on space is represented by the dotted arrow pointing towards ‘space’ in Figure 1.

Consumers also engage in efforts to cognitively validate the status of the emplaced narrative in the physical world (solid arrow pointing away from ‘space’ in Figure 1). They identify pre-existing

parallels between story content and the physical space in which it is embedded, helping to bolster perceived story verisimilitude. For example, they search for, and express delight about, instances in which Pokémon characters appear to fit realistically in the spatial environment (e.g. when they are sitting on a sofa) (*Quote 2.2*). Consumers even engage in more imaginative sensemaking to help construct the vision of a hybridized reality. For example, they draw on their knowledge of the physical world to explain aspects of the story world, such as the localized presence of Pokémon characters in certain places, which they attribute to the existence of nests, a concept not integrated into Pokémon GO. In doing so, consumers act in co-creative capacity to help elaborate on the ontology of the story world, and make it seem more plausible. In both examples, the fact that the narrative content adheres to the properties of the physical world helps to spatially validate the story world for consumers.

Social Story Experiences

Geo-media embeds stories in the physical world, and that means those stories often have bearing on social relations or are intertwined with those relations. Due to the public and distributed nature of the story world, consumers regularly report interacting with strangers also immersed in the Pokémon GO narrative. Yet, consumers’ most consistent and profound social experiences are with those they already know: co-workers playing with each other outside of office hours; old friendships, forged over past Pokémon games, being awakened through play after periods of dormancy; close friends altering the rhythm and routines of their relations with Pokémon-related trips (*Quote 3.1*). In this way, the story narrative structures social relations, providing people with a reason to be together as well as a social script to follow.

In turn, these social relations validate the locative content and make it seem more real and appealing. Acquaintances and strangers, alike, talk about story world elements, visit Pokéstops and hunt Pokémon, and share pictures of their captures; they are creating shared knowledge, participating in rituals, and enacting norms and values. In short, they are constructing a culture that recognizes the existence of a hybridized narrative-physical reality. In this culture, some consumers even project social qualities on to the story world characters themselves, imagining that Pokémon have social relations with humans, pets, and other Pokémon (*Quote 3.2*). Taken as a whole, these findings suggest that geo-media storytelling can have powerful impact on social relations and the experience of narrative transportation.

Validated Imagery & Embodied Transportation Practices

Prior work on narrative transportation highlights the importance of story elements such as character and plot, and those cannot be underestimated in the context of geo-media either. Yet, as previously noted, the emplaced nature of geo-mediated stories in the real world also necessitates that these story elements be validated both spatially and socially through, for example, thoughtful integration into the surrounding context and social relations. Consumers, as story interpreters and co-creators, play a critical role in this process, imagining and discussing undeveloped aspects of the story (e.g. the existence of Pokémon nests and relations between Pokémon monsters and pets).

Another way that transportation differs with geo-media is that it is an embodied practice: the story character’s body and the consumer’s body are one and the same, travelling around the hybridized physical-story world. If a consumer wants to experience a particular narrative thread, he or she needs to physically access it. And some aspects of a story – those set in an ocean or in a foreign country – can be physically, socially, monetarily hard to access (*Quote 4.1*). It is not as simple as turning the page or pressing play. Consumers

go on hunts that leave them hot and sweaty, they get lost, and they avoid particular places because embodied narrative transportation is accompanied by real and felt risks (Quote 4.2).

Discussion

In this research, we explored how to conceptualize narrative transportation when a story is told using geo-media, creating a mixed reality through emplacing a story world within the story receiver's world of lived experience. We have found that narrative transportation, in this case, involves more than just creating mental imagery to access a separate world. It involves embodied practices and mental acts of validation that create and stabilize a mixed reality in which the story world "feels real" as it is seamlessly emplaced in the physical world. Narrative transportation in mixed reality thus requires researchers and marketers to rethink the environment in which a story is consumed, as well as how the story is produced.

Narrative transportation research, due to its focus on laboratory studies, typically downplays the role of the environment. If considered at all, the environment is conceptualized as a locus of distraction, for example when a crying baby in a movie theater attracts attention to the real world, rather than the story world, and thus makes transportation difficult or impossible (Green et al. 2004). However, even in more traditional media, the environment can cross-fertilize mental imagery, for example when someone reads *Heart of Darkness*, a story set on a boat traversing the Congo River, next to a bubbling stream. This type of environmental propping of mental imagery (Kuzmičová 2015), while typically ignored in narrative transportation research, becomes especially important for people and brands who wish to use geo-media to tell their stories.

REFERENCES

- Ahn, Sun Joo, Amanda Minh Tran Le, and Jeremy Bailenson (2013), "The Effect of Embodied Experiences on Self-other Merging, Attitude, and Helping behavior," *Media Psychology*, 16(1), 7-38.
- Biocca, Frank (2002), "The Evolution of Interactive Media," *Narrative Impact. Social and Cognitive Foundations*, 97-130.
- Chess, Shira (2014), "Augmented Regionalism: Ingress As Geomediated Gaming Narrative," *Information, Communication & Society*, 17 (9), 1105-1117.
- Elson, Malte, Johannes Breuer, James D. Ivory, and Thorsten Quandt (2014), "More Than Stories with Buttons: Narrative, Mechanics, and Context as Determinants of Player Experience in Digital Games." *Journal of Communication*, 64 (3), 521-542.
- Farman, J. (2012), *Mobile Interface Theory*, New York: Routledge.
- Gerrig, Richard J. (1993), *Experiencing Narrative Worlds: On the Psychological Activities of Reading*, New Haven, CT: Yale University Press.
- Graham, Mark, Matthew Zook, and Andrew Boulton (2012), "Augmented Reality in Urban Places: Contested Content and the Duplicity of Code," *Transactions of the Institute of British Geographers*, 38 (3), 464-479.
- Green, Melanie C., and Keenan M. Jenkins (2014), "Interactive Narratives: Processes and Outcomes in User-Directed Stories," *Journal of Communication*, 64 (3), 479-500.
- Green, Melanie C., and Timothy C. Brock (2002), "In the Mind's Eye: Transportation-Imagery Model of Narrative Persuasion," in *Narrative Impact: Social and Cognitive Foundations.*, ed. Melanie C. Green, Jeffrey J. Strange, and Timothy C. Brock, Mahwah, NJ: Erlbaum, 315-41.
- Green, Melanie C., Timothy C. Brock, and Geoff F. Kaufman (2004), "Understanding Media Enjoyment: The Role of Transportation into Narrative Worlds," *Communication Theory*, 14 (4), 311-27.
- Kuzmičová, Anežka (2015), "Does It Matter Where You Read? Situating Narrative in Physical Environment," *Communication Theory*, 26 (3), 1-19.
- Lapenta, Francesco (2014), "Geomedia: On Location-based Media, The Changing Status of Collective Image Production and the Emergence of Social Navigation Systems." *Visual Studies*, 26 (1), 14-24.
- Leszczynski, Agnieszka (2015), "Spatial Media/ation," *Progress in Human Geography*, 39 (6), 729-751.
- Liao, T., and L. Humphreys (2014), "Layar-ed Places: Using Mobile Augmented Reality to Tactically Reengage, Reproduce, and Reappropriate Public Space," *New Media & Society*, 1-18.
- Muniz, Albert M., and Thomas C. O'Guinn (2001), "Brand Community," *Journal of Consumer Research*, 27 (4), 412-32.
- Phillips, Barbara J., and Edward F. McQuarrie (2010), "Narrative and Persuasion in Fashion Advertising," *Journal of Consumer Research*, 37 (3), 368-92.
- Scholz, Joachim, and Andrew N. Smith (2016), "Augmented Reality: Designing Immersive Experiences that Maximize Consumer Engagement," *Business Horizons*, 59 (2), 149-161.
- Van Laer, Tom, and Ko de Ruyter (2010), "In Stories We Trust: How Narrative Apologies Provide Cover for Competitive Vulnerability after Integrity-Violating Blog Posts," *International Journal of Research in Marketing*, 27 (2), 164-74.
- Van Laer, Tom, Ko De Ruyter, Luca M. Visconti, and Martin Wetzels (2014), "The Extended Transportation-imagery Model: A Meta-analysis of the Antecedents and Consequences of Consumers' Narrative Transportation," *Journal of Consumer Research*, 40 (5), 797-817.

Does Pulling Together Lead to Falling Apart? The Self-Regulatory Consequences of Cooperative Orientations for the Self-Reliant

Ainslie Schultz, Providence College, USA
Cait Lambertson, University of Pittsburgh, USA
Jesper Nielsen, University of Arizona, USA

EXTENDED ABSTRACT

*To be successful you have to be selfish, or else you never achieve.
And once you get to your highest level, then you have to be
unselfish. – Michael Jordan*

Many successful individuals often attribute their personal success to their own self-reliance and individual effort in training and practice. As these individuals advance to managers who oversee others' work, for example, or team captains, continued success often requires collaboration. Essentially, they must put their "selfish interests" aside and navigate the opinions and capabilities of others in order to achieve. In these situations, the question arises: what happens when self-reliant individuals are placed in situations that depend on cooperation and others' performance?

Past research shows cooperation can help individuals and organizations reach their goals (Johnson and Johnson 1986). Less understood, though, are the consequences for those involved in cooperation. Research has proposed that cooperation triggers personal costs for collaborators since cooperation requires restraining selfish urges (Kocher et al. 2017), but support for this hypothesis is mixed with findings in support of this relationship (Kocher et al. 2017; Verkoeijen and Bouwmeester 2014) and in conflict (e.g. Bear and Rand 2016; Lotito, Migheli, and Ortona 2013). One explanation for this inconsistency is that not all individuals may experience cooperation's depleting effects. Our research introduces an important moderator, self-reliance, that we believe may help explain why cooperation sometimes appears to require the expenditure of self-regulatory resources, while at other times, self-regulatory resources remain intact.

We employ ego depletion theory (Baumeister et al. 1998) and suggest that whether cooperation depletes an individual's self-control depends on that individual's level of self-reliance. Since the self-reliant believe they can, and prefer to, succeed through their own efforts, ego depletion theory would suggest that for the self-reliant, cooperating may be taxing. Cooperation requires relinquishing control to others, switching mindsets, navigating other perspectives, and acting against one's preferences—behaviors that, for the self-reliant, likely draw on self-regulation and force counter-attitudinal behaviors (Baumeister et al. 1998).

Experiment 1 predicts that individuals primed with self-reliance (vs. no-prime control condition) show more unethical behavior, a measure of self-control, when cooperating versus competing individually. 172 undergraduates participated in an online study. Participants first completed a writing task to prime self-reliance (vs. control). In the self-reliance condition, participants wrote about an experience in their life when they felt self-reliant, while in the control condition, participants wrote about any experience in their life.

Participants then saw a string of letters ("hdkltiwoertbca") and had three minutes to make as many words as possible out of the letters (e.g. ski). Participants believed that they were either (1) cooperating with others online (cooperation condition), or (2) competing against other individuals (individual competition condition). Participants in both conditions were entered into a lottery based on their performance. For the dependent variable, participants received 20 number matrices, containing 12, 3-digit numbers (e.g. 2.17) and

were told the matrices contained two numbers summing to 10, and to mark "got it" when they solved the matrix (Mazar, Amir, and Ariely 2008). Since participants did not need to indicate which two numbers summed to ten, participants could cheat and win; however, 10 of the 20 matrices did not contain two numbers summing to 10. This allowed us to measure dishonest behavior by the number of unsolvable matrices participants dishonestly checked as solved.

Contrasts show that individuals primed with self-reliance and asked to cooperate showed more unethical behavior than those asked to compete individually ($M_{\text{cooperation, self-reliance}} = 4.27$; $M_{\text{competition, self-reliance}} = 2.63$; $F(1, 168) = 3.87, p = .05$), demonstrating that for individuals primed with self-reliance, participating in a cooperative (vs. competitive individual) task led to more unethical behavior.

Experiment 2 uses a novel online shopping task to create a "real" cooperative task. 174 undergraduates took part in a lab study. Participants first completed the writing task from Experiment 1 to prime self-reliance (vs. control). Next, participants were assigned a partner or competitor and either cooperated with or competed against their partner for five minutes to earn the highest score on the online search task. Participants received a shopping list of products and were to find those items on the retailer's website using *only* their mouse, no keyboard. Last, participants completed a series of four anagrams—but unbeknownst to participants, the fourth anagram was unsolvable (Baumeister et al. 1998). The time spent on the anagram served as our measure of restraint.

Individuals who cooperated and were primed with self-reliance persisted for less time than those who competed individually ($M_{\text{cooperation, self-reliance}} = 101.54$ seconds; $M_{\text{competition, self-reliance}} = 143.20$ seconds; $F(1, 170) = 4.23, p = .04$), demonstrating that for individuals primed with self-reliance, participating in a cooperative (vs. competitive individual) task led to less persistence on a subsequent task.

Experiment 3 tests self-regulation as the underlying mechanism and demonstrates that declines in self-regulation trigger these effects. 172 participants were recruited on M-Turk. The experiment consisted of a between subjects design with one manipulated factor (cooperation or individual competition) and one measured variable (trait self-reliance). Participants first saw the same cooperative and competitive individual manipulations from Experiment 1 and after, the number-summing task from Experiment 1, which served as our measure of restraint toward dishonest behavior. Last, participants completed a filler task, Triandis and Gelfand's (1998) self-reliance scale, and Tangney, Baumeister, and Boone's (2004) self-control scale.

Analysis shows a significant two-way interaction of the cooperative/individual competitive prime and self-reliance and a significant three-way interaction of cooperative/individual competitive prime, self-reliance, and self-control. The same pattern of results from the previous studies emerged among lower self-control individuals. Here, low self-control, high self-reliant individuals engaged in more unethical behavior under cooperation as opposed to individual competition (Effect = 1.92, $t = 2.59, p = .01$). The effect did not emerge among those higher in self-control.

Overall, our results show that whether cooperation requires self-control depends on an individual's level of self-reliance. We find that self-reliant individuals show diminished self-control when co-

operating as opposed to competing individually. Our results delve deeper into why *pulling together* may lead to *falling apart* for self-reliant individuals.

REFERENCES

- Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice (1998), "Ego depletion: Is the active self a limited resource?" *Journal of Personality and Social Psychology*, 74(5), 1252-65.
- Bear, Adam and David G. Rand (2016), "Intuition, deliberation, and the evolution of cooperation," *Proceedings of the National Academy of Sciences*, 113(4), 936-41.
- Johnson, Roger T., and David W. Johnson (1986), "Cooperative learning in the science classroom," *Science and Children*, 24(2), 31-2.
- Kocher, Martin G., Peter Martinsson, Kristian Ove R. Myrseth, and Conny E. Wollbrant (2017), "Strong, bold, and kind: Self-control and cooperation in social dilemmas," *Experimental Economics*, 20(1), 44-69.
- Lotito, Gianna, Matteo Migheli, and Guido Ortona (2013), "Is cooperation instinctive? Evidence from the response times in a public goods game," *Journal of Bioeconomics*, 15(2), 123-33.
- Mazar, Nina, On Amir, and Dan Ariely (2008), "The dishonesty of honest people: A theory of self-concept maintenance," *Journal of Marketing Research*, 45(6), 633-44.
- Tangney, June P., Roy F. Baumeister, and Angie Luzio Boone (2004), "High self-control predicts good adjustment, less pathology, better grades, and interpersonal success," *Journal of Personality*, 72(2), 271-324.
- Triandis, Harry C., and Michele J. Gelfand (1998), "Converging measurement of horizontal and vertical individualism and collectivism," *Journal of Personality and Social Psychology*, 74(1), 118-28.
- Verkoeijen, Peter P. J. L., & Bouwmeester, S. (2014), "Does intuition cause cooperation?" *PloS One*, 9(5), e96654.

A Regulatory Focus Approach to Consumers' Moral Decision Making

Maria Schwabe, Friedrich-Schiller-University of Jena, Germany

David B. Dose, Friedrich-Schiller-University of Jena, Germany

Gianfranco Walsh, Friedrich-Schiller-University of Jena, Germany

EXTENDED ABSTRACT

This research demonstrates that consumers' regulatory focus influences moral self-regulating consumption. Promotion-focused consumers' moral deeds provide them with a license for subsequent consumption behavior that is more immoral, and more immoral deeds can be cleansed by successively more moral consumption decisions. Prevention-focused consumers repeat their past moral consumption decisions, irrespective of the moral valence of previous decisions though. We further show that these effects are contingent on the domain congruency of the decisions and the efficiency of a more moral option.

Recent literature has shown that consumers' moral decisions largely depend on their behavioral history, though research into how previous decisions influence consumers' subsequent behavior in moral trade-off situations offers contradictory results: On the one hand, consumers might persist in their moral history, leading to consistent behavior (e.g., Gino, Norton, and Ariely 2010; Kanmarkar and Bollinger 2015; Zhang et al. 2014). On the other hand, consumers may deviate from the moral stance reflected in their past decisions, such that they balance their moral and immoral deeds (Gneezy et al. 2012; Krishna 2011). Presented with these opposing theoretical viewpoints, more research is needed to determine when consumers are motivated to balance their consumption decisions and when they tend to be consistent (Mullen and Monin 2016). Drawing on regulatory focus theory, we demonstrate that consumers' regulatory focus influences moral self-regulating consumption.

Study 1 was a 3 (first decision: moral vs. immoral vs. control) × 2 (regulatory focus: prevention vs. promotion) between-subjects experiment with a sample of 188 students and university staff. Regulatory focus was manipulated by asking participants to write about their hopes/aspirations (promotion focus) or obligations/duties (prevention focus) (Freitas and Higgins 2002). To manipulate the morality of the first decision participants wrote about a situation where they helped someone unrewarded (moral) or were mean without any particular reason (immoral) (Conway and Peetz 2012). In all studies the control condition consisted of an unrelated scrambled sentence task. After the writing tasks, participants indicated their relative preference for organic versus conventional coffee which was the dependent measure. Interestingly, the results reveal that promotion-focused participants who had previously recalled moral decisions exhibited licensing behavioral patterns, indicating a lower subsequent preference for the organic coffee. Participants in the promotion focus condition who remembered past immoral decisions instead tried to "clean up" their behavior by preferring organic over conventional coffee. An induced prevention focus, however, causes consumers to repeat their past behavior which is consistent with past research (Zhang et al. 2014). Hence, participants with a prevention focus who recalled moral decisions preferred the organic coffee over the conventional alternative. If they confronted a prior immoral decision, prevention-focused participants indicated less preference for the organic coffee.

In study 2, we measured consumers' chronic regulatory focus and manipulated the morality of the first decision, as well as the domain congruency of the first and second decisions, with a 2 (first decision: moral vs. immoral) × 2 (domain: same vs. different) between-subjects design and a morally neutral control group. The sample consisted of 291 students and university employees. For ma-

nipulating subsequent decisions of the same domain we first let participants choose from nine convenience goods (e.g., coffee, potato chips) that they would like to buy (Mazar and Zhong 2010). In the more moral condition, participants were shown seven green and two conventional convenience goods; in the more immoral condition, seven conventional and two green convenience goods appeared. Afterwards, they indicated their relative preference for organic versus conventional coffee as dependent measure. In the different domain condition, participants chose from a set of nine (moral: 7 green, 2 conventional; immoral: 7 conventional, 2 green) vouchers redeemable for green versus conventional clothes (e.g., T-shirts, jeans). The results indicate that promotion-focused participants show balancing patterns only for subsequent consumption situations in different behavioral domains. For subsequent decisions in the same behavioral domain they mimic their past decisions irrespective of the behavior's moral stance. Prevention-focused consumers, however, show consistency in their consumption behavior in the same as well as in different consumption domains.

Study 3 manipulated the morality of the first decision, consumers' regulatory focus, and the charity's efficiency, using a 3 (first decision: moral vs. immoral vs. control) × 2 (regulatory focus: prevention vs. promotion) × 2 (charity efficiency: high vs. low) between-subjects design with 372 students and university employees as participants. The dependent variable was the choice in a moral trade-off, that is, the choice between keeping the reward in a customer referral program for themselves and donating the money to charity. Regulatory focus was manipulated as in study 1, while we used the scenario with nine different convenience goods from study 2 for manipulating the morality of the first decision. Charity efficiency was manipulated by indicating that the charity received a two-star (low efficiency) or four-star (high efficiency) rating by an independent institution (Winterich and Barone 2011). The results show that charity efficiency has no influence on the moral consumption behavior of promotion-focused participants. The authors presume that this is because promotion-focused consumers concentrate on the consequences of their behavior for their own moral self-perception, whereas the degree to which their moral decision benefits others may have relatively less importance. However, prevention-focused consumers refrain from mimicking the moral stance of their past behavior if the moral alternative is inefficient. Instead, they likely choose the more immoral option, irrespective of their behavior in subsequent situations. An inefficient moral choice option creates a situation in which the more moral alternative also is more risky, in that the donated money may not reach the intended recipient and thus would be lost. Hence, prevention-focused consumers may opt for the more immoral alternative, irrespective of their preceding decisions.

In sum, the findings show that a consumer's inherent or situationally induced regulatory focus influences whether he or she regulates or repeats moral consumption decisions. These effects, however, are contingent on boundary conditions such as the domain congruency of the decisions studied and the efficiency of the more moral option. Thus, our research improves understanding regarding the dynamics of consumers' moral self-regulation.

REFERENCES

- Conway, Paul and Johanna Peetz (2012), "When does feeling moral actually make you a better person? Conceptual abstraction moderates whether past moral deeds motivate consistency or compensatory behavior," *Personality and Social Psychology Bulletin*, 38(7), 907-19.
- Freitas, Antonio L. and E. Tory Higgins (2002), "Enjoying goal-directed action: The role of regulatory fit," *Psychological Science*, 13(1), 1-6.
- Gino, Francesca, Michael I. Norton, and Dan Ariely (2010), "The counterfeit self the deceptive costs of faking it," *Psychological Science*, 21(5), 712-20.
- Gneezy, Ayelet, Alex Imas, Amber Brown, Leif D. Nelson, and Michael I. Norton (2012), "Paying to be nice: Consistency and costly prosocial behavior," *Management Science*, 58(1), 179-87.
- Karmarkar, Uma R. and Bryan Bollinger (2015), "BYOB: How bringing your own shopping bags leads to treating yourself and the environment," *Journal of Marketing*, 79(4), 1-15.
- Krishna, Aradhna (2011), "Can supporting a cause decrease donations and happiness? The cause marketing paradox," *Journal of Consumer Psychology*, 21(3), 338-45.
- Mazar, Nina and Chen-Bo Zhong (2010), "Do green products make us better people?" *Psychological Science*, 21(4), 494-98.
- Mullen, Elizabeth and Benoit Monin (2016), "Consistency versus licensing effects of past moral behavior," *Annual Review of Psychology*, 67(1), 363-85.
- Winterich, Karen Page and Michael J. Barone (2011), "Warm glow or cold, hard cash? Social identity effects on consumer choice for donation versus discount promotions," *Journal of Marketing Research*, 48(5), 855-68.
- Zhang, Shu, James FM Cornwell, and E. Tory Higgins (2014), "Repeating the past: Prevention focus motivates repetition, even for unethical decisions," *Psychological Science*, 25(1), 179-87.

The Chill of the Moment: Emotions and Pro-Environmental Behavior

Daniel Schwartz, University of Chile, Chile

George Loewenstein, Carnegie Mellon University, USA

EXTENDED ABSTRACT

In the internet age, visual emotional appeals have gained a broader audience, and hence attracted great attention from marketing researchers, as many short videos or ads are shared online, generally watched only once. These videos, which often request immediate action (e.g., a video about world hunger followed by a donation request), have become an important tool to promote action on public policy issues. One important question is whether these social-marketing emotional materials will motivate the same action after a time delay once emotions have cooled off. This is especially important for environmental policies as many actions (e.g., purchasing a green product) are likely to be taken only after a time delay.

Climate change may be an appropriate target for interventions using emotional ads because it has almost all the hallmarks of an issue about which people are likely to experience scarce moments of emotional arousal to motivate pro-environmental action (Loewenstein and Schwartz 2010). Prior research has addressed the effect of emotion-evoking stimuli on environmental issues, focusing on intentions or attitudinal measures (Hartmann et al. 2016; Leiserowitz 2004; Lowe et al. 2006; Matthes, Wonneberger, and Schmuck 2014). However, studies that only provide hypothetical opportunities for taking action may actually understate the effect of emotion-evoking stimuli by not providing real opportunities to dispel negative emotions (Witte and Allen 2000). Furthermore, in most prior research, attitudes and intentions have been measured immediately following the emotion-evoking stimulus, raising the question of whether changes in attitudes or behavioral intentions would continue over time. We tackle these issues by measuring actual behavior immediately following, or with a delay after, an emotion-inducing stimulus.

We introduce two interventions to offset the effect of the time delay using tools that expand the literature of social marketing. First, as practitioners may assume that warning people about the consequences of time delay is an effective tool, we examine the effect of warning that emotions affect behavior, but this effect diminishes over time. Second, we examine whether intentions, through non-binding commitments adopted at a moment of emotional arousal, would translate into actions after emotions have cooled off.

Study 1 examines the differential impact of sadness-evoking and non-emotional videos, adding a time delay between videos and participants' decisions. Participants ($N = 687$) were randomly assigned to watch either a sadness-evoking video or a non-emotional video, both previously pretested. Participants were randomly assigned to donate all or part of an announced \$30 prize to the World Wildlife Fund (WWF), either immediately or one hour after they watched the video. We found that those who watched the sadness-evoking video offered to donate 25% more money right after they watched the video than one hour later, $p = 0.03$. Time had no impact on those who watched the non-emotional video, $p = 0.57$. Participants who watched the emotion-evoking video offered to donate more money (30%) than participants who watched the non-emotional video when donations were made just after watching the videos, $p < 0.01$. However, one hour after watching the videos, there was no difference in donations, $p = 0.89$. Reported sadness mediated the decrease in donations, after the delay, by participants who watched the emotion-evoking video. Based on ELM theory (Petty and Cacioppo 1990), we found that people with lower (vs. higher) concern for global warming

are more affected by sadness-evoking ads and, therefore, by the effect of a time delay. This result was replicated in the following studies.

Study 2 examines an informative intervention in which participants ($N = 520$) are warned of the effect of emotions on behavior ("When time has passed since people have watched the video, and the emotions that the video evokes have cooled down, people are less likely to donate, and when they do donate, they donate smaller amounts"). We also examined whether an active choice may increase donations (alone or with the warning) by asking participants whether they would like to postpone their donation decision. This study used the same sadness-evoking video from study 1, with a one-day time window between parts. We found that participants donated 45% more right after watching the emotion-evoking video than when asked to make a donation the day after ($p < 0.01$). When presented with the possibility of postponement, participants offered a donation 34% higher than those who could only donate the next day, $p = 0.03$, but very similar to participants who could only donate right after watching the video, $p = 0.56$. This suggests that choosing may be a useful strategy to avoid the diminution of donations following a delay. We found that explicitly warning participants that emotions will diminish and affect their donations has no effect ($p = 0.63$).

Study 3 adds a non-binding commitment just after participants ($N = 476$) watched the sadness-evoking video ("We would like to ask you how much you would like to donate in the second part of the study"). We found that adding a non-binding donation caused participants to donate, one day later, an amount very similar to what they proposed the previous day ($r = 0.96$). This high correlation resulted in higher donations on the second day of the study compared to participants who watched the same video but did not indicate any intention the previous day (30.8% difference; $p < 0.01$).

In summary, these studies reveal that sadness-evoking videos induce greater donations to an environmental organization than non-affective videos, but this effect disappears once emotions have cooled off after a delay. In addition, cautioning people that emotions, and their effects on behavior, cool off is not effective unless people provide a non-binding commitment just after watching the affective ad so that they can translate their initial intention into action after the time delay. Our results help explain why emotion-evoking ads that seek to promote pro-environmental behavior, such as reducing energy use, often fail to produce sustained behavioral change, and they suggest that if a sustained response is sought, behavioral commitments may need to be elicited in moments of high emotion.

REFERENCES

- Hartmann, Patrick, Vanessa Apaolaza, Clare D'Souza, Jose M. Barrutia, and Carmen Echebarria (2016), "Promoting Renewable Energy Adoption: Environmental Knowledge vs. Fear Appeals," Springer, Cham, 359–67.
- Leiserowitz, AA (2004), "Day After Tomorrow: Study of Climate Change Risk Perception," *Environment: Science and Policy for Sustainable Development*, 46(9), 22–39.
- Loewenstein, G. and Daniel Schwartz (2010), "Nothing to Fear but a Lack of Fear: Climate Change and the Fear Deficit," *G8 Magazine*, 60–62.

- Lowe, T., K. Brown, S. Dessai, M. F. Doria, K. Haynes, and K. Vincent (2006), "Does Tomorrow Ever Come? Disaster Narrative and Public Perceptions of Climate Change," *Public Understanding of Science*, 15(4), 435–57.
- Matthes, Jörg, Anke Wonneberger, and Desirée Schmuck (2014), "Consumers' Green Involvement and the Persuasive Effects of Emotional versus Functional Ads," *Journal of Business Research*, 67(9), 1885–93.
- Petty, Richard E. and John T. Cacioppo (1990), "Involvement and Persuasion : Tradition Versus Integration," *American Psychological Association*, 107(3), 367–74.
- Witte, Kim and M Allen (2000), "A Meta-Analysis of Fear Appeals: Implications for Effective Public Health Campaigns.," *Health education & behavior : the official publication of the Society for Public Health Education*, 27(5), 591–615.

Will It Taste Better If You Think about What You Are Eating? Cultural Differences in Food-Ingredient Information Seeking

Hao Shen, Chinese University of Hong Kong, China

Jun Pang, Renmin University of China, China

EXTENDED ABSTRACT

When consumers choose foods, some may prefer items for which they are offered specific information about the ingredients constituting the items they will be eating, whereas others may not form preferences based on such information. Thus, an important question regarding food marketing arises: Should food be marketed by providing specific information about ingredients to consumers?

The answer to this question may depend on the consumer's cultural background. In this research, we propose that Chinese versus American consumers may have different lay beliefs about how different foods come together to form a meal, affecting norms for preparing and serving foods. Due to Confucian teaching and traditions, Chinese people tend to believe in the philosophy of yin and yang, such that apparently opposite forces are complementary and need to be balanced. This belief permeates the norms and values associated with foods and eating. When preparing foods, Chinese people want to balance yin foods (e.g., fruits and vegetables) and yang foods (e.g., beef and pork). Chinese food is an art of mixture that balances color, flavor, and texture. Chinese cooking involves looking at the combination of the ingredients as well as paying particular attention to the complex process and equipment involved. China has hundreds of cooking methods. Good cooking depends on the blending of various ingredients and condiments rather than the taste of the individual elements. Chinese people believe that various ingredients result in the overall harmony of flavors (Sundararajan 2015). For example, when preparing a dish of "Beef with mushroom and bamboo shoots," Chinese people put all ingredients into a pan and deep-fry them repeatedly, to mix the flavors of all the ingredients. In the pursuit of balance and moderation, Chinese people do not perceive each ingredient to be a stand-alone, independent element of the meal, but rather consider the dish that has been formed to be a new, different entity—separate from its component parts. The Judeo-Christian traditions of Americans, on the other hand, eschew balance in favor of extreme stances (Briley, Morris, and Simonson, 2000; Spencer-Rodgers et al., 2009). Consistent with this belief, Americans tend to regard each ingredient as independent, and focus on how each element can contribute (Sundararajan, 2015).

Based on these considerations, we propose that Americans emphasize individual ingredients more than the Chinese do and therefore tend to be more interested in detailed descriptions of each ingredient when they consider foods. Study 1 provided initial evidence for our prediction. We asked participants to imagine going to a restaurant for a dinner and finding the restaurant has two versions of the menu available: one has the names of dishes with pictures, whereas the other has the names of dishes with detailed information about ingredients. American participants (60.7%) were more likely than Chinese participants (31.7%) to choose the menu with ingredient information, ($\chi^2(1) = 17.28, p < .001$).

Study 2 used a 2 (culture: American vs. Chinese) \times 2 (food type: soup vs. pizza) \times 2 (ingredient information: present vs. absent) between-subjects design. We told participants we were interested in their choice of foods. Then they were either exposed to a pair of soup dishes or a pair of pizzas, depending on the condition. In addition, we manipulated the availability of ingredient information. In one condition, both food options had no ingredient information. In the other condition, however, both options provided ingredient information. American participants reported greater choice certainty when ingredient information was present for food options than when it was absent ($M = 5.57$ vs. $4.37, F(1, 193)$

$= 18.30, p < .001$). However, this difference was mitigated for Chinese participants ($M = 5.27$ vs. $4.95, F(1, 193) = 1.31, p > .25$). The two-way interaction between culture and ingredient information was also significant ($F(1, 193) = 4.81, p = .03$), which was independent of food type ($F < 1.0$).

Study 3 used a 2 (culture: Chinese vs. American) \times 2 (processing style: overall impression vs. ingredients focus) between-subjects design. Participants saw a picture of seafood pasta and were either asked to form an overall impression of food or write down each ingredient in this dish. We then asked them to indicate the tastiness of the food. The two-way interaction between culture and processing style was significant ($F(1, 140) = 6.10, p = .015$). In particular, Americans evaluated pasta more favorably if they wrote down each ingredient than if they gave an overall impression ($M = .65$ vs. $-.04, F(1, 140) = 3.40, p = .07$). However, the reverse was true for Chinese people, though the difference was marginally significant ($M = .87$ vs. $1.45, F(1, 140) = 2.71, p = .10$).

Study 4 used a 2 (culture: Chinese vs. American) \times 2 (food presentation: separate vs. mixed) between-subjects design with the type of food as a within-subject factor. Participants saw a picture of a beef noodle dish and a beef burger, and the order of these pictures was counterbalanced. In the separate condition, each ingredient was displayed separately in both pictures. In the mixed condition, ingredients were presented mixed together in both pictures. A 2 \times 2 ANOVA of culture and display on food evaluation revealed a significant interaction ($F(1, 151) = 9.63, p < .01$), which was independent of food type. More specifically, separated (vs. mixed) presentation increased food evaluations for Americans ($M_{\text{separate}} = 1.09, M_{\text{mixed}} = .49, F(1, 151) = 4.90, p = .03$) but decreased food evaluations for Chinese participants ($M_{\text{separate}} = .14, M_{\text{mixed}} = .70, F(1, 151) = 4.73, p = .03$).

In sum, our research contributes to literature examining consumers' food perceptions, an area of increasing importance in consumer behavior research (Bagchi and Block, 2011; Bublitz, Peracchio, and Block, 2010; Wansink, 2015). Further, we address the influence of culture, showing that Chinese consumers may be less interested than American consumers in information about individual food ingredients.

REFERENCE

- Bagchi, Rajesh, and Lauren G. Block (2011), "Chocolate Cake Please! Why Do Consumers Indulge More When It Feels More Expensive?" *Journal of Public Policy & Marketing*, 30(2), 294-306.
- Briley, Donnel A, Michael W Morris, and Itamar Simonson (2000), "Reasons as Carriers of Culture: Dynamic vs. Dispositional Models of Cultural Influence on Decision Making," *Journal of Consumer Research*, 27 (2), 157-78.
- Bublitz, Melissa G., Laura A. Peracchio, and Lauren G. Block (2010), "Why Did I Eat That? Perspectives on Food Decision Making and Dietary Restraint," *Journal of Consumer Psychology*, 20(3), 239-258.
- Spencer-Rodgers, J., Boucher, H. C., Mori, S. C., Wang, L., and Peng, K. (2009). The Dialectical Self-Concept: Contradiction, Change, and Holism in East Asian Cultures," *Personality and Social Psychology Bulletin*, 35(1), 29-44.
- Sundararajan, Louise (2015), *Understanding Emotion in Chinese Culture*. Switzerland: Springer International Publishing.

From Strong Uncertainty-Loathing to Strong Uncertainty-Loving

Luxi Shen, Chinese University of Hong Kong, China

EXTENDED ABSTRACT

In the last decade, two lines of research on uncertainty have found their places in the literature: one by Gneezy, List, and Wu (2006) documenting a strong uncertainty-aversion effect, and one by Shen, Fishbach, and Hsee (2015) documenting a strong uncertainty-loving effect. Each line is surprising by itself, and more surprising is the contrast between the two. This research aims to reconcile these two striking (and strikingly opposite) effects and build up a theoretical framework to understand responses to uncertainty in general.

Consumers have different responses to exogenous uncertainty, that is, the out-of-personal-control kind of uncertainty. It appears that most of the times, they are uncertainty averse (e.g., Arrow 1965; Holt and Laury 2002; Kahneman and Tversky 1979) and sometimes uncertainty loving (e.g., Dhar, Gonzalez-Vallejo, and Soman 1995; Goldsmith and Amir 2010; Mazar, Shampanier, and Ariely 2016). It is important to note that as long as the response to the uncertain outcome is still bounded by the responses to its worst and best outcomes for certain, both uncertainty aversion and loving here are still congruent to the dominance principle, that is, the certain incentive of a high value should dominate the uncertain incentive of the expected value, and in turn, the uncertain discount should dominate the certain incentive of a low value.

Anomalies do exist. As a violation of dominance against the lower bound, Gneezy et al. (2006) demonstrated a strong uncertainty-aversion effect. Research participants were willing to work even *less* to earn a lottery ticket of an uncertain payment than its worst possible payment. As a violation of dominance against the upper bound, Shen et al. (2015) demonstrated a strong uncertainty-loving effect. Research participants worked even *harder* to earn a bonus of an uncertain magnitude than a bonus of a certain, larger magnitude. We describe both above effects as “strong,” because each is a violation of the dominance principle.

In this research, we suggest that they actually do not happen at the same time. Strong uncertainty-aversion occurs before one engages in the activity, or “in-prospect,” while strong uncertainty-loving occurs when one engages in the activity, or “in-process.” Thus, the mode in which decisions are made, in-prospect versus in-process, moderates the effect of this incentive uncertainty. Specifically, we hypothesize that strong uncertainty aversion occurs in prospect, while strong uncertainty loving occurs in process.

The in-prospect and in-process decisions vary on many psychological aspects (see Figure 1 for a summary of the literature review). However, all psychological differences have their root in one physical feature: continuity. The in-prospect decision is often made on a single time point and hence can be seen as a static decision in a temporal isolation. By contrast, the in-process decision is often made over time and hence can be seen as a dynamic decision in a temporal continuity. Therefore, we propose a “continuity hypothesis”: that the effect from a single decision with continuity (in-process decisions) differs from the combined effects from multiple decisions in isolation (in-prospect decisions). Continuity adds extra utility into the process, and this process utility is usually in the form of high arousal and emotion. In the case of exogenous uncertainty, the extra utility can be in the form of excitement and engagement (Goldsmith and Amir 2010; Lee and Qiu 2009; Shen et al. 2015; Vosgerau, Wertenbroch, and Carmon 2006; Wilson et al. 2005).

We test this framework in a series of four experiments. All experiments entail real consequences for the participants and hence

are incentive-comparable. In a typical experiment, participants were assigned to one of six conditions, which constitute a 3 (outcome: certain high (HI) vs. certain low (LO) vs. uncertain (UN)) x 2 (decision mode: in-prospect vs. in-process) between-participants design. In one study, participants were given the opportunity to repeatedly guess the meaning of a foreign word, and were promised to earn \$0.25 (LO), \$0.50 (HI), or either \$0.25 or \$0.50 (UN) if they made the correct guess. The word was designed to be so difficult that no one could guess it correctly, so the DV was persistence. As for an in-prospect decision, the participants, before starting the task, indicated how long they would persist. As for an in-process decision, the participants worked on the task and we observed how long they actually persisted. We found that for in-prospect decisions, the persistency pattern followed: HI > UN = LO, indicating not so strong uncertainty aversion and failing to replicate Gneezy et al. (2006), whereas for in-process decisions the persistency pattern followed: UN > HI > LO, indicating strong uncertainty loving and succeeding in replicating Shen et al. (2015). In another study, we found the strong uncertainty aversion did occur in in prospect, but as documented by Yang, Vosgerau, and Lowenstein (2013), the uncertain outcome had to be framed as a lottery.

In other studies, we further replicated this in-prospect/ in-process discrepancy on (a) ambiguity (when UN does not specify the probability of each outcome), (b) choices (when the behavioral measurement was a discrete variable), and (c) pricing measurement (when the behavioral measurement has sensible financial consequences). In the last study, we directly tested the continuity hypothesis by breaking an in-process decision into several in-prospect decisions and gathered supportive evidence.

To the best of our knowledge, we are the first to reconcile the Gneezy effect and the Shen effect, and we are also the first to demonstrate both effects by manipulating a single factor in a single experiment with the same decision context and on the same magnitude level. This research does not only resolve a “conflict” in the literature but also greatly advances our understanding of how people behave under uncertainty in prospect and in process.

REFERENCES

- Arrow, Kenneth J. (1965), “Aspects of the Theory of Risk Bearing,” Helsinki, Sweden: Yrjö Jahnssonin Säätiö.
- Dhar, Sanjay K., Claudia Gonzalez-Vallejo, and Dilip Soman (1995), “Brand Promotions as a Lottery,” *Marketing Letters*, 6(3), 221-33.
- Gneezy, Uri, John A. List, and George Wu (2006), “The Uncertainty Effect: When A Risky Prospect Is Valued Less Than Its Worst Possible Outcome,” *Quarterly Journal of Economics*, 121(4), 1283-1309.
- Goldsmith, Kelly and On Amir (2010), “Can Uncertainty Improve Promotions?” *Journal of Marketing Research*, 47(6), 1070-77.
- Holt, Charles A., and Susan K. Laury (2002), “Risk Aversion and Incentive Effects,” *American Economic Review*, 92(5), 1644-55.
- Kahneman, Daniel, and Amos Tversky (1979), “Prospect Theory: An Analysis of Decision under Risk,” *Econometrica*, 47(2), 263-92.
- Lee, Yih Hwai and Cheng Qiu (2009), “When Uncertainty Brings Pleasure: The Role of Prospect Imageability and Mental Imagery,” *Journal of Consumer Research*, 36(4), 624-33.

- Mažar, Nina, Kristina Shampanier, and Dan Ariely (2016), "When Retailing and Las Vegas Meet: Probabilistic Free Price Promotions," *Management Science*.
- Shen, Luxi, Ayelet Fishbach, and Christopher K. Hsee (2015), "The Motivating- Uncertainty Effect: Uncertainty Increases Resource Investment in the Process of Reward Pursuit," *Journal of Consumer Research*, 41, 1301-15.
- Vosgerau, Joachim, Klaus Wertenbroch, and Ziv Carmon (2006), "Indeterminacy and Live Television," *Journal of Consumer Research*, 32 (4), 487-95.
- Wilson, Timothy D., David B. Centerbar, Deborah A. Kermer, and Daniel T. Gilbert (2005), "The Pleasures of Uncertainty: Prolonging Positive Moods in Ways People Do Not Anticipate," *Journal of Personality and Social Psychology*, 88 (1), 5-21.
- Yang, Yang, Joachim Vosgerau, and George Loewenstein (2013), "Framing Influences Willingness to Pay but Not Willingness to Accept," *Journal of Marketing Research*, 50(6), 725-38.

Embracing Experiential over Material Consumption: Thinking about Death Increases Consumer Preferences for Experiences

Yoonji Shim, University of British Columbia, Canada
Katherine White, University of British Columbia, Canada

EXTENDED ABSTRACT

And a moment came that stopped me on a dime,

I went sky diving,

I went rocky mountain climbing,

I went 2.7 seconds on a bull name Fumanchu.

And I loved deeper,

And I spoke sweeter,

And I gave forgiveness I've been denying,

And he said someday I hope you get the chance,

To live like you were dying.

—“Live Like You Were Dying”, Tim McGraw (2004)

In this song, which was the number one country song on Billboard in 2004, a man who is going to die soon, makes the most of his last days by engaging in various experiential pursuits such as sky diving and mountain climbing. He further advises that people take the opportunity to live like they were dying because, in the face of his own impending death, he was finally able to live life to the fullest. Similar insights were portrayed by the film, *The Bucket List* (2007), which depicts a story about two men who ended up sharing a hospital room at a crossroads in their lives and set out on the adventure of a lifetime to spend the time they have left doing everything they ever wanted to experience before they die.

Although these anecdotal examples of embracing experiences in response to reminders of death may seem intuitive at first blush, past research on mortality salience finds that people in fact tend to be more materialistic in the face of thinking about their own death (Arndt et al. 2004; Kasser and Sheldon 2000; Mandel and Heine 1999). In contrast to the research suggesting that people will consume material goods under conditions of mortality salience, we argue that, when people are given the choice between material and experiential options, thinking about one's own death will make people prefer experiential over material consumption. We propose that the mechanism underlying this effect is the tendency for experiential rather than material options to fulfill one's desire for meaning. We argue that reminders of one's own mortality will lead people to imbue their lives with a sense of *meaning* and this activated desire for meaning will make people prefer more experiential rather than material consumption. To our knowledge, no work has looked at the comparative preferences for experiential versus material options in response to mortality salience.

Our conceptual framework extends previous work on TMT (Greenberg et al. 1986), which demonstrates that reminders of one's own death creates existential anxiety, leading to responses that allow the individual to bolster their own cultural worldviews in ways that increase perceptions of a life with meaning (Rosenblatt et al. 1989). Building upon this, we make a novel prediction that thinking about one's own death leads individuals to prefer experiential purchases (i.e., those made with the primary intention of acquiring a life experience) over material purchases (i.e., those made with the primary intention of acquiring a tangible good or material possession; e.g., Van Boven and Gilovich 2003). We make this key prediction because experiential purchases are particularly associated with a person's *true self* (Carter and Gilovich 2012; Schlegel et al. 2009), which serves as an important source of *meaning in life* (King et al. 2006). Thus, we suggest that the mechanism underlying the preference for experiential versus material options in response to mortality salience is the pursuit of meaningfulness. Specifically, we predict that people will perceive experiences (vs. material goods) as more meaningful following mortality salience threats and will demonstrate a preference for experiential options because of a desire to pursue meaning.

In five studies, we investigate whether mortality salience leads people to prefer experiential over material consumption, using multiple real-world field (Studies 1a and 1b) and experimental settings (Study 2). We further examine whether the observed tendency is mediated by differences in perceived meaningfulness of experiential and material purchases (Study 3). Finally, we test the moderating role of meaning-affirmation on the observed effect (Study 4).

Study 1a

In Study 1a, we sought to provide a preliminary test of our predictions in a field study. Borrowing a method from a global art project, *Before I Die* (www.beforeidie.cc), we examined whether people express greater desires for engaging in experiences than acquiring material goods when thinking about their own death. We created a chalkboard wall, stenciled with a grid of the sentence “Before I die, I want to _____.” on campus, and then asked people walking by to fill in the blank ($n = 227$) (see Figure 1). Once the wall was full, we photographed wall and transcribed the responses for coding purposes. Then, the responses were erased so that a new set of sentences could be written on the wall. All of the responses were classified into one of the two categories (experiential vs. material) by two trained coders. We calculated the proportion of responses that reflected experiences and the proportion of responses that reflected material goods.

As predicted, people expressed a greater desire for engaging in experiences (e.g., go skydiving, ski in the Alps) than for acquiring material goods (e.g., get a Ferrari, buy all Apple devices) in the face of their own death ($M_{\text{exp}} = 97.4\%$, $SD = .01$; $M_{\text{mat}} = 2.6\%$, $SD = .37$; $\chi^2(1) = 203.63$, $p < .001$). Using a real-world setting, Study 1a provided initial correlational evidence for the notion that mortality salience is related to preferences for acquiring experiences rather than preferences for acquiring material goods.

Study 1b

In Study 1b, we adopted a different real-life approach and identified consumer preferences for experiences over material goods in response to thinking about one's own death using a natural data source: Pinterest (www.pinterest.com). Pinterest is an online content sharing platform that allows members to *pin* images, videos, and other objects to their *pin boards* for others to view. To test our prediction in a real-world online setting, we explored what people have *pinned* on Pinterest by using a keyword phrase: “Before I die.”. A research assistant used Pinterest Quick Search by typing in a keyword phrase “before I die” in the search box and randomly selected 200 pin boards, which displayed a total of 2964 pins. The pins were classified into one of the two categories (experiential vs. material) by two trained coders. We calculated the number of experiences or material goods out of the total number of pins.

As anticipated, people posting a pin listed under “before I die” expressed a greater desire for engaging in experiences (e.g., go zip lining, stay in an ice hotel) than acquiring material goods (e.g., own a pearl necklace, have a luxurious bathroom) ($M_{\text{exp}} = 95.7\%$, $SD =$

.03; $M_{\text{mat}} = 4.3\%$, $SD = .12$; $\chi^2(1) = 2481.43$, $p < .001$). The results of Study 1b provided supporting evidence for the impact of mortality salience on preferences for experiences over material goods.

Study 2

In Study 2, we sought more direct evidence regarding the causal effect of mortality salience on preferences for experiential over material consumption in a more controlled setting. Given that thoughts about death produce a unique type of anxiety (Greenberg et al. 1990), we predicted that participants who focus on thoughts about death only indicate higher WTP for experiential than material purchases, but this effect would not emerge for those who focus on thoughts about social rejection, physical pain, or a neutral topic.

Method and Procedure

We randomly assigned participants ($n = 392$) to one of four experimental conditions: 1) the mortality threat, 2) social rejection threat, 3) physical threat, and 4) grocery shopping (control) condition, and manipulated the conditions using a writing task (Arndt et al. 2002). After completing this task, participants were asked to list three experiential and material purchases and indicate their willingness to pay (WTP) for each of the purchases.

Results and Discussion

First, we calculated participants' WTP for the experiential and material purchases by subtracting the average WTP of the three material purchases from the average WTP of the three experiential purchases. A one-way ANOVA on the index of WTP revealed a significant difference between the conditions ($F(3,388) = 3.99$, $p < .01$). As expected, participants who thought about their own death indicated higher WTP for experiential than material purchases ($M_{\text{mortality}} = \$178.37$, $SD = 1035.42$), compared to those who thought about being socially excluded ($M_{\text{social}} = -\$131.65$, $SD = 592.77$), dental pain ($M_{\text{physical}} = -\$154.75$, $SD = 794.06$), and grocery shopping ($M_{\text{control}} = -\$108.83$, $SD = 514.34$). Follow-up analysis revealed that those participants in the social rejection, the dental pain, and the control condition did not differ on the index of WTP for the experiential and material purchases ($p > .97$). Thus, Study 2 provided direct evidence in support of our prediction that reminding people of their own mortality leads them to prefer experiential over material purchases and this tendency is only caused by mortality salience (vs. social threats vs. physical threats vs. control).

Study 3

In Study 3, we explored the underlying mechanism by predicting that people who think about their own mortality (vs. control) will perceive experiential (vs. material) purchases as more meaningful, and the difference in perceived meaningfulness will prompt people to spend more money on experiences than on material goods in response to mortality salience threats.

Method and Procedure

Participants ($n = 158$) were randomly assigned to either the mortality salience or the control condition. Participants in the mortality salience condition were presented a short documentary clip that reminds them of limited amount of the time left to spend with their family. In contrast, participants in the control condition were presented a short movie clip about bighorn sheep (Heatherton et al. 1993). Afterward, as in Study 2, participants were asked to list three of experiential and material purchases and indicate the WTP for each of the purchases. They were then asked to rate an item on each of the experiential and material purchases that they listed: "To what extent do you think this experiential (material) purchase would be meaningful to yourself?" (7-point scale: 1 = "not at all," 7 = "very much so").

Results and Discussion

A one-way ANOVA on the index of WTP revealed a significant difference between the conditions ($F(1,156) = 4.85$, $p < .05$). As predicted, participants who focused on thoughts about their own death indicated higher WTP for experiential than material purchases ($M_{\text{mortality}} = \$348.52$, $SD = 766.72$), compared to those who thought about grocery shopping ($M_{\text{control}} = \$16.79$, $SD = 1101.02$).

To test our proposed underlying mechanism, we first calculated an index of perceived meaningfulness by subtracting the average perceived meaningfulness of the three material purchases from the average perceived meaningfulness of the three experiential purchases. We then conducted a mediation analysis (model 4; Hayes 2013) with mortality as the independent variable, the index of WTP for experiential and material purchases as the dependent variable, and the index of perceived meaningfulness as the mediating variable. First, we found a marginally significant main effect of mortality salience (vs. control) on the index of WTP ($b = 278.61$, $SE = 150.97$, $t = 1.85$, $p = .067$), indicating that participants who thought about their own death (vs. control) indicated higher WTP for experiential than material purchases. Furthermore, there was a significant main effect of mortality salience (vs. control) on the index of perceived meaningfulness ($b = .46$, $SE = .22$, $t = 2.08$, $p < .05$), indicating that participants in the mortality salience condition perceived experiences (vs. material goods) as more meaningful (vs. control). Finally, the procedures generated a 95% confidence interval around the indirect effect with zero falling outside the confidence interval ($b = 53.10$, $SE = 38.51$, 95% CI = [7.9077 to 165.5168]), indicating that the mediating pathway is significant. Thus, Study 3 confirmed that the observed tendency to prefer experiential over material purchases in response to mortality salience was statistically mediated by differences in perceived meaningfulness between the experiential and the material purchases.

Study 4

In Study 4, we tested the effect of *meaning-fulfillment* following mortality salience threats on consumer preferences for experiential over material purchases. We theorized that engaging in an alternative task that allows the individual to recall a past meaningful experience (i.e. meaning-fulfillment) should mitigate the observed tendency for consumers to prefer experiences over material goods in response to mortality salience. Thus, we predicted that the observed tendency will not emerge when people are given an opportunity to fulfill their meaning by recalling their past meaningful experience.

Method and Procedure

This was a 2 (mortality: salient vs. control) x 2 (meaning-fulfillment: yes vs. no) between-participants design. Participants ($n = 228$) were randomly assigned to one of the two conditions. As in Study 2, we manipulated mortality salience (vs. control) by using the writing task and asked participants in the meaning-fulfillment condition to describe a past experience that they felt was meaningful and to explain why the event was meaningful to them. Those participants in the no meaning-fulfillment condition were not asked to describe any of their past meaningful experiences. Afterward, participants were asked to list three of future experiential and material purchases and to indicate their WTP for each of purchases they listed.

Results and Discussion

We performed a mortality x meaning-fulfillment ANOVA with the index of WTP as a dependent variable. As expected, we found a significant interaction between the mortality salience and the meaning-fulfillment manipulation ($F(1,226) = 4.00$, $p < .05$). In the mortality salience condition, participants reported higher WTP for

experiential than material purchases when they were not given the opportunity to recall their past meaningful experience ($M_{\text{no-fulfillment}} = 72.41$, $SD = 79.66$). When they were given the opportunity to recall their past meaningful experience, however, the tendency was eliminated ($M_{\text{fulfillment}} = -166.61$, $SD = 83.14$; $F(1, 226) = 4.31$, $p < .05$). In the control condition, meaning-fulfillment had no influence on the observed effect ($M_{\text{no-fulfillment}} = -103.72$, $SD = 80.99$; $M_{\text{fulfillment}} = -14.05$, $SD = 84.66$; $F(1, 226) = .59$, $p > .44$). The results of Study 4 demonstrated recalling one's past meaningful experience resolved the desires for meaning elicited by mortality salience and this, in turn, alleviated the tendency to bolster their meaningfulness in response to mortality salience threats.

General Discussion

The current research brings to light one of the key consumption domains in which mortality salience has a substantial influence: Experiential versus material purchases. From a managerial perspective, we provide insight for marketing practice, especially for experiential consumption, by emphasizing the need to remind consumers of the limited amount of time left to them to do everything they ever wanted to do. Thus, it would be key for marketers to understand the meaningful nature of experiences and develop promotion plans (e.g. using images, advertising slogans) which can remind people of thoughts about death to differentiate their products from competitors.

We hope that the current research spurs other work examining the nuances of experiential consumption. Further, we would like to summarize the takeaway from this research with a quote from Brazilian novelist Paulo Coelho on his Twitter (@paulocoelho; 2012): "One day, you will wake up and there won't be any more time to do the things you've always wanted. Do it now."

REFERENCES

- Arndt, Jamie, Jeff Greenberg, and Alison Cook (2002), "Mortality Salience and the Spreading Activation of Worldview-Relevant Constructs: Exploring the Cognitive Architecture of Terror Management," *Journal of Experimental Psychology: General*, 131, 307-324.
- Arndt, Jamie, Sheldon Solomon, Tim Kasser, and Kennon M. Sheldon (2004), "The Urge to Splurge: A Terror Management Account of Materialism and Consumer Behavior," *Journal of Consumer Psychology*, 14 (3), 198-212.
- Belk, Russel W. (1985), "Materialism: Trait Aspects of Living in the Material World," *Journal of Consumer Research*, 12, 265-280.
- Burke, Brian, Andy Martens, and Erik H. Faucher (2010), "Two decades of terror management theory: A meta-analysis of mortality salience research," *Personality and Social Psychology Review*, 14, 155-195.
- Carter, Travis J. and Thomas Gilovich (2010), "The Relative Relativity of Material and Experiential Purchases," *Journal of Personality and Social Psychology*, 98, 146-159.
- _____ (2012), "I Am What I Do, Not What I Have: The Differential Centrality of Experiential and Material Purchases to the Self," *Journal of Personality and Social Psychology*, 102, 1304-1317.
- Dunn, Elizabeth and Michael Norton (2013). *Happy money: The science of smarter spending*. New York: Simon and Schuster.
- Gilovich, Thomas and Amit Kumar (2015), "We'll Always Have Paris: The Hedonic Payoff from Experiential and Material Investments," *Advances in Experimental Social Psychology*, 51, 147-187.
- Greenberg, Jeff, Tom Pyszczynski, and Sheldon Solomon (1986), "The Causes and Consequences of the Need for Self-Esteem: A Terror Management Theory," in *Public Self and Private Self*, ed. Roy F. Baumeister, New York: Springer, 189-212.
- Greenberg, Jeff, Tom Pyszczynski, Sheldon Solomon, Abram Rosenblatt, Mitchell Veeder, Shari Kirkland, and Deborah Lyon (1990), "Evidence for Terror Management II: The Effect of Mortality Salience on Reactions to Those Who Threaten or Bolster the Cultural Worldview," *Journal of Personality and Social Psychology*, 58, 303-318.
- Heatherton, Todd F, Janet Polivy, C. Peter Herman, Roy F. Baumeister (1993), "Self-Awareness, Task Failure, and Disinhibition: How Attentional Focus Affects Eating," *Journal of Personality*, 61, 49-61.
- Kasser, Tim and Kennon M. Sheldon (2000), "Of Wealth and Death: Materialism, Mortality Salience, and Consumption Behavior," *Psychological Science*, 11, 348-351.
- King, Laura A, Joshua A. Hicks, Jennifer L. Krull, and Amber K. Del Gaiso (2006), "Positive affect and the experience of meaning in life," *Journal of Personality and Social Psychology*, 90, 179-196.
- Mandel, Naomi and Steven J. Heine (1999), "Terror Management and Marketing: He Who Dies with the Most Toys Wins," *Advances in Consumer Research*, 26, 527-532.
- Molden, Daniel. C, Gale M. Lucas, Wendi L. Gardner, Kristy Dean, and Megan L. Knowles (2009), "Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored," *Journal of Personality and Social Psychology*, 96, 415-431.
- Richins, Marsha. L. and Scott Dawson (1992), "A consumer values orientation for materialism and its measurement: Scale development and validation," *Journal of Consumer Research*, 19, 303-316.
- Rosenblatt, Abram, Jeff Greenberg, Sheldon Solomon, Tom Pyszczynski and Deborah Lyon (1989), "Evidence for terror management theory I: The effects of mortality salience on reactions to those who violate or uphold cultural values," *Journal of Personality and Social Psychology*, 57, 681-690.
- Rosenzweig, Emily and Thomas Gilovich (2012), "Buyer's Remorse or Missed Opportunity? Differential Regrets for Material and Experiential Purchases," *Journal of Personality and Social Psychology*, 102, 215-23.
- Schlegel, Rebecca J., Joshua A. Hicks, Jamie Arndt, and Laura A. King (2009), "Thine Own Self: True Self-Concept Accessibility and Meaning in Life," *Journal of Personality and Social Psychology*, 96, 473-490.
- Steger, Michael F., Patricia Frazier, Shigehiro Oishi, and Matthew Kaler (2006), "The Meaning in Life Questionnaire: Assessing the Presence of and Search for Meaning in Life," *Journal of Counseling Psychology*, 53, 80-93.
- Van Boven, Leaf and Thomas Gilovich (2003), "To Do or to Have? That Is the Question," *Journal of Personality and Social Psychology*, 85, 1193-1202.

Mind The Gap: How Smaller Numerical Differences Can Increase Product Attractiveness

Meyrav Shoham, Bar-Ilan University, Israel
Yael Steinhart, Tel-Aviv University, Israel
Sarit Moldovan, The Open University of Israel, Israel

EXTENDED ABSTRACT

This research explores situations in which *smaller* numerical differences can be perceptually *larger* and consequently increase product attractiveness. We find that when a product's numerical information changes from a decimal to an integer (e.g., 3.4 to 4), consumers are likely to perceive the product as more improved and therefore *more* appealing than when the change is between two integers (e.g., from 3 to 4), even though the difference is larger in the latter case. Specifically, we propose that when a product's version number or rating changes from a decimal number to an integer, consumers infer that the product has leapt over intermediate values and crossed the threshold into a new category, reflecting greater improvement.

A decimal number can draw attention to the fine-grained scale and may suggest the possibility of additional, intermediate values (Pandelaere, Briers and Lerbregts 2011). Consequently, we propose that the change from a decimal to an integer (rather than to another decimal number) is perceived as the crossing of a threshold. Building on research showing the impact of category boundaries on consumers' perceptions and behavior (e.g., Irmak, Walker-Naylor, and Bearden 2011; Isaac and Schindler 2013), we predict that a decimal-to-integer boundary crossing will lead consumers to infer that the product has improved substantively, which will increase product attractiveness.

This positive effect of a smaller, more precise difference is contingent upon the perception that a category threshold has been crossed. Therefore, we do not expect it to occur when the change is from one decimal number to another (e.g., from 2.1 to 2.7), as this is likely to be perceived as a relatively minor improvement. If the integer component of a number remains unchanged, consumers may focus on that rather than on changes in the digits after the decimal point.

The decimal-to-integer effect also depends on consumers' familiarity with the product and the scale. When the scale is vague or unfamiliar, consumers need to infer the meaning of the numerical information from whatever cues are available which will lead to the decimal-to-integer effect. If consumers have existing knowledge or understanding as to what the number actually represents, they should be less prone to such inferences about the meaning of the numerical differences.

In four studies, we provide support for the proposed effect, and demonstrate the mediating role of product improvement and how (lack of) familiarity with the numerical information moderates the effect.

Study 1 demonstrated that a smaller difference between a decimal version number and an integer version number can increase perceived product attractiveness. We randomly assigned undergraduate participants ($n=96$) to one of two conditions: software whose existing version number was either 3 (integer condition) or 3.4 (decimal condition). The new version in both conditions was 4. We found that participants who were told that the upgrade under consideration was from version 3.4 to version 4 were more favorable about an upgrade than those who were told that the upgrade being considered was from version 3 to version 4 ($t(94)=2.16, p=.03$).

In study 2, participants ($n=172$) were randomly assigned to one of five conditions in which they read descriptions of two versions of a "social camera," with different combinations of version numbers. A one-way ANOVA revealed significant differences between the conditions ($F(4,167)=2.57, p=.04$). Camera evaluations were more positive

in the version 2.4 vs. 3 condition than when the version number had changed from 2 to 3 ($F(1,167)=3.60, p=.06$). It was also more positive than in the version 2 vs. 2.6 condition ($F(1,167)=4.98, p=.03$), and the version 2.1 vs. 2.7 condition ($F(1,167)=8.75, p<.01$). Differences between the other conditions in the study were not significant. These results indicate that it is not the precision of a decimal number in itself that is advantageous, but rather the combination of numerical precision and the crossing of a numerical threshold.

Study 3 provided support for the underlying mechanism of perceived improvement. Participants ($n=85$) were randomly assigned to one of two conditions: a hotel whose previous "eco-friendly rating" was either 8 (integer condition) or 8.3 (decimal condition). They read that this rating had increased to 9 following a recent renovation. We found that the hotel was perceived as better when its rating had increased from 8.3 to 9 compared to when it had increased from 8 to 9 ($t(83)=2.35, p=.02$). Interest in staying at the hotel was also greater in the decimal-to-integer rating condition compared to the integer-to-integer rating condition ($t(83)=1.92, p=.06$). Perceived improvement of the hotel mediated the effect ($b=0.20, SE=0.11; 95\% CI: 0.04$ to 0.46).

In study 4, we examined a possible moderator: the type of numerical information that consumers encounter. Participants ($n=190$) were randomly assigned to one of four conditions in a 2(previous product model: decimal or integer) \times 2(type of numerical information: familiar or less familiar) experimental design. They were asked to imagine that they wanted to buy a new camera. In the familiar condition, participants were told that the previous model of this camera had a display size of 3 or 3.4 inches, while the new camera had a 4-inch display. In the less familiar condition, participants were told that the camera's "color accuracy rating" had increased from 3 or 3.4 to 4. We found a familiarity \times type of numerical information interaction ($F(1,186)=5.98, p=.02$), such that participants who were presented with the unfamiliar color accuracy rating were more interested in buying the camera when the rating had improved from 3.4 to 4 than when it had increased from 3 to 4 ($F(1,186)=4.13, p=.04$). Among participants who read about the camera's display size, the difference between the decimal and integer conditions did not reach significance ($F(1,186)=2.05, n.s.$).

While larger numerical gaps might be expected to signal a greater difference between product versions or ratings, our findings indicate that sometimes the reverse is true: smaller differences can be perceptually larger and boost product attractiveness. In other words, some small differences *feel* larger than others – and it is important to "mind the gap" and its implications.

REFERENCES

- Irmak, Caglar, Rebecca Walker Naylor, and William O. Bearden. (2011), "The out-of-region bias: Distance estimations based on geographic category membership," *Marketing Letters*, 22 (2), 181-196.
- Isaac, Mathew S., and Robert M. Schindler (2013), "The Top-Ten Effect: Consumer's Subjective Categorizations of Ranked Lists," *Journal of Consumer Research*, 40 (2), 1181-1202.
- Pandelaere, Mario, Barbara Briers, and Christophe Lerbregts (2011), "How to make a 29% increase look bigger: The unit effect in option comparisons," *Journal of Consumer Research*, 38 (2), 308-322.

The Friend-Number Paradox

Kao Si, The Chinese University of Hong Kong, Hong Kong
Xianchi Dai, The Chinese University of Hong Kong, Hong Kong
Robert Wyer, The Chinese University of Hong Kong, Hong Kong

EXTENDED ABSTRACT

Little research has examined people's competence in predicting others' perceptions of their own attractiveness in social networks. Mispredictions of this kind are consequential: They hinder the establishment and maintenance of desirable relationships and negatively affect the efficient allocation of resources to achieve particular goals in the social realm. For example, a woman might overestimate others' liking for her and adopt an interaction strategy that actually decreases her popularity (Dai, Dong, and Jia 2014). A political candidate who over-predicts his or her favorability in the eyes of minority groups might distribute his or her attention and resources in a suboptimal manner that decreases the chances of winning. In short, correct insights into others' preferences towards oneself are important for people's well-being and functioning in general and for accomplishment of effective marketing campaigns in particular.

In this research, we propose and investigate a fundamental preference mismatch in social networking with regard to individuals' numbers of friends. By "social networking," we are referring to the will and practices undertaken to expand one's social circle. It includes but is not limited to the use of Internet-based social media platforms. In addition, we focus on social networking for the purpose of establishing "pure" friendships rather than those formed in pursuit of economic, professional, or other interests (e.g., establishing business connections). We show that people expect others to be more willing to make friends with them when they already have a large number of friends, whereas others actually exhibit a preference that is diametrically opposed to that expectation: People are actually more willing to make friends with someone who has a small number of friends. We coin the term *friend-number paradox* to describe this mismatch between people's expectation and others' actual preference. In the following, we explicate the reasons behind this paradox and report the results of four studies confirming the validity of our propositions.

Theoretical Background

Preference for Small Number of Friends

Social ties are the building blocks of the social world and are thus highly valued, with larger numbers of social ties often reflecting higher social esteem and more likeable personality traits. It therefore seems reasonable to assume that people prefer individuals with larger numbers of friends as social networking targets (Feld 1991). However, social ties are valuable only to the extent that adequate levels of relationship quality are maintained, and relationship quality is essentially entrenched in the obligations and expectations inherent in social ties. Reliability and the due fulfillment of obligations and expectations cost attention, time, and other resources.

In his seminal paper, Coleman (1988) suggested that obligations and expectations constitute a major form of social capital that facilitates actions within social networks and is an important resource with regard to efficiency and well-being. Given the importance of social capital, its accumulation is an implicit yet fundamental objective in social networking. In other words, relationship quality is the primary concern of social networking. Hence, an individual's ability to honor his or her obligations to another person and to meet that person's expectations (i.e., ability to build social capital with that person) should be a predominant predictor of the latter's preference for networking

with the individual. We propose that this ability is negatively affected by an individual's number of social ties because limited resources become more diluted with a larger number of social ties. Therefore, a person would expect the quality of his or her relationship with a given individual to be poorer if that individual had a large number of friends, and be less likely to make the effort to become friends with that individual. In other words, we predict that people are more likely to network with individuals who have fewer existing friends.

Preference Mispredictions in Social Networking

If the preceding observations are valid, then why would people overlook others' concern for relationship quality and mispredict their preferences? For one thing, taking the perspective of others requires effort and motivation (Epley, Keysar, Van Boven, and Gilovich 2004; Lin, Keysar, and Epley 2010). As a result, people often exhibit an egocentric bias, focusing on self-relevant information while paying insufficient attention to concerns that might underlie others' judgments (Ross and Sicoly 1979; Windschitl, Kruger, and Simms 2003). It is therefore proposed that when predicting the number of social ties that others prefer, people are prone to overlooking others' concern for relationship quality and focus instead on the symbolic significance of social ties. In other words, they may infer that the greater the number of ties they have, the higher their social esteem and more likeable their personality traits, and thus the stronger others' preference for networking with them.

Furthermore, we propose that this preference mismatch is also a result of people's neglect of their own obligations and expectations in the social network when formulating the predictions. Research shows that people are inclined to neglect various kinds of "expenses" when they make judgments and predictions (Berman, Tran, Lynch and Zauberman 2016; Campbell and Warren 2015; Frederick, Novemsky, Wang, Dhar, and Nowlis 2009). For example, they often neglect opportunity costs in their decisions and choices (Frederick et al. 2009). If insufficient consideration has been given to the obligations and expectations inherent in social ties, individuals are likely to become insensitive to the decrease in relationship quality caused by increases in the numbers of social ties, and thus express a preference for a larger number of ties in their predictions.

In summary, we propose that people expect others to be more willing to make friends with them when they have a large number of friends. Others, in contrast, are more willing to make friends with someone who has a small number of friends. This preference mismatch arises because people overlook others' concern with relationship quality and focus on the symbolic meaning of social ties when making predictions about others. Further, the difference in relationship quality concern is closely related to neglect of one's obligations to and expectations from friends at the time these predictions are formulated. We conducted four studies that demonstrate this preference mismatch and test the validity of our hypotheses. We describe the major findings of the studies in the next section.

Study 1: Friend Number on Facebook

Method

102 participants ($M_{Age} = 35.21$, 59% male) took part in a short choice study. The participants read that Facebook is one of today's most widely used online social networking sites. Then, those in the

others' preference condition were asked to predict whether others would be more likely to make friends with them if their Facebook page showed that they had 500 friends or 50 friends. Participants in the *own preference* condition were asked whether they would be more likely to make friends with a person whose Facebook page showed 500 friends or 50 friends.

Results

71% (36/51) of participants in the *others' preference* condition predicted that others would be more likely to make friends with them if they had 500 rather than 50 friends on Facebook. In contrast, only 31% (16/51) of participants in the *own preference* condition preferred an individual with 500 rather than 50 Facebook friends. The difference between the two conditions was highly significant ($\chi^2(1) = 15.69, p < .001$).

Study 2: Preference for a Target Person's Relationship Quality

The results of Study 1 are consistent with our proposed effect. However, an alternative explanation could also account for our findings: Individuals with an *excessive* number of friends are associated with certain negative impressions (e.g., frivolousness) that affect others' inferences about their social esteem and personality traits. Therefore, participants in the *own preference* condition may have chosen the person with fewer friends not because of relationship quality concerns but out of concerns over the target person's social esteem or personality traits.

In Study 2, we tested this alternative explanation by asking participants whether they would prefer a target person who had many good relationships (strong relationship quality) versus another who had merely many acquaintances (weak relationship quality). Like relationship quantity, average relationship quality should also negatively influence an individual's ability to build social capital with others. However, stronger average relationship quality should be unconditionally associated with higher social esteem and more likeable personality traits. If the effects in Study 1 were indeed driven by differing concerns over relationship quality, then we would expect a significant difference in preferences to again emerge between the two judgment conditions.

Method

101 participants ($M_{\text{Age}} = 35.61$, 62% male) took part in this study. Participants in the *others' preference* condition read a scenario in which they were asked to imagine themselves in each of two situations. In one situation, they had lived in a community for a long time and had good relationships with many people. In the other, they had recently moved to a new community and had made the acquaintance of the same number of people as in the first situation. They then selected the situation in which they thought others would be more willing to make friends with them.

In the *own preference* condition, participants were instructed to imagine two fictitious persons in their community who were similar to each other in all aspects except that one had lived in the community for a long time and had good relationships with many people, whereas the other had moved to the community recently and was merely acquainted with the same number of people. They were then asked to select the person with whom they would prefer a friendship.

Results

Of the participants in the *others' preference* condition, 84% (42/50) thought that others would be more likely to make friends with them if they had many good friends rather than an equal number of acquaintances. In the *own preference* condition, however, only 51% (26/51) of participants expressed a preference for making

friends with a person with many good friends over one with an equal number of acquaintances. The difference between the two conditions was highly significant ($\chi^2(1) = 12.51, p < .001$). These results therefore provide further evidence that the preference mismatch is driven by concerns over relationship quality rather than inferences about the target person's social esteem or personality traits.

Study 3: Concern With Relationship Quality

Study 3 provided evidence supporting the mediating role of differences in relationship quality concern in the current effect.

Method

100 participants ($M_{\text{Age}} = 38.89$, 52% male) took part in this study. Study 3 adopted a design similar to that of Study 1. After participants made their choices, they were given four descriptions regarding their concerns for relationship quality and were asked to indicate whether those concerns had occurred to them when they were making their choices.

Results

The choice data replicated results of our previous studies. 72% (36/50) of the participants in the *others' preference* condition predicted that another individual would be more likely to make friends with them when they had 200 instead of 50 friends. However, only 22% (11/50) of participants in the *own preference* condition expressed a preference for making friends with another individual with 200 versus 50 friends ($\chi^2(1) = 25.09, p < .001$).

Analysis of the combined measure of relationship quality concern ($\alpha = .90$) revealed that the participants in the *own preference* condition were concerned with relationship quality to a significantly greater extent ($M = 5.20, SD = 1.50$) than those in the *others' preference* condition ($M = 4.33, SD = 1.44; F(1, 98) = 8.88, p = .004; d = .59$). We confirmed the mediating effect of relationship quality concern on the relationship between judgment perspective and friend-number preference using the bootstrapping method (Hayes 2013). With 5000 bootstrap samples, the indirect mediating effect was estimated to be $-.93$ (boot $SE = .57$), with its 95% bias-corrected confidence interval $(-2.27, -0.23)$ excluding zero.

Study 4: Reminder of Obligations and Expectations

As previously noted, differences in the degree of concern with relationship quality are inextricably associated with the failure to consider the obligations and expectations inherent in social ties when predicting the preferences of others. Hence, reminding participants of those obligations and expectations should attenuate or even reverse a preference for large numbers of friends in their predictions, thereby bringing those predictions more in line with the actual preferences of others. Study 4 examined this prediction.

Method

Study 4 employed a similar design as in Studies 1 and 3. A *reminder* condition was added in which participants were asked to think about and write down what others would expect them to do in various situations as friends before they predicted others' preference for their number of friends in social networking. 205 participants ($M_{\text{Age}} = 33.31$, 59% male) were randomly assigned to three between-participants conditions.

Results

The participants' choices differed significantly among the three conditions ($\chi^2(2) = 31.18, p < .001$). Replicating our previous findings, the majority of participants (79%; 56/71) in the *own preference* condition preferred another individual with 50 rather than 200 friends, whereas only a small proportion of participants (32%; 23/71) in the *others' preference (baseline)* condition correctly pre-

dicted that preference by the majority of others ($\chi^2(1) = 31.07, p < .001$). More importantly, compared with the baseline condition, a significantly larger percentage (57%; 36/63; $\chi^2(1) = 8.30, p = .004$) of participants in the *reminder* condition predicted that others would be more likely to make friends with them if they had 50 rather than 200 friends, although the percentage still differed from that in the *own preference* condition ($\chi^2(1) = 7.33, p = .007$). These findings again provide support for our proposed mechanism underlying the friend-number paradox.

General Discussion

One important motivation for engaging in social networking is to expand one's number of social ties. In the studies reported herein, we found that in the process of such engagement, people paradoxically prefer individuals with a relatively small rather than large number of friends. At the same time, they are rather inept at predicting that preference of others, judging instead that others would prefer to network with them if they had more rather than fewer friends.

The current research examines a fundamental mismatch between people's predictions of others and their own personal preferences. We investigated the mismatch in the context of social networking, which is highly relevant to daily life and important to well-being. However, we believe that the friend-number paradox is pertinent to a much wider scope of contexts, and hope that further studies will be inspired to explore its broader implications.

REFERENCES

- Berman, Jonathan Z., An TK Tran, John G. Lynch Jr, and Gal Zauberman (2016), "Expense Neglect in Forecasting Personal Finances," *Journal of Marketing Research*, 53 (4), 535-50.
- Campbell, Margaret C., and Caleb Warren (2015), "The progress bias in goal pursuit: When one step forward seems larger than one step back," *Journal of Consumer Research*, 41 (5), 1316-31.
- Coleman, James S. (1988), "Social capital in the creation of human capital," *American Journal of Sociology*, 94, S95-S120.
- Dai, Xianchi, Ping Dong, and Jayson S. Jia (2014), "When does playing hard to get increase romantic attraction?" *Journal of Experimental Psychology: General*, 143 (2), 521-6.
- Epley, Nicholas, Boaz Keysar, Leaf Van Boven, and Thomas Gilovich (2004), "Perspective taking as egocentric anchoring and adjustment," *Journal of Personality and Social Psychology*, 87 (3), 327-39.
- Feld, Scott L. (1991), "Why your friends have more friends than you do," *American Journal of Sociology*, 96 (6), 1464-77.
- Frederick, Shane, Nathan Novemsky, Jing Wang, Ravi Dhar, and Stephen Nowlis (2009), "Opportunity cost neglect," *Journal of Consumer Research*, 36 (4), 553-61.
- Hayes, Andrew F (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*, Guilford Press.
- Lin, Shuhong, Boaz Keysar, and Nicholas Epley (2010), "Reflexively mindblind: Using theory of mind to interpret behavior requires effortful attention," *Journal of Experimental Social Psychology*, 46 (3), 551-6.
- Ross, Michael, and Fiore Sicolu (1979), "Egocentric biases in availability and attribution," *Journal of Personality and Social Psychology*, 37 (3), 322-36.
- Windschitl, Paul D., Justin Kruger, and Ericka Nus Simms (2003), "The influence of egocentrism and focalism on people's optimism in competitions: When what affects us equally affects me more," *Journal of Personality and Social Psychology*, 85 (3), 389-408.

Time Units and Patience

Rafay A. Siddiqui, Hong Kong Polytechnic University, Hong Kong
Ashwani Monga, Rutgers University, USA
Eva Buechel, University of South Carolina, USA

EXTENDED ABSTRACT

Consider a consumer in the market for an iPad, who could purchase the current generation iPad (SS) or wait for the next generation version that is better, but available later in time (LL). In the current work, we show that patience may increase when wait time for LL is expressed using larger units of time. Importantly, we argue that this only occurs when the rewards are hedonic in nature, and not when they are utilitarian.

Theoretical Development

Patience in intertemporal choices may be affected by wait time perception (Kim, Zauberaman and Bettman 2012), as well as the nature of the rewards (Thaler 1981). We demonstrate a novel interactive effect of wait time and rewards. Specifically, we show that the units used to describe wait time (e.g., days vs. months) influence wait time perception, and consequently patience, but this is contingent on whether the rewards are hedonic or utilitarian. Our prediction for this interactive effect is based on past work on the numerosity heuristic and the hedonic vs. utilitarian distinction in consumer products.

People have a tendency to equate smaller numbers with smaller magnitudes, an effect known as the numerosity heuristic (Pelham, Sumarta and Myaskovsky 1994). For example, 10,000 Korean Won appear to be greater than 1,000 Japanese Yen, even though both are of equal value (Raghubir and Srivastava 2002). Thus, if the wait time for LL is expressed as 3 months instead of 90 days, people should perceive it to be shorter and, consequently, become more patient. The reason for this is that the larger unit of months results in a smaller number being used to express the wait time (i.e., '3' rather than '90'). However, since numerosity is an effortless heuristic, it should impact intertemporal choice more when decision makers are relying less on careful calculation. We believe one such situation is when individuals evaluate hedonic rather than utilitarian rewards. Given that the primary purpose of hedonic consumption is pleasure rather than practicality (Khan et al. 2005; Pham 1998), hedonic consumption is associated less with careful thinking and more with reliance on feelings. The influence of the numerosity heuristic in intertemporal choice should thus be stronger in the case of hedonic rewards. Hence, we predict that larger time units should lead to shorter wait time perception and, consequently, higher patience, but that this should only be the case when the rewards are hedonic rather than utilitarian.

We observe support for our prediction in six studies, four of which provide process evidence. Studies 3 to 6 show that the interactive effect of time unit and reward type on patience is mediated by the perceived length of the wait time. Studies 5 and 6 demonstrate that this interactive effect attenuates when participants engage in careful calculation.

Studies

In study 1, participants made a hypothetical choice between the current version of a computer tablet versus an upcoming version. The tablet was manipulated to be either hedonic or utilitarian and the wait time for the upcoming version was expressed as 120 days vs. 4 months. Participants were more patient for the new version when wait time was expressed in months rather than days, but only when the tablet was hedonic (not when it was utilitarian).

In study 2, participants were first manipulated to think of money as a means to buy something hedonic versus utilitarian. Then they were offered either a small monetary reward that they could receive immediately or a larger monetary reward that they could receive later. The wait time for the larger reward was expressed as 4 days vs. 96 hours. Participants waited for the larger amount more when wait time was expressed in days rather than hours, but only when they thought of money as a means to buy something hedonic (not utilitarian).

In study 3, participants imagined receiving a \$100 visa gift card and were asked to think about what they will spend it on. They were then informed that they could receive a \$110 gift card instead if they were to wait. Wait time was expressed as 14 days vs. 2 weeks. Participants preferred to wait more when wait time was expressed in weeks rather than days, but only when they thought about buying hedonic (not utilitarian) products with the gift card. Participants' wait time perception mediated the effect of units and reward type on patience.

In study 4, participants imagined buying headphones online, which were manipulated to be either hedonic or utilitarian. They chose between standard and expedited shipping, with shipping times expressed in hours vs. days. For hedonic (but not utilitarian) headphones, participants chose standard shipping more, and thus reflected more patience, when shipping times were in days rather than hours. Participants' wait time perception mediated the effect of units and reward type on patience.

In study 5, participants were first manipulated to think of money as a means to buy something hedonic versus utilitarian. They then indicated preference between a \$100 gift card in 2 weeks (vs. 14 days) versus a \$120 gift card in 8 weeks (vs. 56 days), and completed the lay rationalism scale (Hsee et al. 2015) as a measure of their natural inclination towards relying more on calculation. Results from earlier studies replicated, but only for participants who were relatively low on the lay rationalism scale.

In study 6, in a control condition, participants completed the same procedure as in study 4. In a calculation prime condition, participants first solved a few mathematical problems that would encourage careful calculation rather than the use of heuristics. Results from study 4 replicated in the control condition, but in the calculation prime condition no significant effects were observed even when the rewards were hedonic.

Discussion

We show that using larger units to express wait time can boost patience, but only when the rewards are hedonic and not when they are utilitarian. Reliance on careful calculation attenuates the effect even for hedonic rewards. These results reveal a novel interactive effect between the nature of the rewards and wait time perception in intertemporal choice.

REFERENCES

- Hsee, Yang Yang, Kingshan Zheng, and Hanwei Wang (2015), "Lay Rationalism: Individual Differences in Using Reason Versus Feelings to Guide Decisions," *Journal of Marketing Research*, 52 (1), 134-146.

- Khan, Uzma, Ravi Dhar, and Klaus Wertenbroch (2005), "A Behavioral Decision Theory Perspective on Hedonic and Utilitarian Choice," *Inside Consumption: Frontiers of Research on Consumer Motives, Goals, and Desires*, 144-65.
- Kim, B. Kyu, Gal Zauberaman, and James R. Bettman (2012), "Space, Time, and Intertemporal Preferences," *Journal of Consumer Research*, 39 (4), 867-80.
- Pelham, Brett W., Tin T. Sumarta, and Laura Myaskovsky (1994), "The Easy Path from Many to Much: The Numerosity Heuristic," *Cognitive Psychology*, 26 (2), 103-33.
- Pham, Michel T. (1998), "Representativeness, Relevance, and the Use of Feelings in Decision Making," *Journal of Consumer Research*, 25 (2), 144-59.
- Raghubir, Priya, and Joydeep Srivastava (2002), "Effect of Face Value on Product Valuation in Foreign Currencies," *Journal of Consumer Research*, 29 (3), 335-47.
- Thaler, Richard H. (1981), "Some Empirical Evidence on Dynamic Inconsistency," *Economics Letters*, 8 (3), 201-07.

Lacking a Resource or Being One: Money Scarcity versus Time Scarcity Differentially Shape Self-value and Product Judgments

Jane So, University of Washington, USA
Nidhi Agrawal, University of Washington, USA

EXTENDED ABSTRACT

In this article, we investigate how time scarcity and money scarcity differentially affect consumer's subjective assessment of the self-value via altering consumer's view of the self as a resource.

Time and money are both primary resources that are used to achieve certain ends (Becker 1965). However, consumer researchers have shown that time is systematically different from money in multiple ways (Leclerc et al. 1995; Mogilner and Aaker 2009; Okada and Hoch 2004). One important difference between time and money is that money does not require the self as an actor to have its value and meaning but time is bounded up with the self to have its value and meaning. Money is a medium of exchange that has a fixed value (Leclerc et al. 1995; Okada and Hoch 2004; Saini and Monga 2008). However, time is by its definition, an experience that the self is connected to (Liu and Aaker 2008; Mead 1934; Reed et al. 2007).

We suggest that due to this difference in interconnectedness of the self and the resources, the self-inferences that people make when feeling time (vs. money) scarcity can be different. Because money is not bounded up with the self, the self-inference that people make when feeling money scarcity is simply that 'I don't have the resource'. Money is a tangible resource that one can possess (Macdonnell and White 2015) and be used to exchange with desirable outcomes. Thus, people who are feeling money scarcity may have a negative self-inference such that they lack the scarce and important resource. However, time is a resource that the self is at root (Flaherty and Fine 2002; Mead 1932), thus scarcity of time entails meanings other than simply not possessing the resource. Because individual's activities and experiences translates into spending time (George and Jones 2000; Mead 1932), lack of time means the shortage of the self as an actor who needs to take multiple roles at the same time (Jabs and Devine 2006; Kaufman et al. 1991). Thus when feeling time scarcity, people may have a positive self-inference such that 'I am the scarce resource', over and above the negative inference of 'I don't have the scarce resource'.

We further suggest that this relative difference in self-inferences will differentially affect consumer's self-value. We suggest that the desirability and positive aspects of scarcity can be applied to the self when making the positive self-inference that further leads to greater self-value. We measure the self-value through a variety of self-related variables such as self-esteem, self-importance, and self-achievement. Such increased self-value shapes consumer's preference towards products that reflect the higher self-value such as choosing higher priced products and better evaluations of products that pitch the self as 'being worth it' or special. Furthermore, to test that these effects are driven by the positive self-inferences, we document conditions when time scarcity does not lead to favorable self-inferences (i.e., low personal control) and when money scarcity leads to more favorable self-inferences (e.g., when the scarcity arises from prioritization).

The objective of study 1 is to show that time (vs. money) scarcity leads to increased positive self-inference, which further affects consumer's responses. We used pre/post measure of positive and negative self-inferences to test this link. We found that both time and money scarcity led to greater negative self-inference (i.e., I lack the scarce resource). However, we found that only time (vs. money) scarcity led to greater positive self-inference (i.e. I am the scarce

resource). Moreover, we found that the increased positive self-inference significantly predicted self-value (e.g., self importance, self-esteem) and self-value significantly predicted consumer's preference towards self-value promoting advertisement. We found a serial mediation in this study.

In study 2, we showed the effect of time (vs. money) scarcity on positive self-inference can be switched off by using personal control as a moderator. If time scarcity leads to greater positive self-inference because spending time requires the self as an actor, then those who perceives themselves as unable to change the outcome will be less likely to infer that they are the scarce resource. As predicted, we replicated our previous effect that time (vs. money) scarcity leads to greater positive self-inference, among those who have high personal control. However, we found that such difference was diminished among those who have low personal control.

In study 3, we showed that money scarcity effect can be switched on. If money scarcity does not lead to positive self-inference because the self as an actor is not salient to consumers, then highlighting the positive role of the self should boost their positive self-inference. We tested this using the self as the source of scarcity. Those who view themselves as a positive source of scarcity (i.e. feeling scarcity because the self was prioritizing the use of resource), we should see that even money scarcity leads to greater positive self-inference. However, those who view themselves as a negative source of scarcity (i.e., feeling scarcity because the self mismanaged the use of resource), we should replicate our previous effect. We used 2(money scarcity vs. time scarcity) x 2(prioritization vs. mismanagement vs. control) between subjects design. We replicated our previous findings in the control and the mismanagement condition, such that time scarcity condition indicated greater positive self-inference and preference towards indulgent product than the money scarcity condition. However, within the prioritization condition, the money scarcity condition showed increased positive self-inference and increased preference towards indulgent product.

Our findings suggest that compared to money scarcity, time scarcity leads to positive self-inference whereas both time scarcity and money scarcity lead to negative self-inference. This is due to that time is more bounded up with the self, such that spending time cannot be done without the self as an actor. Such positive self-inference leads time (vs. money) scarce people to have greater assessment of self-value.

REFERENCES

- Becker, Gary S. (1965), "A Theory of the Allocation of Time," *Economic Journal*, 75 (299), 493-517.
- Flaherty, Michael G., and Gary Alan Fine (2001), "Present, Past, and Future," *Time & Society* 10 (2-3), 147-161.
- George, Jennifer M., and Gareth R. Jones (2000), "The Role of Time in Theory and Theory Building," *Journal of Management*, 26(4), 657-684.
- Jabs, Jennifer, and Carol M. Devine (2006), "Time Scarcity and Food Choices: an overview," *Appetite*, 47 (2), 196-204.
- Kaufman, Carol F., Paul M. Lane, and Jay D. Lindquist (1991), "Exploring More than 24 Hours Day: A Preliminary Investigation of Polychronic Time Use," *Journal of Consumer Research*, 18 (3), 392-401.

- Leclerc, France, Bernd H. Schmitt, and Laurette Dube (1995), "Waiting Time and Decision Making: Is Time like Money?" *Journal of Consumer Research*, 22 (1), 110-19.
- Liu, Wendy and Jennifer Aaker (2008), "The Happiness of Giving: The Time-Ask Effect," *Journal of Consumer Research*, 35 (3), 543-57.
- Macdonnell, Rhiannon, and Katherine White (2015), "How Construals of Money Versus Time Impact Consumer Charitable Giving," *Journal of Consumer Research*, 42 (4), 551-63.
- Mead, G. H. (1932), *The Philosophy of the Present*, Chicago, London: Open Court Publishing.
- Mogilner, Cassie, and Jennifer Aaker (2009), "The Time vs. Money Effect": Shifting Product Attitudes and Decisions through Personal Connection," *Journal of Consumer Research*, 36 (2), 277-91.
- Okada, Erica Mina, and Stephen J. Hoch (2004), "Spending Time versus Spending Money," *Journal of Consumer Research*, 31(2), 313-23.
- Reed, Americus II, Karl Aquino, and Eric Levy (2007), "Moral Identity and Judgments of Charitable Behaviors," *Journal of Marketing*, 71 (1), 178-93.
- Saini, Ritesh, and Ashwani Monga (2008), "How I Decide Depends on What I Spend: Use of Heuristics Is Greater for Time than for Money," *Journal of Consumer Research*, 34 (6), 914-22.

The Power of Negative Visualizations: When Fear Appeals Motivate Consumer Behavior

Kamila Sobol, Concordia University, Canada
Marilyn Giroux, Auckland University of Technology, New Zealand

EXTENDED ABSTRACT

Fear appeals are a common marketing tactic that intend to persuade consumers to buy products and services that aim to help avoid an undesirable outcome. It is proposed that the main mechanism involved is the arousal of fear or anxiety, a potent source of energy that propels people into action (Hull 1943). It is assumed that scare tactics should modify behavior when the undesirable outcome is perceived as severe, probable, yet surmountable (Rogers 1975). However, empirical evidence reveals that fear appeals are not always efficient despite meeting these criteria (e.g. Morales et al. 2012; Passyn and Sujun 2006). Various variables were examined to explain the inconsistencies in past findings (e.g. Manyiwa and Brennan 2012; Smith and Stutts 2003), focusing primarily on moderators relating to types of fear appeal, emotions and individual differences.

The present paper employs the technique of visualization to further understand instances when fear appeals are, and are not, efficient at motivating behavior. Work on negative visualizations is limited and generally affirms that mental imagery of feared self-states encourage consumers to engage in behaviors that will distance them from the undesirable outcome (Hoyle and Sherrill 2006). However, we propose that negative visualizations are not all equally efficient, and that processing style (abstract versus concrete) is a key determinant of the fear appeal's persuasiveness. More specifically, abstract imagery of the feared self should increase motivation to avoid the undesirable outcome, while concrete visualizations do not produce such motivational tendencies.

These propositions are based on past research which affirms that abstract processing reduces perceived boundaries between an individual's various self-concepts, while concrete processing heightens self-concept distinctions (Forster et al. 2008; Wakslak et al. 2008). This theorizing suggests that mentally simulating one's feared self-state in abstract terms should evoke perceptions of assimilation to the imagined feared self, which is likely to evoke sufficient anxiety required to drive motivated behavior. Conversely, visualizations processed in a concrete fashion heighten perceptions of self-discrepancy, thereby reassuring individuals that the feared self is distant from their present state and hence, that no action is required. In sum, we propose that fear appeals have the potential to motivate consumer behavior, but only when they instigate abstract (not concrete) visualizations. Further, we also show that this effect is driven by feelings of anxiety.

Study 1

To verify whether abstract visualizations enhance motivation, we examine whether they increase people's tendency to engage in goal shielding – i.e. a tendency to inhibit other goals from diverting attention from a focal goal (Shah et al. 2002). 128 participants were randomly assigned to a 2 (visualization task: feared self, control) by 2 (processing style: abstract, concrete) between-subject design. 12 participants (9%) were dropped for failing to complete the manipulation task. In the feared self condition, participants either visualized having achieved their feared body appearance in a general sense (i.e. abstract processing), or first specified important attributes associated with their feared body image (e.g. gain 20 pounds, cellulite) and then visualized having achieved these concrete attributes (i.e. concrete processing). In the control condition, participants visualized

their daily routine in a general sense (i.e. abstract) or specifically visualized their morning routine (i.e. concrete). In a seemingly unrelated study participants were asked to write down their new year's resolutions. Answers were coded for how many unrelated goals were reported (dependent variable). If the avoidance goal (i.e. feared body appearance) was still activated, participants should engage in goal shielding and list less goals unrelated to health and fitness. An ANOVA and simple contrasts verified that abstract fear visualizations motivated goal shielding tendencies more so than the other types of visualizations ($M_{viz_abstract}=.85$, $M_{viz_concrete}=1.57$, $M_{control_abstract}=1.79$, $M_{control_concrete}=1.33$).

Study 2

The main objective of study 2 was to confirm that abstract visualizations of the feared self motivate goal-congruent choices. 194 undergraduate students participated in a 2 (visualization task: feared self, control) x 2 (processing style: abstract, concrete) between-subject design. 12 participants (6%) were dropped for failing to complete the imagery task. Participants first completed the same visualization task as in study 1. After a short filler task, subjects were presented with a list of 20 consumer goods, and rated how likely they were to purchase each item (7-point scale). Included in the list were 6 health-related items (e.g. running shoes, smoothie maker). The mean score served as the dependent variable. An ANOVA and simple contrasts verified that abstract visualizations of the feared self motivated higher intent to purchase healthy goods, compared to the other visualizations ($M_{viz_abstract}=5.12$, $M_{viz_concrete}=4.55$, $M_{control_abstract}=4.65$, $M_{control_concrete}=4.61$).

Study 3

The objective of Study 3 was to provide evidence for the proposed affect-based mechanism, namely that abstract imagery evokes feelings of anxiety, and that these feelings prompt motivated behavior. 215 participants were randomly assigned to the abstract fear and routine visualization conditions (the concrete conditions were removed). They then reported their feelings, and completed the same consumer survey as in the previous study, measuring their level of interest in health-related products. A mediational analysis using model 4 of Hayes's PROCESS macro indicated a partial mediation (5000 samples, 95% CI, .04-.13) (figure 1). The indirect effect of abstract fear visualizations on healthy behaviors through anxiety was positive, however, anxiety only partially mediates this relationship since the direct effect of abstract fear visualizations on healthy behaviors, after the path through anxiety was accounted for, was still significant.

General Discussion

The present findings show when and how visualizations of the feared self motivate people to make goal-relevant consumer choices and engage in goal-congruent behaviors, as well as provide preliminary evidence for the mediating role of affect in this relationship. The present paper contributes to the literature in at least three ways. First, we are the first to employ the visualization technique when examining the effects of fear appeals in consumer research. Second, we are the first to examine the role of processing style as a moderator in the mental imagery literature. Third, we provide empirical evidence

that negative mental imagery motivates consumer behavior via emotional arousal (not only cognitive processes).

REFERENCES

- Forster, J., Liberman, N., & Kuschel, S. (2008). The effect of global versus local processing styles on assimilation versus contrast in social judgment. *Journal of Personality and Social Psychology*, 94(4), 579-599.
- Hoyle, R., & Sherrill, M. (2006). Future orientation in the self-system: possible selves, self-regulation, and behavior. *Journal of Personality*, 74(6), 1673-1696.
- Manyiwa, S. & Brennan, R. (2012). Fear appeals in anti-smoking advertising: How important is self-efficacy?. *Journal of Marketing Management*, 28(11/12), 1419-1437.
- Morales, A., Wu, E. & Fitzsimons, G. (2012). How disgust enhances the effectiveness of fear appeals. *Journal of Marketing Research*, 49(June), 383-393.
- Passyn, K. & Sujan, M. (2006). Self-accountability emotions and fear appeals: Motivating behavior. *Journal of Consumer Research*, 32(2), 583-590.
- Rogers, RW. (1975). A protection motivation theory of fear appeals and attitude change. *J.Psych* 91: 93-114.
- Ruiter, R., Abraham, C., & Kok, G. (2001). Scary warnings and rational precautions: A review of the psychology of fear appeals. *Psychology and Health*, 16 (6), 613-630.
- Shah, JY., Friedman, R., & Kruglanski, AW. (2002). Forgetting all else: On the antecedents and consequences of goal shielding. *Journal of Personality and Social Psychology*, 83 (6), 1261-1280.
- Smith, K. & Stutts, MA. (2003). Effects of short-term cosmetic versus long-term health fear appeals in anti-smoking advertisements on the smoking behavior of adolescents. *Journal of Consumer Behavior*, 3(2), 157-177.
- Wakslak, C., Nussbaum, S., Liberman, N., & Trope, Y. (2008). Representations of the self in the near and distant future. *Journal of Personality and Social Psychology*, 95(4), 757-773.

How Does Power Distance Belief Affect Consumers' Preference for User- versus Designer-Designed Products?

Xiaobing Song, Dalian University of Technology, China

Yinlong Zhang, University of Texas at San Antonio, USA

Vikas Mittal, Rice University, USA

EXTENDED ABSTRACT

User design, whereby firms draw on their user communities to generate ideas for new products (Dahl, Fuchs, and Schreier 2015), has become increasingly popular among marketers. However, there are substantial differences in the effectiveness of this design approach across countries, suggesting that cultural orientation is important in understanding the effect of user design on consumer preferences. Until now, the extant research has not yet investigated the role of cultural orientation. We propose that power distance belief (PDB), defined as “the extent to which a society accepts and views as inevitable or functional human inequality in power, wealth, or prestige” (Oyserman 2006, 353), moderates the relationship between design philosophy and consumer preference. More specifically, we predict that consumers with high (low) PDB will prefer designer- (user-) designed products to user- (designer-) designed products (H1). Additionally, the impact of low PDB on preferring user-designed products to designer-designed products is mediated by a stronger identification with the user-driven company (H2a), while the impact of high PDB on preferring designer-designed products to user-designed products is mediated by a stronger trust in the designer-driven company (H2b).

Study 1 used Apache's country-level market share to measure consumers' preference between user- and designer-designed products. We used Hofstede's country scores of power distance (PD) as independent variable, while individualism, masculinity, uncertainty avoidance, long-term orientation per capita GDP, educational index, and the Internet users index of each country as control variables. The results of regression on 75 matching countries indicated that only PD had a significant negative effect on Apache's market share ($b = -.009$, $z = -2.21$, $p = .02$), such that Apache's market share was smaller in countries with higher PD than in those with lower PD. Further, we found that the relationship between PD and user-designed product preference is robust by controlling for alternative explanations such as other cultural dimensions and economic variables. Taken together, the results supported hypothesis 1 at country level.

Study 2 was a 2 (PDB: low US vs. high China) \times 2 (Design philosophy: designer design vs. user design) between-subjects design. The results revealed a significant interaction between country and design philosophy ($F(1, 463) = 24.67$, $p < .001$). American participants (low PDB) demonstrated a stronger preference ($M_{\text{user A}} = .43$) for user-designed products than for designer-designed products ($M_{\text{designer A}} = -.18$; $F(1, 463) = 10.31$, $p = .001$), consistent with Dahl et al. (2015). The Chinese participants (high PDB) indicated a reverse pattern ($M_{\text{user A}} = -.36$, $M_{\text{designer A}} = .39$; $F(1, 463) = 14.46$, $p < .001$). Thus, hypothesis 1 was supported at individual level.

Study 3 was designed to investigate the underlying mechanism proposed in hypotheses 2a and 2b. It was a 2 (PDB: low vs. high) \times 2 (Design philosophy: designer design vs. user design) between-subjects design. We used the sentence-scrambling task developed by Zhang et al. (2010) to prime PDB, and we manipulated design philosophy following Schreier et al. (2012). The results revealed that the interaction effect between design philosophy and PDB ($F(1, 172) = 8.45$, $p = .004$) was significant. A planned contrast indicated a similar pattern to Study 2. More importantly, a bootstrap analysis revealed the significant moderated mediation effects of identification (95%

CI: [-1.19, -.02]) and trust (95% CI: [-.50, -.03]) at different levels of PDB. For low-PDB condition, identification (95% CI: [.03, .92]) mediated the positive effect of user design on purchase intention, whereas trust (95% CI: [-.27, .05]) did not. For high-PDB condition, the negative relationship between user design and purchase intention was mediated by trust (95% CI: [-.55, -.12]) but not by identification (95% CI: [-.48, .27]). Thus, hypothesis 2a and hypothesis 2b were supported.

Study 4 was a 4 (Design philosophy: novice designer design vs. designer design vs. user design vs. male user design) between-subjects design. The description in “designer design” and “user design” conditions was identical to Study 3. To manipulate the female participants' identification with the user-driven company, we additionally described the members of the user-community as predominantly male in the “male user design” condition. We manipulated participants' trust in the designer-driven company by undermining the expertise of the internal designers in the “novice designer design” condition. We measured purchase intention, identification, trust and chronic PDB. The results revealed a significant interaction effect between design philosophy and chronic PDB ($t(368) = -3.26$, $p = .001$). More importantly, when identification was manipulated to be low, there was no significant difference in purchase intention between the low-PDB participants in the “male user design” and the “designer design” conditions ($M_{\text{male user}} = 4.13$ vs. $M_{\text{designer}} = 4.18$; $t(368) = -.16$, $p > .80$), suggesting that identification was underlying low-PDB's effect on preference between designer and user designed products. However, when trust was manipulated to be low, no significant difference was found between the high-PDB participants' purchase intention in the “novice designer design” and “user design” conditions ($M_{\text{novice designer}} = 4.47$ vs. $M_{\text{user}} = 4.49$; $t(368) = -.07$, $p > .90$), suggesting that trust was mediating high-PDB's effect on dependent variable. Thus, this study provided stronger evidence regarding the underlying psychological processes using a moderation-by-process design.

This paper contributes to the relevant literature in several significant ways: advancing user-design research by uncovering a very important theoretical boundary condition, i.e., PDB; documenting a new psychological process for user-design evaluation by showing that trust is also essential to explain consumer's preference for user- versus designer-designed products among high-PDB consumers; advancing the PDB literature by demonstrating that PDB effect can be mediated by different psychological process, depending on the decision contexts.

REFERENCES

- Dahl, Darren W., Christoph Fuchs, and Martin Schreier (2015), “Why and When Consumers Prefer Products of User-Driven Firms: A Social Identification Account,” *Management Science*, 61 (8), 1978-88. doi:10.1287/mnsc.2014.1999.
- Oyserman, Daphna (2006), “High Power, Low Power, and Equality: Culture Beyond Individualism and Collectivism,” *Journal of Consumer Psychology*, 16 (4), 352-56. doi:10.1207/s15327663jcp1604_6.

Schreier, Martin, Christoph Fuchs, and Darren W. Dahl (2012), "The Innovation Effect of User Design: Exploring Consumers' Innovation Perceptions of Firms Selling Products Designed by Users," *Journal of Marketing*, 76 (5), 18-32. doi:10.1509/jm.10.0462.

Zhang, Yinlong, Karen Page Winterich, and Vikas Mittal (2010), "Power Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47 (Oct.), 945-54. doi:10.1509/jmkr.47.5.945.

Unethical Product Returning as a Function of Consumers' Experienced Psychological Distance

Anja Spilski, Saarland University, Germany
Andrea Groeppel-Klein, Saarland University, Germany
Hannah Jungfleisch, Saarland University, Germany
Anja Bsdurek, Saarland University, Germany

EXTENDED ABSTRACT

Unethical product returning refers to a form of consumer misbehavior that is characterized by abuse of a firm's returns policy by a consumer. Harris (2008) defined unethical product returning to be knowingly returning "a functional but used or post-purchase damaged product to any store without informing the store of the use or the true cause of damage" (p. 464). Unethical product returning by consumers is a source of great expense for retailers in terms of re-shipping, quality checks after the return, repackaging or even destroying the products. Therefore, research and practice warrant explanations for the prevalence of this misbehavior (Rosenbaum, Kuntze, and Wooldridge 2011).

Literature previously focused on issues such as which products typically are returned (Piron and Young 2000), motivations to defraud (Schmidt et al. 1999), demographic or psychographic factors that influence unethical product returning (King and Dennis 2003; Harris 2008), neutralization techniques of customers who defraud (Rosenbaum, Kuntze, and Wooldridge 2011), determinants of the success of the fraud (Harris 2010), the perspective of service employees on unethical product returning (O'Brien, Hill, and Autry 2009), and contextual factors that influence unethical product returning (e.g., firms' return policies, Chu, Gerstner, and Hess 1998).

This article extends previous research on contextual influences on unethical product returning in terms of the following issues: First, we introduce and systematically test the impact of psychological distance experienced by consumers towards a company on the probability of executing unethical product returning. While recent research has shown the importance of psychological distance for the extent of trust associated with a retailer (Darke et al. 2016), we consider psychological distance in the area of consumer misbehavior. Psychological distance is connected to construal-level theory (Trope, Liberman, and Wakslak 2007). The basic assumption is that more distal entities are constructed on a higher level and are therefore represented more abstractly than proximal entities. Abstraction, then, can influence how consumers process and evaluate information (Dhar and Kim 2007). We focus on social distance as one facet of psychological distance because of its special importance for unethical product returning, as research has found consumers to hesitate to execute unethical product returning when they anticipate embarrassment in front of service personnel (e.g., Harris 2010).

Second, we systematically consider two contextual variables that may influence psychological distance; in particular, we analyze how the retail channel (offline vs. online) alone or in interaction with firm size (small vs. large firms) affects psychological distance and therefore the probability of unethical product returning (Study 1). We derive two hypotheses:

Hypothesis 1: The probability of unethical product returning is higher when the product is purchased online than when it is purchased at a brick-and-mortar (offline) store. This relationship is mediated by the social distance experienced by consumers.

Hypothesis 2: Firms size moderates the effect proposed in H1. More specifically, the effect of an online (vs. offline) channel on unethical product returning via social distance is stronger for small firms while it is weaker or even absent for large firms.

As a third contribution, we consider ways to decrease unethical product returning. Previous studies have focused on financial methods to reduce unethical product returning, such as fees for (re)shipment (Chu, Gerstner, and Hess 1998; Hjort and Lantz 2012). The present paper supplements the consideration of financial costs by taking "psychological cost" (Chu, Gerstner, and Hess 1998, p. 143) into account. By suggesting that a smaller psychological distance affects the psychological cost of unethical product returning, we analyze possibilities for firms to reduce UPR via reducing psychological distance (Study 2). We analyze the impact of "giving the online retailer a face" – a personalization strategy that applies a personal purchase advisor on the website. We derive the following hypotheses:

Hypothesis 3: An online retailer can decrease the probability of unethical product returning by applying (vs. not applying) a personalization strategy on the website. The effect of personalization is sequentially mediated by reduced social distance and increased anticipated return risk.

Hypothesis 4: The effect proposed in H3 is stronger for small firms and weaker or even absent for large firms.

We conducted two experimental studies. Study 1 employed a 2 (retail channel: offline vs. online store) × 2 (firm size: small vs. large) between-subjects design. Study 2 focused on the online channel and used a 2 (personalization strategy: absent vs. present) × 2 (firm size: small vs. large) between-subjects design. We applied a scenario approach in the context of a jewelry retailer (Study 1) and a clothing retailer (Study 2). We used third-person scenarios, which are recommended to decrease socially desirable answering. Participants indicated the probability of returning the product and experienced psychological distance from the third-person perspective (Fisher 1993). Since only participants were included who had recognized the firm's return policy, a higher probability can be interpreted as abuse of these rules. We used mediation analyses and moderated mediation analyses to calculate effects. The results confirmed retail channel to influence consumers' experienced social distance and consequently probability of unethical product return (H1). This effect was moderated by firm size (H2). We found that personalization strategy on a website reduced social distance. The results confirm a chain of effects of personalization on the probability of unethical product returning via social distance and anticipated return risk (H3). H4, suggesting a moderation of the website personalization effect by firm size, was rejected.

Several further research avenues are worth considering. First, we focused on unfamiliar retailers. Since research has discussed the relevance of familiarity for social distance (Edwards et al. 2009), further studies should ask whether the effects found here hold for

familiar retailers. In Study 2, participants were exposed to a purchase advisor they did not know. Therefore, research could consider the effects of avatars that are used in integrated communication (e.g., when consumers already know the avatars from advertising or other sources). Second, as the results for H3 have shown, anticipated return risk served as a mediator. However, processes that are more closely related to relational aspects should be considered (as the impact of reduced social distance on trust; Darke et al. 2016).

REFERENCES

- Chu, Wujin, Eitan Gerstner, and James D. Hess (1998), "Managing Dissatisfaction: How to Decrease Customer Opportunism by Partial Refunds," *Journal of Service Research*, 1 (2), 140–155.
- Darke, Peter R., Michael K. Brady, Ray L. Benedictus, and Andrew E. Wilson (2016), "Feeling Close From Afar: The Role of Psychological Distance in Offsetting Distrust in Unfamiliar Online Retailers," *Journal of Retailing*, 92 (3), 287–299.
- Dhar, Ravi and Eunice Y. Kim (2007), "Seeing the Forest or the Trees: Implications of Construal Level Theory for Consumer Choice," *Journal of Consumer Psychology*, 17 (2), 96–100.
- Edwards, Steven M., Jin Kyun Lee, and Carrie La Ferle (2009), "Does Place Matter When Shopping Online? Perceptions of Similarity and Familiarity as Indicators of Psychological Distance," *Journal of Interactive Advertising*, 10 (1), 35–50.
- Fisher, Robert J. (1993), "Social Desirability Bias and the Validity of Indirect Questioning," *Journal of Consumer Research*, 20 (2), 303.
- Harris, Lloyd C. (2008), "Fraudulent Return Proclivity: An Empirical Analysis," *Journal of Retailing*, 84 (4), 461–476.
- Harris, Lloyd C. (2010), "Fraudulent consumer returns: exploiting retailers' return policies," *European Journal of Marketing*, 44 (6), 730–747.
- Hjort, Klas and Björn Lantz (2012), "(R)e-tail borrowing of party dresses: an experimental study," *International Journal of Retail & Distribution Management*, 40 (12), 997–1012.
- King, Tamira and Charles Dennis (2003), "Interviews of deshopping behaviour: an analysis of theory of planned behaviour," *International Journal of Retail & Distribution Management*, 31 (3), 153–163.
- O'Brien, Matthew, Donna J. Hill, and Chad W. Autry (2009), "Customer Behavioral Legitimacy in Retail Returns Episodes: Effects on Retail Salesperson Role Conflict," *Journal of Marketing Theory and Practice*, 17 (3), 251–266.
- Piron, Francis and Murray Young (2000), "Retail borrowing: insights and implications on returning used merchandise," *International Journal of Retail & Distribution Management*, 28 (1), 27–36.
- Rosenbaum, Mark S., Ronald Kuntze, and Barbara Ross Wooldridge (2011), "Understanding unethical retail disposition practice and restraint from the consumer perspective," *Psychology and Marketing*, 28 (1), 29–52.
- Schmidt, Ruth A., Fiona Sturrock, Philippa Ward, and Gaynor Lea-Greenwood (1999), "Deshopping – the art of illicit consumption," *International Journal of Retail & Distribution Management*, 27 (8), 290–301.
- Trope, Yaacov, Nira Liberman, and Cheryl Wakslak (2007), "Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior," *Journal of Consumer Psychology*, 17 (2), 83–95.

Why Garlic Ice Cream? Innovative Line Extensions Can Increase Choice of a Brand's Pre-existing Products

Brittney L. Stephenson, Washington University in St. Louis, USA

Cynthia E. Cryder, Washington University in St. Louis, USA

Stephen M. Nowlis, Washington University in St. Louis, USA

Robyn A. LeBoeuf, Washington University in St. Louis, USA

EXTENDED ABSTRACT

A common marketing strategy, especially recently, is to offer product line extensions that are innovative and unusual. Crest toothpaste recently introduced Mint Chocolate, Vanilla Mint and Lime Spearmint flavors. A serious concern with this strategy is that line extensions might cannibalize the sales of the original items in the line. Prior research has found that introducing new extensions often leads to cannibalization (Mason & Milne, 1994, Kerin, Harvey & Rothe, 1978, Copulsky, 1976).

We examine the effect of introducing innovative line extensions on the choice of existing items in the line. Prior work on attribute transfer has found that perceptions of specific attributes can flow between a brand and its extensions (Keller and Aaker 1992; Park, Milberg, and Lawson 1991). Furthermore, research on fit would suggest that line extensions should also transfer perceptions of attributes between the brand and its line extensions (Aaker and Keller 1990).

We specifically focus on whether an innovative line extension can transfer the perception of innovativeness back to the parent brand, making the brand more appealing. Previous work has found that higher perceived innovativeness is often related with more positive brand attitudes (Heath, DelVecchio, and McCarthy 2011). Thus, innovative brands are likely to be more positively evaluated and may increase purchase intent. We predict that introducing an innovative line extension will lead consumers to purchase a greater number of the brands existing items, ultimately reversing cannibalization.

Four experiments test our hypothesis. We first show that when a brand introduces innovative line extensions (versus non-innovative extensions), people choose to purchase more existing items (Studies 1A and 1B). We then show the effect replicates across various product categories and is mediated by perceived brand innovativeness (Study 2). Our last two studies rule out alternative explanations that 1) the effect is driven by disgust (Study 3) and 2) the effect is due to a contrast effect (Study 4).

In studies 1A (n=150) and 1B (n=601), participants were randomly assigned in a 3-cell (Extension: None, Non-Innovative, Innovative) between-subjects design. All participants saw three existing items offered by a hypothetical brand (Study 1A: Emmi's) or a national brand (Study 1B: Breyer's): Vanilla, Chocolate, and Strawberry. In addition to the existing items, participants saw three extension flavors based on their condition. Non-Innovative Extension: Cookies & Cream, Chocolate Chip, and Neapolitan. Innovative Extension: Garlic, Cheddar Cheese, and Avocado Jalapeno. No Extension: no extension items. After reading the list of items, participants indicated a purchase quantity for each item.

We found that choice quantity of existing items increased significantly when an innovative extension is introduced ($M_{1A}=2.63$, $M_{1B}=2.40$) compared to a non-innovative extension ($M_{1A}=0.81$, $p<.001$); $M_{1B}=1.07$, $p<.001$) or no extension ($M_{1A}=1.45$, $p<.001$; $M_{1B}=1.64$, $p=.001$).

Study 2 (n=297) was designed to show our effect replicates in other product categories and to examine if perceived brand innovativeness mediates this effect. The procedure was identical to study 1A, except that we used Kai's Toothpaste in place of Emmi's Ice Cream. Toothpaste flavors were substituted for the ice cream fla-

vors. Replicating our previous findings, choice quantity of the existing items increased when innovative extensions were introduced ($M=2.01$) compared to non-innovative extensions ($M=1.36$, $p=.01$) or no extensions ($M=1.53$, $p=.04$). Our prediction that innovative extensions will lead to an increase in perceived brand innovativeness was also confirmed. A test of mediation supports that introducing innovative extensions leads to higher perceived brand innovation, which ultimately increases choice quantity of existing items (95% CI: [-.30, -.03]).

Study 3 (n=246) was designed to rule out an alternative explanation of our results. One could argue that the innovative flavors are also disgusting, leading to an attraction effect, in which introducing inferior (or disgusting) options boosts the choice share of similar but superior options. We test this alternative explanation by altering both the relative disgust and relative innovativeness of flavors.

Participants were randomly assigned to one of four conditions in a 2 (Innovativeness: low, high) x 2 (Disgust: low, high) between-subjects design. Participants followed the same procedure as study 1A, however, we changed the extension flavors participants saw. Participants saw extension flavors either high or low on disgust and high or low on innovativeness, depending on their condition. We found a main effect of innovativeness, such that more innovative extensions increased choice quantity of the existing items. Yet there was no main effect of disgust. These results suggest that higher levels of innovativeness, and not disgust, increase the choice of existing items in the product line. The interaction was not significant.

In study 4 (n=410), we address another alternative explanation, that if customers find the innovative extensions unappealing for any other reason, aside from disgust, the extensions may yield a contrast effect. To rule out this alternative explanation, we ran a study with a competitor brand in the choice set to show that only choice share of the existing items of the parent brand increases – not choice share of competing brands. The design was identical to study 1A, except that a competing brand was offered in the choice set. Scoops Ice Cream (competitor brand) offered: Vanilla, Chocolate, Strawberry, Butter Pecan, Coffee, Mint. After seeing all items offered by both brands, participants indicated the number of each item (from Emmi's and Scoops) that they would purchase.

Replicating our main effect, we find that when Emmi's offers innovative extensions, people choose more existing items ($M=1.35$) than when no extensions ($M=1.08$, $p=.06$) or non-innovative extensions are offered ($M=0.67$, $p<.001$). People chose more items in total (existing + extensions) from Emmi's when innovative extensions are offered ($M=2.41$) compared to non-innovative extensions ($M=1.93$, $p<.01$). Most importantly, the total number of Scoops items chosen did not increase when Emmi's introduced innovative extensions ($M=2.62$) compared to no extensions ($M=2.78$, $F(1, 407)<1$), suggesting that an innovative extension does not benefit all brands (e.g., through a contrast effect), but mainly benefits the parent brand.

Altogether, we find evidence that innovative line extensions may reverse the effect of cannibalization. Innovative extensions increase perceptions of the brand's innovativeness, which leads consumers to purchase a higher quantity of the original items in the line.

REFERENCES

- Aaker, David A. and Kevin Lane Keller (1990), "Consumer Evaluations of Brand Extensions," *Journal of Marketing*, 54 (1), 27-41.
- Copulsky, William (1976), "Cannibalism in the Marketplace," *Journal of Marketing*, 40 (October), 103-105.
- Heath, Timothy B., Devon DelVecchio and Michael S. McCarthy (2011), "The Asymmetric Effects of Extending Brands to lower and Higher Quality," *Journal of Marketing*, 75 (4), 3-20.
- Keller, Kevin Lane and David A. Aaker (1992), "The Effects of Sequential Introduction of Brand Extensions," *Journal of Marketing Research*, 29 (1), 35-50.
- Kerin, Roger A., Michael G. Harvey, and James T. Rothe (1978), "Cannibalism and New Product Development," *Business Horizons*, 21 (October), 25-31.
- Mason, Charlotte H. and George R. Milne (1994), "An approach for identifying cannibalization within product line extensions and multi-brand strategies," *Journal of Business Research*, 31 (2-3), 163-170.
- Park, Whan C., Sandra Milberg, and Robert Lawson (1991), "Evaluation of Brand Extensions: The Role of Product Feature Similarity and Brand Concept Consistency," *Journal of Consumer Research*, 18 (2), 185-193.

The Name Game: How Naming Promotes Effects Beneficial to Marketers

Jennifer L. Stoner, University of North Dakota, USA

Barbara Loken, University of Minnesota, USA

Ashley Stadler Blank, University of St. Thomas, USA

EXTENDED ABSTRACT

Toyota is encouraging car owners to name their cars and has provided close to 100,000 name badges for owners to affix to their autos (Diaz 2015). Yet, the phenomenon of consumers naming even nonhuman-like products has not been examined by academic researchers. When a person spontaneously names an inanimate object (such as a car), the person is probably doing so because he likes the object. But what about the inverse: what happens when a company asks or directs the consumer to name an object? In the research reported here, we hypothesize and find that naming of products bestows benefits to the products when consumers are directed or requested to name them.

We hypothesize that naming of an object may increase liking for it because it increases feelings of ownership. Naming is an activity generally performed for newborns or pets in one's family, or for nonhuman objects (e.g. dolls, cars, stuffed animals) that the namer believes to "be mine". Abundant research on the endowment effect has shown that when consumers take ownership of an object, it increases in value (e.g. Kahneman, Knetsch, and Thaler 1990). These endowment or ownership effects are also found when consumers feel psychological (rather than actual) ownership. (Pierce, Kostova, and Dirks 2003).

Study 1 explores the basic effect of naming and whether it persists over time. Student participants were recruited for a two-part study on stress reduction. Participants were randomly assigned to either a naming or no-name condition. During the first lab session, all participants received a plain yellow stress ball and were either instructed to name it or not. Four weeks later, participants were asked to report how much someone would have to pay them to buy their stress ball from them. As predicted, the naming condition placed greater value on their stress ball than those in the no-name condition, $F(1,38) = 4.42, p < .05$. In fact, price values were remarkably more than \$1 higher for participants in the naming than no-name condition ($M = \$4.07$ vs. $\$2.67$).

In Study 2 participants were randomly assigned to one of four conditions: naming, no-name, assigned descriptive name "Blue", or assigned non-descriptive name "Steve". All participants viewed a picture of a stapler. Participants in the naming condition were asked to provide a name for it whereas in the assigned name conditions the stapler had already been given a name. An ANOVA revealed a significant effect of condition, $F(3, 196) = 3.75, p = .01$, on purchase intention. Purchase intentions were highest in the naming condition ($M = 4.49$), followed by the "Blue" ($M = 3.75$), "Steve" ($M = 3.74$) and no name ($M = 3.50$) conditions. Planned contrasts showed that purchase intent was higher in the naming condition than each individual condition (p 's $< .05$). Additionally, mediation analysis demonstrated that psychological ownership mediated this effect.

In Study 3 we compare the effects of naming for an unbranded product (laptop) and for a brand product with a strong prior brand image (Apple laptop). Participants were randomly assigned to a 2 (brand, no brand) X 4 (naming, no-name, assigned descriptive name "Slimbook", or assigned non-descriptive name "George") between-subjects design. Participants reported their attitudes toward the laptop on five items. Results revealed in the unbranded condition favorability was highest in the naming condition ($M = 5.03$), followed by the "Slimbook" ($M = 4.63$), no name ($M = 4.51$) and "George" ($M = 4.44$) conditions. Planned contrasts showed the naming condition was sig-

nificantly higher than all the other conditions individually (all p 's $< .10$). For the branded condition, none of the contrasts were significant (all p 's $> .10$). Once again, the naming effect was significantly mediated by psychological ownership. Potential alternative mediators such as attachment, self-efficacy, and involvement were not significant.

Study 4 attempted to understand what name features drive self-name success. We employed a mixed design where product (stapler, mug) was a between subjects factor and name condition (no name, assigned descriptive name, assigned non-descriptive name) was a within subjects factor (p 's $> .05$). There was no difference in the product conditions and so these data were collapsed for analysis. A repeated measures ANOVA on attitudes ($F(2, 240) = 58.10, p < .01$) and purchase intentions ($F(2, 240) = 55.76, p < .01$) revealed a significant main effect of name. Participants reported higher attitudes ($M_{\text{self}} = 5.34$) and purchase intentions ($M_{\text{self}} = 4.84$) for self-names than assigned descriptive names (attitudes: $M_{\text{descriptive}} = 4.26$; purchase intentions: $M_{\text{descriptive}} = 3.89$) or non-descriptive (attitudes: $M_{\text{non-descriptive}} = 3.36$; purchase intentions: $M_{\text{non-descriptive}} = 2.98$) names. Participants also reported higher attitudes and purchase intentions for descriptive versus non-descriptive names (all p 's $< .05$). Furthermore, the MEMORE macro (Montoya and Hayes 2017) for repeated measures designs demonstrated that this effect was driven by psychological ownership which in turn was driven by the fit and creativity of the name.

Study 5 compares the effects of naming to a form of co-creation, designing a mug. Student participants were randomly assigned to one of three conditions: naming, no-name, and designing. In the design condition, participants were given colored pencils to design a mug. All participants completed the same scales used in Study 3. An ANOVA on attitudes revealed a significant main effect ($F(2, 101) = 10.37, p < .01$). Participants reported higher attitudes for self-design ($M = 5.23$) than self-name ($M = 4.48$) or the control ($M = 3.61$). Importantly, participants still reported higher attitudes for self-name versus the control (all p 's $< .05$). Once again, this effect was mediated by psychological ownership. Interestingly, affective commitment also mediated the positive impact of self-design but did not mediate the difference between self-name and the control condition.

REFERENCES

- Diaz, Ann-Christine (2015), "Toyota's 'Mas que un Auto' Is More than Your Average Campaign: Hispanic 'Badge' Campaign via Conill Gives Real Individuality to Cars," *Advertising Age*, < <http://adage.com/article/behind-the-work/toyota-s-mas-auto-average-campaign/297904/>> last accessed August, 22, 2016.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1990), "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, 1325-48.
- Montoya, Amanda K., and Andrew F. Hayes (2017), "Two-Condition Within-Participant Statistical Mediation Analysis: A Path-Analytic Framework.," *Psychological Methods*, 22 (1), 6-27.
- Pierce, Jon L., Tatiana Kostova, and Kurt T. Dirks (2003), "The State of Psychological Ownership: Integrating and extending a Century of Research," *Review of General Psychology*, 7(1), 84-107.

The Influence of Visual Aesthetics on Food Choice: The Moderating Effect of Food Processing

Jacob Suher, Portland State University, USA

Courtney Szocs, Portland State University, USA

Koert Van Ittersum, University of Groningen, The Netherlands

EXTENDED ABSTRACT

Each year billions of pounds of produce are thrown away due to aesthetic imperfections (i.e., blemishes, unconventional shapes; Bratskeir 2015), often because retailers and consumers refuse to purchase products that fail to meet strict cosmetic standards for visual perfection (Royte 2016). Interestingly, as safe-to-eat fruits and vegetables are discarded because of their imperfect appearance, food manufacturers and restaurant chains intentionally manufacture products that are aesthetically imperfect. For example, employees at Domino's Pizza purposefully shape dough into irregular rectangles when preparing Artisan Pizza (Choi 2013). Why is it that retailers and manufacturers discard fruits and vegetables that contain aesthetic imperfections yet design processed foods to contain aesthetic imperfections?

In contrast to conventional wisdom that "beautiful is good" (Veryzer and Hutchinson 1998), our research provides evidence that in some cases consumers prefer aesthetically imperfect (vs. perfect) foods. We show that preference for aesthetically perfect (vs. imperfect) food depends on the level of mechanical processing the food has undergone. Specifically, in four studies we show that when given a choice between unprocessed foods (e.g., two apples) consumers prefer the aesthetically perfect option. However, when given the choice between two processed foods (e.g., two bowls of applesauce) consumers prefer the aesthetically imperfect option. These effects are attenuated for both unprocessed and processed foods when individuals have the opportunity to sample the items before choosing.

First, we conducted a pretest to identify images of unprocessed and processed foods that differed in terms of the degree of visual perfection, but were similar in terms of healthiness, size, and safety. In the main experiment (study 1a), members of an online panel were randomly assigned to view either a pair of unprocessed foods (i.e., carrots) or a pair of processed foods (i.e., pizzas). For each pair, one option was aesthetically perfect and the other option was aesthetically imperfect (as determined by the pretest). Participants were asked to indicate which item they would prefer to eat. The results showed that participants who viewed the pair of unprocessed foods were significantly more likely to choose the aesthetically perfect option than participants who viewed the pair of processed foods ($P_{\text{carrots}} = 79.59\%$ vs. $P_{\text{pizza}} = 58.82\%$; $\chi^2 = 5.039$, $p < .05$).

One shortcoming of study 1a is that we used two different food items for the processed and unprocessed foods. In study 1b we address this shortcoming by using the same food item and varying only the level of mechanical processing. Study 1b had a one-factor between subjects design with two experimental conditions (food type: processed vs. unprocessed). Members of an online panel ($N = 71$, $M_{\text{age}} = 30.30$; 52.1% females) were randomly assigned to view a pair of apples (unprocessed condition) that were the same weight and type but varied in appearance (i.e., one had a uniform shape and texture and the other had a variable shape and texture). Participants in the processed condition viewed two bowls of applesauce. The applesauce was created by mechanically processing (i.e., blending) an apple and water. Each bowl contained the same amount of applesauce, but the bowls varied in appearance. The aesthetically perfect applesauce had a uniform texture and color due to a lack of apple chunks and apple skin. The aesthetically imperfect applesauce had

a variable texture and color due to the presence of apple chunks and skin. The lateral position of the options was counterbalanced. After viewing the pair of foods participants indicated their preference (1 = definitely option A, 7 = definitely option B). The data was prepared so that "option A" always represented the aesthetically imperfect food option. A one-way ANOVA revealed that participants had a stronger preference for the aesthetically perfect option when they viewed unprocessed (vs. processed) foods ($M_{\text{processed}} = 4.3056$ vs. $M_{\text{unprocessed}} = 6.1714$; $F(1, 69) = 25.587$, $p < .01$).

Consumers rely on heuristics when information is ambiguous (Kruger et al. 2004), but are less likely to use such heuristics when information is unambiguous. Thus, in the context food choices, the effect of aesthetic imperfections should be less influential in driving choice when taste information is available (i.e., unambiguous). Study 2a tested this idea using a one factor between subjects experiment (taste information present vs. absent). Participants ($N=71$) chose between an aesthetically perfect and imperfect unprocessed food (i.e., whole oranges). The key finding was that participants were significantly more likely to choose the aesthetically imperfect orange when they had the opportunity to sample prior to choosing than when they did not have the opportunity to sample prior to choosing ($P_{\text{sampling present}} = 53.66\%$ vs. $P_{\text{sampling absent}} = 16.67\%$; $\chi^2 = 10.059$, $p < .01$). Study 2b was similar to study 2a except that the study was a field experiment at a grocery store and shoppers ($N = 41$) choose between two processed foods (i.e., cookies) when taste information was present or absent. The results showed that preference for the aesthetically imperfect cookie decreased when taste information was present (i.e., when individuals were allowed to sample the food before choice) ($P_{\text{multi-sensory absent}} = 71.7\%$ vs. $P_{\text{multi-sensory present}} = 54.0\%$; $\chi^2 = 3.461$, $p = .07$). Collectively, studies 2a and 2b suggest that retailers can overcome the effects of aesthetic imperfections on food choice by providing diagnostic taste information.

The results of four studies show that consumers prefer aesthetically perfect (vs. imperfect) unprocessed foods and aesthetically imperfect (vs. perfect) processed foods. These effects are attenuated for both unprocessed and processed foods when individuals have the opportunity to sample the items before choosing. Theoretically, our findings contribute novel evidence that the "form" of a product moderates the influence of visual aesthetics on choice. While much is known about the stimulus factors and individual differences that drive aesthetic impressions (e.g., Veryzer & Hutchinson 1998), we demonstrate that visual aesthetics can have either a positive or, counterintuitively, a negative influence on consumer choice. Our findings also contribute evidence that food processing influences consumer food choices (Szocs and Lefebvre 2016). From a sustainability perspective, our findings provide evidence that multi-sensory information can increase consumers' acceptance of visually imperfect produce.

REFERENCES

- Bratskeir, Kate (2015), "Six Billion Pounds of Perfectly Edible Produce is Wasted Each Year, Simply Because It's Ugly," http://www.huffingtonpost.com/2015/05/19/food-waste-ugly-fruits-and-vegs-dont-judge_n_7309432.html

- Choi, Candice (2013), "Food Companies Work to Make it Look Natural," <http://www.sandiegouniontribune.com/sdut-food-companies-work-to-make-it-look-natural-2013jun17-story.html>
- Kruger, Justin, Derrick Wirtz, Leaf Van Boven, T. William Altermatt (2004), "The Effort Heuristic," *Journal of Experimental Social Psychology*, 40(1), 91-98.
- Royte, Elizabeth (2016), "How 'Ugly' Fruits and Vegetables Can Help Solve World Hunger," *National Geographic*, March 2016.
- Szocs, Courtney and Sarah Lefebvre (2016), "The Blender Effect: Physical State of Food Influences Healthiness Perceptions and Consumption Decision," *Food Quality and Preference*, 54, 152-159.
- Veryzer, Robert W. and J. Wesley Hutchinson (1998), "The Influence of Unity and Prototypicality on Aesthetic Responses to New Product Designs," *Journal of Consumer Research*, 24(4), 374-385.

Punishing Politeness: Moderating Role of Belief in Just World on Severity?

Aparna Sundar, University of Oregon, USA

Wendy Paik, University of Oregon, USA

EXTENDED ABSTRACT

Three studies demonstrate that politeness in advertising affect how consumers punish brands for unethical behavior. Those low in belief in just world (BJW) were more likely to punish a brand when more polite language was used. Both cynicism and trust mediated the effect of ethical practice on level of punishment.

Introduction

People are more likely to apply moral judgements to psychologically distant situations (Eyal et al. 2008). Psychological distance can be influenced through language. One aspect of language, politeness, has been shown to increase social distance between speakers (Brown and Levinson 1987; Holtgraves and Yang 1990; 1992). The purpose of this research is to understand the effect of politeness on moral judgements of the actions of brands.

We show that polite language in advertising can affect consumers' intentions to punish a brand whose actions are ethically ambiguous. We explore the role of belief in a just world (BJW) when making such judgments. In addition, we also explore the underlying mechanism of trust and cynicism that drives punishment and moral perception of the brand.

Conceptual Development

Politeness

Formal titles, e.g. *sir* or *Mister*, are considered more polite than less formal terms of address, e.g. *dude* or *mate* (Ambady et al. 1996; Brown and Levinson 1987; Clark and Schunk 1980; Holtgraves and Yang 1990; 1992). Polite speech, however, increases the perception of social distance between speakers (Brown and Gilman 1989; Brown and Gilman 1960; Holtgraves and Yang 1990; 1992). Situational factors can also cause otherwise polite speech to be considered manipulative, sarcastic, or even offensive (Watts 2003).

The greater the psychological distance, the more abstract people's thinking (Trope and Liberman 2010). More polite speech is associated with a higher level of psychological distance (Stephan et al. 2010). Judgements of morality are also associated with psychological distance. The greater the social distance between parties involved in a moral transgression, the more morally wrong an action is perceived (Eyal et al. 2008). It therefore follows that more polite speech, which increases social distance, should also increase the perception that a moral transgression is wrong.

Belief in a Just World

BJW is a belief that people get what they deserve (Lerner 1980). When encountering an injustice, BJW motivates us to punish a victimizer (Lerner 1980). Those high in BJW are more likely to punish those who violate social norms (Zhu et al. 2012). Those low in BJW perceive others as more motivated by self-interest, and that they believe that people often exploit others to their advantage (Lipkus 1992). BJW has also been shown to be related to psychological distance, such that as psychological distance increases, so too does BJW (Warner et al. 2012). As such, we believe that when more polite speech is used, social distance increases, so too does the need to restore justice.

Cynicism and Trust

Cynicism and trust are two important dimensions of moral judgment (Turner and Valentine 2001). The goals or values which moti-

vate cynicism can be described by the belief that firms are disguising their own self-interest with altruism (Helm 2004; Odou and de Pechpeyrou 2011). Cynical consumers seem to be motivated by a desire to punish companies whom they distrust (Helm 2004). Trust is the belief that the motives of others will be beneficial to one's interests (Turner and Valentine 2001). Brand trust is the ability of a brand to elicit trust from consumers (Chaudhuri and Holbrook 2001). Trusting consumers seem to be motivated by a desire to reward trustworthy companies (Helm 2004).

Study 1

The objective of Study 1 was to evaluate whether consumers would penalize brands differently based on the politeness demonstrated in an advertisement by the brand.

Design and Participants

Participants ($N = 124$; 54.8% female; $M_{\text{age}} = 35.79$) were randomly assigned to one of three conditions (politeness: control vs. less polite vs. more polite). Participants were asked to review an advertisement for a fictitious apparel brand called CJ. In the more polite condition, the tag line was the same as in the control condition followed by the word *sir*, and in the less polite condition, was followed by the word *dude*. Participants were then randomly presented with one of two press reports. They were that CJ was recently in the news and that a press report stated either: *CJ purchases clothes from manufacturers that do not use child labor; however the manufactures do not provide health care benefits to their employees* (pretested $M = 3.93$, $SD = 1.34$) or that *CJ uses low impact dyes, but the colors fade in clothing and are not durable* (pretested $M = 4.25$; $SD = 1.54$). These two statements were not significantly different on ethical rating ($p = .38$).

Procedures and Measures

Participants were asked to indicate how much they agreed with the statement, "I feel that CJ did something morally wrong," (anchored: 1 = strongly disagree; 7 = strongly agree; adapted from Cheng, Ottati, and Price, 2013). Then they were asked to, "Rate the degree of punishment for such behavior," (anchored: 1 = lenient; 7 = severe; adapted from Cheng, Ottati, and Price 2013). Participants then completed the sixteen-item measure of BJW scale (and Peplau 1973).

Results

An ANCOVA was conducted with politeness in the advertisement and the composite score of BJW ($\alpha = .90$) as predictors of punishment. There was a significant effect of politeness in advertising on severity of punishment ($F(2, 118) = 3.42$, $p < .05$, $\eta^2 = .055$). There was also a significant effect of BJW on severity of punishment ($F(1, 118) = 6.05$, $p < .05$, $\eta^2 = .049$). There was a significant interaction between politeness in the advertisement and the BJW ($F(2, 118) = 3.09$, $p < .05$, $\eta^2 = .05$). A spotlight analysis revealed that when BJW was high, the punishment judgments did not vary significantly among the three advertisement conditions ($p = .67$). The control ($M = 3.60$, $SD = 1.34$) did not vary from the high politeness condition ($M = 3.00$, $SD = 2.55$, $p = .65$), which in turn did not vary from the low politeness condition ($M = 4.00$, $SD = 1.73$). It was only when the BJW was low that participants reduced the severity of punishment for the control ($M = 1.40$, $SD = .54$) and in comparison to the more polite condition ($M = 3.63$, $SD = 2.20$; $F(1, 118) = 4.80$, $p < .05$). The

punishment was low even for the less polite condition as well ($M = 1.67$, $SD = 1.21$) in comparison to the more polite condition ($M = 3.63$, $SD = 2.20$; $F(1, 118) = 3.83$, $p < .05$). This result was despite the fact that the interaction of BJW and politeness in the advertisement on morality judgments was not significant ($p = .22$).

Discussion

Those low in BJW indicated higher punishment for the brand which used more polite language over the brand with less polite language and the control. Thus, our hypothesis that the consumers will penalize brands differently based on the politeness of the language used in an advertisement was supported.

Study 2

The objective of Study 2 was to evaluate whether the penalty imposed on different brands would manifest in the fine amounts.

Design and Participants

Participants ($N = 167$; 56.9% female; $M_{\text{age}} = 34.08$) were randomly assigned to one of two conditions (levels of politeness in advertising: more polite vs. less polite). Participants were asked to review an advertisement of the fictitious coffee brand called Jaunt. The tag line used in the advertisement varied on two levels of politeness. In the more polite condition, participants read *Are you going to have a cup of coffee?* In the less polite condition, participants read *Gonna have a cup of coffee?* Participants were then told: *Recently, Jaunt was in the press. The press report noted that: Jaunt collaborates with local farmers in Peru, but they do not contribute to infrastructure improvement in Peru* (pretested $M = 3.64$; $SD = 1.51$). Participants were then asked to quantify the punishment levied against the brand.

Procedures and Measures

Participants were asked *If the Peru government had to levy a fine on Jaunt what would it be?* Participants were asked to indicate the fine for the company on a \$0 to \$250,000.00 sliding scale (modified from previous research where consumers levied fines for company misconduct [e.g. Ashton-James and Tracy 2012; Rosenblatt et al. 1989]). Following this, participants were asked the BJW scale as used in Study 1.

Results

Hypothesis Testing. An ANCOVA was conducted with politeness in the advertisement and the composite score of BJW ($\alpha = .89$) as predictors of fines levied by participants. There was a significant effect of politeness in advertising the fine levied ($F(1, 163) = 5.34$, $p < .05$, $\eta^2 = .032$). There was also a significant effect of BJW on severity of punishment ($F(1, 163) = 3.75$, $p < .05$, $\eta^2 = .023$). There was a significant interaction between politeness in the advertisement and BJW ($F(1, 164) = 3.92$, $p < .05$, $\eta^2 = .025$). A spotlight analysis revealed that when BJW was high, the fine did not vary significantly among the two levels of politeness ($p = .96$). Specifically, the fine levied in the more polite condition ($M = \$10,626.63$, $SD = 29,806.24$) did not vary from the less polite condition ($M = \$10,138.91$, $SD = 28869.13$). It was only when BJW was low that the fine levied was low for the less polite condition ($M = \$23,614.33$, $SD = 38,476$) in comparison to the more polite condition ($M = \$240,904.92$, $SD = 433,574.67$; $F(1, 163) = 7.75$, $p < .01$). This result was even though the interaction of BJW and politeness in the advertisement on morality judgments was not significant ($p = .34$).

Discussion

Those high in BJW showed no significant difference in the fine as a measure of punishment between two advertisements with varied politeness levels in the language. Those low in BJW, however, indicated a higher fine for the brand which used more polite language. It

seems plausible that when individuals believe that people get what they deserve, the effectiveness of punishment would be diminished. By the same token those low in BJW, would probably view the advertising strategy of adopting politeness as an attempt at misleading consumers.

Study 3

The objective of this study was to evaluate the role of both brand trust in a brand and the consumer cynicism in the observed condemnation by consumers. To evaluate this, we adopted ethical statements that were judged to be either low or high on ethical ratings in the pretest.

Design and Participants

Participants ($N = 162$; 56.2% female; $M_{\text{age}} = 37.7$) were randomly assigned to one of two conditions (ethical rating: high vs. low). A known brand (GEICO) was selected for this study. Participants were told that GEICO was recently in the press. In the low ethical condition, participants read: *A press report noted that GEICO hires women who work in cooperatives, however, these women are sometimes criminals who don't pay their taxes* (pretested $M = 2.77$; $SD = 1.17$). Participants in the high ethical condition read: *A press report noted that GEICO helps disadvantaged communities, but the help is only through volunteer service and not monetary in nature* (pretested $M = 5.16$; $SD = 1.41$). These two statements were significantly different on ethical rating ($t(58.01) = 7.22$, $p < .001$).

Procedures and Measures

After reviewing the advertisement and the press statement, participants were asked to indicate the degree to which GEICO did something morally wrong on the same scale as used in Study 1. Participants then rated the degree of punishment of GEICO. Participants were also asked to provide ratings to capture cynicism on a two-item scale: *I feel cynical about GEICO*; *I feel skeptical about GEICO's business practices* (anchored: 1 = strongly disagree; 7 = strongly agree). Then brand trust was captured using three items: *I trust GEICO*; *GEICO is an honest brand*; *GEICO is a safe brand* (anchored: 1 = strongly disagree; 7 = strongly agree; adapted from Chaudhuri and Holbrook 2001).

Results

Morality and Punishment. An analysis of the effect of ethical practice on perception that GEICO did something morally wrong was higher when presented with a less ethical practice ($M = 4.06$, $SD = 1.53$) in comparison to the more ethical practice ($M = 2.54$, $SD = 1.50$; $t(159.94) = 6.34$; $p < .001$). An analysis of the effect of ethical practice on severity of punishment yielded a significant difference with participants wanting more punishment for the less ethical practice ($M = 3.94$, $SD = 1.33$) in comparison to the more ethical practice ($M = 2.07$, $SD = 1.50$; $t(160) = 8.06$; $p < .001$).

Mediation Analysis. To determine whether cynicism or trust accounted for participants' perception of GEICO, we conducted a mediation analysis (Hayes 2012, Model 4; bootstrapped with 5,000 draws). The analysis revealed that although the ethical practice influenced both cynicism and trust, only cynicism mediated the relationship between how ethical GEICO's practice was and participant's perception of how moral GEICO was (95% CI = $[-.42, -.04]$) but trust did not mediate the relationship between how ethical GEICO's practice was and participant's perception of how moral GEICO was (95% CI = $[-.02, .22]$). On the other hand, when the same mediation analysis (Hayes 2012, Model 4; bootstrapped with 5,000 draws) was conducted, both cynicism (95% CI = $[-.50, -.06]$) and trust (95% CI = $[.01, .31]$) mediated the effect of ethical practice on level of punishment.

Discussion. The participants of Study 3 indicated that GEICO did more morally wrong when the brand was presented with the less ethical practice than with the more ethical practice. They punished GEICO more for their less ethical practice compared to the more ethical practice. The result indicated that the participants felt more cynical when they were exposed to GEICO performing a less ethical practice in comparison to the more ethical practice. Individuals trusted GEICO more when presented with a more ethical practice than a less ethical practice. Mediation analyses showed that cynicism was the only mediator of the relationship between the ethical practice and moral perception. Both trust and cynicism were found to be significant mediators of the relationship between ethical practice of the brand and punishment.

General Discussion

We add on work by Eyal et al. (2008) by showing that politeness increases social distance and increased social distance leads to greater judgements of wrongdoing. Based on past research on BJW, our findings show that the language used in a brand's advertising can potentially harm the brand when it is undergoing a brand crisis (i.e., an ambiguously unethical business practice reported by the media). Individuals in our studies consistently showed that they would more likely punish a brand which used more polite language in their advertising compared to the brand which used less polite language. Our results showed that the influence of the politeness of the language used in advertising was only significant for the individuals with low BJW. These results correspond to past findings that those low in BJW believe people often exploit others to their advantage, particularly those of higher power and status (Lipkus 1992). Thus, a possible explanation would be that those low in BJW were more cautious of the actions of the brand and thus reacted to its unethical business practice differently.

REFERENCES

- Ambady, Nalini, Jasook Koo, Fiona Lee, and Robert Rosenthal (1996), "More than Words: Linguistic and Nonlinguistic Politeness in Two Cultures," *Journal of Personality and Social Psychology*, 70 (5), 996–1011.
- Ashton-James, Claire E., and Jessica L. Tracy (2012), "Pride and Prejudice How Feelings about the Self Influence Judgments of Others," *Personality and Social Psychology Bulletin*, 38 (4), 466–476.
- Brown, R., and A. Gilman (1960), "The Pronouns of Power and Solidarity," in *Style in Language*, ed. by Thomas A. Sebeok, Cambridge: MIT Press, 253–276.
- _____ (1989), "Politeness Theory and Shakespeare's Four Major Tragedies," *Language in Society*, 18 (02), 159–212.
- Brown, Penelope, and Stephen C. Levinson (1987), *Politeness: Some Universals in Language Usage*, Vol. 4, Cambridge University Press.
- Chaudhuri, Arjun, and Morris B. Holbrook (2001), "The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty," *Journal of Marketing*, 65 (2), 81–93.
- Cheng, Justin S., Victor C. Ottati, and Erika D. Price (2013), "The Arousal Model of Moral Condemnation," *Journal of Experimental Social Psychology*, 49(6), 1012–1018.
- Clark, Herbert H., and Dale H. Schunk (1980), "Polite Responses to Polite Requests," *Cognition*, 8 (2), 111–143.
- Eyal, Tal, Nira Liberman, and Yaacov Trope (2008), "Judging Near and Distant Virtue and Vice," *Journal of Experimental Social Psychology*, 44 (4), 1204–1209.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," white paper, available at <http://www.afhayes.com/public/process2012.pdf>.
- Helm, Amanda (2004), "Cynics and Skeptics: Consumer Dispositional Trust," in *NA – Advances in Consumer Research* Volume 31, eds. Barbara E. Kahn and Mary Frances Luce, Valdosta, GA: Association for Consumer Research, 345–351.
- Holtgraves, Thomas, and Yang Joong-nam (1990), "Politeness as Universal: Cross-cultural Perceptions of Request Strategies and Inferences Based on Their Use," *Journal of Personality and Social Psychology*, 59 (4), 719–729.
- _____ (1992), "Interpersonal Underpinnings of Request Strategies: General Principles and Differences Due to Culture and Gender," *Journal of Personality and Social Psychology*, 62 (2), 246–256.
- Langreth, Robert, and Matthew Herper (2010), "The Planet Versus Monsanto," *Forbes Magazine*, December 29.
- Lerner, Melvin J. (1980), "The Belief in a Just World," in *The Belief in a Just World*, Springer US, 9–30.
- Lipkus, Isaac M. (1992), "A Heuristic Model to Explain Perceptions of Unjust Events," *Social Justice Research*, 5 (4), 359–384.
- Odou, Philippe, and Pauline de Pechpeyrou (2011), "Consumer Cynicism: From Resistance to Anti-consumption in a Disenchanted World?," *European Journal of Marketing*, 45 (11/12), 1799–1808.
- Rosenblatt, Abram, Jeff Greenberg, Sheldon Solomon, Tom Pyszczynski, and Deborah Lyon (1989), "Evidence for Terror Management Theory: I. The Effects of Mortality Salience on Reactions to Those Who Violate or Uphold Cultural Values," *Journal of Personality and Social Psychology*, 57 (4), 681–690.
- Rublin, Z., and A. Peplau (1973), "Belief in a Just world and Reactions to Another's Lot: A Study of Participants in the National Draft Lottery," *Journal of Social Issues*, 29 (4), 73–93.
- Stephan, Elena, Nira Liberman, and Yaacov Trope (2010), "Politeness and Psychological Distance: A Construal Level Perspective," *Journal of Personality and Social Psychology*, 98 (2), 268–280.
- Sundar, Aparna, and James J. Kellaris (2016), "How Logo Colors Influence Shoppers' Judgments of Retailer Ethicality: The Mediating Role of Perceived Eco-friendliness," *Journal of Business Ethics*, DOI 10.1007/s10551-015-2918-4.
- Trope, Yaacov, and Nira Liberman (2010), "Construal-level Theory of Psychological Distance," *Psychological Review*, 117 (2), 440–463.
- Turner, James H., and Sean R. Valentine (2001), "Cynicism as a Fundamental Dimension of Moral Decision-making: A Scale Development," *Journal of Business Ethics*, 34 (2), 123–136.
- Warner, Ruth H., Molly J. VanDeursen, and Anna RD Pope (2012), "Temporal Distance as a Determinant of Just World Strategy," *European Journal of Social Psychology*, 42 (3), 276–284.
- Watts, Richard J. (2003), *Politeness*, Cambridge University Press.
- Zhu, Luke, Jason P. Martens, and Karl Aquino (2012), "Third Party Responses to Justice Failure: An Identity-based Meaning Maintenance Model," *Organizational Psychology Review*, 2 (2), 129–151.

The Influence of Posture on Taste Evaluations

Courtney Szocs, Portland State University, USA
Dipayan Biswas, University of South Florida, USA
Annika Abell, University of South Florida, USA

EXTENDED ABSTRACT

In some contexts, individuals eat while maintaining a seated posture (e.g., at restaurants, in-home dining). However, in other contexts individuals eat while maintaining a standing posture (e.g., at cocktail parties, grocery store sampling stations). Would eating the same food while sitting (vs. standing) influence taste evaluations? That is, how does posture influence taste?

Given that restaurants are beginning to experiment with the standing only concept that has long been popular outside of the United States (Fujita 2013), this finding has important practical implications. In addition, while prior research has examined how the effects of body orientation on consumer decision making much of this work has been done through the lens of embodied cognition (Labroo and Nielsen 2010; Strack, Martin and Stepper 1988). We know of no research that has examined the effects of posture on taste.

We build on literature that shows that standing leads to greater physiological stress than sitting (Abalan et al. 1992) and link it with work that shows that stress decreases the reward value (i.e., liking) of hedonic stimuli (Pizzagalli et al. 2007). We predict that because standing increases physiological stress and stress decreases reward value of hedonic stimuli, consumers will rate the same food as better tasting if they sample while maintaining a sitting (vs. standing) posture. We test this hypothesis and the mediating effect of stress in a series of four experimental studies.

Study 1 examined the basic effect of posture on taste using a single factor between subjects design (posture: sitting vs. standing). Participants ($M_{age} = 24.39$; 50% females) sampled a cookie and rated the taste (Elder and Krishna 2010). Participants also rated their physiological stress/tension and hunger levels. We measured hunger because hunger influences food evaluations (Lozano, Crites and Aikman 1999). The results of an ANCOVA with hunger as a covariate showed that individuals who ate the cookie while seated perceived it as better tasting than individuals who ate the cookie while standing ($M_{sitting} = 4.96$ vs. $M_{standing} = 4.22$; $F(1, 81) = 5.44, p < .05$). Tests for mediation using Preacher and Hayes' (2008) 5,000 bootstrap samples showed that the indirect effects of posture on taste evaluations through the mediator perceived stress/tension (with hunger included as a covariate) yielded a confidence interval that did not include zero ($B = .1497, SE = .099, 90\% CI: .008, .4193$) suggesting that stress/tension mediates the effect of posture on taste.

Then, Study 2 replicated the basic effects of posture on taste and also provided physiological evidence that standing postures were associated with greater stress by measuring participants' heart rate. Study 2 had a one-factor between subjects design and was conducted in two phases because prior research shows that consuming indulgent foods increase heart rate (Brown et al. 2008). The first phase involved individuals sampling a cookie while standing (vs. sitting) and then rating the taste. The second phase, which occurred approximately 3 weeks later involved capturing individuals pulse while they were maintaining the same posture they had in the first phase of the study. Eighty undergraduate students participated in this study however two students did not complete both phases leaving a final sample of seventy-eight ($M_{age} = 24.01, 47.4\%$ females). An ANCOVA with hunger as a covariate showed that participants perceived the cookie as better tasting when they ate it while sitting ($M_{sitting} = 4.35$ vs. $M_{standing} = 3.86$; $F(1, 75) = 3.39, p = .07$). There was also a significant ef-

fect of posture on heart rate with heart rate being higher for standing (vs. sitting) postures ($M_{sitting} = 72.13$ vs. $M_{standing} = 83.28$; $F(1, 76) = 13.13, p < .01$).

If standing is influencing taste by increasing stress then this effect should persist in the absence of a stress prime, but should be attenuated when stress is primed due to decreases in perceived taste when individuals are stressed and seated. Study 3 tested this prediction with a 2 (posture: sitting vs. standing) x 2 (stress: present vs. absent) between subjects design. One hundred and twenty undergraduate students participated in this study ($M_{age} = 22.62$; 40.9% females); however, four individuals did not complete the key dependent measures leaving a final sample of one hundred sixteen. To manipulate stress individuals completed a timed word jumble task (Zellner et al. 2006). Subsequently, individuals sampled a cookie sitting or standing. The results a 2 (posture) x 2 (stress) ANCOVA with hunger as the covariate revealed a significant interaction ($F(1, 111) = 12.156, p = .001$). In the absence of a stress prime, participants who ate the cookie when sitting perceived it as better tasting ($M_{sitting} = 5.79$ vs. $M_{standing} = 4.60$; $F(1, 112) = 12.63, p < .01$). However, when stress was primed there was no difference in taste based on whether participants sampled while sitting (vs. standing) ($M_{sitting} = 4.74$ vs. $M_{standing} = 4.86$; $F(1, 112) = .112, p = .738$).

Finally, in Study 4 we wanted to show that relaxation can relieve the stress associated with standing and attenuate the effects of posture on taste by increasing taste evaluations when individuals are standing. Study 4 had a 2 (posture: sitting vs. standing) x 2 (relaxation: present vs. absent) between subjects design. Posture was manipulated through the presence or absence of chairs. Relaxation was manipulated through the presence of different types of ambient music (Pham, Hung and Gorn 2011). Participants ($N = 111$; $M_{age} = 21.86$; 64.9% females) sampled and evaluated a cream-filled wafer cookie. The results showed that, in the absence of relaxation participants perceived the cookie as better tasting when they were sitting ($M_{sitting} = 5.70$ vs. $M_{standing} = 4.79$; $F(1, 107) = 6.22, p < .05$). However, when relaxation was primed taste evaluations when standing increased and there was no significant difference in taste based on posture ($M_{sitting} = 5.48$ vs. $M_{standing} = 5.67$; $F(1, 107) = .266, p = .607$).

Collectively, the results of four studies show that posture systematically effects taste evaluations by increasing physiological stress.

REFERENCES

- Abalan F., A. Hui Bon Hoa, D. Guillonneau, E. Ruedas, M. Calache, W. Ellison, F. Rigal, F. Perey, M. Sousselier, and M. Bourgeois (1992), "Effect of Posture on Total Cortisol Plasma Concentration," *Hormone and Metabolic Research*, 24, 595-96.
- Brown, Clive M., Abdul G. Dulloo, Gayathri Yepuri, and Jean-Pierre Montani (2008), "Fructose Ingestion Acutely Elevates Blood Pressure in Healthy Young Humans," *American Journal of Physiology*, 294 (3), R730-37.
- Elder, Ryan and Aradhna Krishna (2010), "The Effects of Advertising Copy on Sensory Thoughts and Perceived Taste," *Journal of Consumer Research*, 36 (5), 748-56.

- Fujita, Junko (2013), "Michelin for the Masses: Japan's Standing Restaurants Head for New York," <http://www.reuters.com/article/us-japan-restaurants-standing-idUSBRE94C04A20130513>
- Labroo, Aparna A. and Jesper H. Nielsen (2010), "Half the Thrill is in the Chase: Twisted Inferences from Embodied Cognitions and Brand Evaluations," *Journal of Consumer Research*, 37 (1), 143-158.
- Lozano D.I., S.L. Crites and S.N. Aikman (1999), "Changes in Food Attitude as a Function of Hunger," *Appetite*, 32 (2), 207-18.
- Pham, Michel, Iris W. Hung, and Gerald J. Gorn (2011), "Relaxation Increases Monetary Valuation," *Journal of Marketing Research*, 48 (5), 814-26.
- Pizzagalli, Diego A., Ryan Bogdan, Kyle G. Ratner, and Allison L. Jahn (2007), "Increased Perceived Stress is Associated with Blunted Hedonic Capacity: Potential Implications for Depression Research," *Behavior Research and Therapy*, 45 (11), 2742-53.
- Preacher Kristopher J. and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40 (3), 879-91.
- Strack, Fritz, Leonard L. Martin, and Sabine Stepper (1988), "Inhibiting and Facilitating Conditions of the Human Smile: A Nonobtrusive Test of the Facial Feedback Hypothesis," *Journal of Personality and Social Psychology*, 54 (5), 768-77.
- Zellner, Debra A., Susan Loaiza, Zuleyma Gonzalez, Jaclyn Pita, Janira Morales, Deanna Pecora, and Amanda Wolf (2006), "Food Selection Changes Under Stress," *Physiology & Behavior*, 87 (4), 789-93.

When Less is More: Not Showing the Product's Picture in an Advertisement Can Increase Ad and Brand Evaluations

Tao Tao, Hong Kong Baptist University, Hong Kong, China

Leilei Gao, Chinese University of Hong Kong, China

EXTENDED ABSTRACT

Advertisers often include both the focal product's picture and a context picture that illustrates the brand's benefits in a print advertisement. In some cases, a product's visual appearance is an important information to the viewers (Lazarus 1982, 1991; Yeung and Wyer 2004). In other cases, however, presenting the focal product's picture does not provide much additional information, especially when the product mainly provides non-visual benefits (e.g., service), or when consumers are already familiar with the product's appearance (e.g., coffee, tea). Then, when presenting the product's picture does not provide additional value to the ad viewers, how will the absence (vs. presence) of a product's picture affect consumers' evaluations of the ad and the brand being advertised? The present research bears on this question.

Previous literature has suggested that people respond to pictures in a holistic manner (Spoehr and Lehmkuhle 1982), which facilitates the appreciation of the picture's aesthetics and feelings (Holbrook and Moore 1981). Although responses to pictures are typically holistic, a visually prominent feature or an a priori motive to inspect a specific element can induce a shift from a globalized to a localized processing manner (Spoehr and Lehmkuhle 1982; Hochstein and Ahissar 2002). Based on this logic, consumers are assumed to approach an ad in a global manner. However, since consumers are normally aware of the promotional intent of an advertisement, their subsequent attention is likely to be quickly directed to the focal product's picture (if any). As a result, consumers are likely to quickly shift from processing the holistic features of the ad to attending to the product's picture, facilitating a local processing manner. Furthermore, since the appreciation of the context picture that conveys feelings often requires holistic processing (Escalas 2014; Green and Brock 2000), a local processing manner will reduce consumers' appreciation of the affect-laden benefits. Thus, we propose that when the product's appearance cannot contribute much to an appraisal of its quality, the omission of a picture of the product in an advertisement can increase consumers' affective responses to the ad, and in turn can increase ad and brand evaluations as well as purchase intentions.

Using four different sets of stimuli, the first set of experiments examined the positive effect of the omission of a product's picture. Experiment 1a employed a 2 (product presence: absent vs. present) x 2 (ad stimulus: Lay's potato chips vs. Turkish Airlines) between-subjects design. The Lay's chips ad depicted a scene of a girl enjoying eating. The product's picture, a bag of potato chips was either printed on the lower left-hand side of the ad or not. The Turkish Airlines ad showed the silhouette of a girl standing on the beach, looking up into the sky. The product's picture, an airplane, was either presented in the sky or absent from the ad. As expected, regardless of the ad stimulus, compared to the presence of a product's picture, the absence of the picture increased brand evaluation (6.35 vs. 7.02; $F(1, 114) = 4.76, p < .05$), ad evaluation (5.02 vs. 5.51; $F(1, 114) = 4.42, p < .05$), and affective reaction (4.46 vs. 5.09; $F(1, 114) = 6.64, p < .05$). Besides, bootstrapping analyses showed that affective reaction mediates the effects of product presence on brand and ad evaluations. Experiment 1b and 1c replicated these findings using an ad of foot massage and an ad of tea ware, respectively.

Experiment 2 tested three alternative explanations. First, consumers might perceive the absence of the product's picture as a

mystery, enhancing favourableness. Second, consumers might try to imagine the appearance of the product when it is absent (Sengupta and Gorn 2002), and the self-generated product's image might be more attractive. Third, the product's picture might be unattractive and thus lead to negative impressions. To rule out these explanations, Experiment 2 manipulated whether the product's picture was revealed *after* participants had browsed an ad for tea but *before* they made evaluations. If the positive product omission effect was driven by any of the above explanations, this effect should be eliminated after the product revelation. Results showed that ad evaluation was higher when product's picture was not shown than when it was (4.64 vs. 3.82; $F(1, 115) = 9.37, p < .01$), independent of product revelation ($F_s < 1$).

Experiment 3 and 4 tested an important moderator. We assume that appreciation of the context picture requires holistic processing. However, if the context picture is highly relevant to the viewers' current life experiences, they are likely to integrate his or her relevant personal experiences into the simulation of the content, which involves a detailed and concrete processing strategy (Zhao, Dahl and Hoefler 2014). As a result, the global processing manner triggered by the absence of a product's picture will impair this self-relevant imagery and decrease the affective reactions evoked by the simulated experience. Consequently, omitting the product's picture will have negative effects.

To test this proposition, participants in Experiment 3 browsed an ad for a bridal cake. The context picture depicted a hugging couple. Participants indicated their current romantic relationship status. If they were in a relationship, their simulation was likely to involve their personal experiences, resulting in a negative product omission effect. If participants were not, however, a positive product omission effect should occur. A significant interaction of product's picture and relationship status ($F(1, 117) = 6.47, p < .05$) confirmed this prediction. Participants who were not in relationship evaluated the brand more favorably when the product's picture was absent than when it was present (6.76 vs. 6.22; $F(1, 117) = 3.71, p = .06$). In contrast, participants who were in a relationship rated the brand less favorably in the former condition than in the latter condition (6.29 vs. 5.74; $F(1, 117) = 2.88, p = .09$). Experiment 4 replicated these findings using an ad of coffee and manipulating the content of the ad as either a study or a business scenario, which was either relevant to the student participants or not.

In summary, four experiments demonstrated that leaving out (vs. presenting) the product's picture in an ad can lead to a *positive* effect on evaluations of the ad and the brand. These findings provide practical implications to advertisement design.

REFERENCE

- Escalas, Jennifer Edson (2014), "Imagine Yourself in the Product: Mental Simulation, Narrative Transportation, and Persuasion," *Journal of Advertising*, 33(2): 37-48.
- Green, Melanie C., and Timothy C. Brock (2000), "The Role of Transportation in the Persuasiveness of Public Narratives," *Journal of Personality and Social Psychology*, 79(5): 701-21.
- Hochstein, Shaul, and Merav Ahissar (2002), "View from the Top: Hierarchies and Reverse Hierarchies in the Visual System," *Neuron*, 36(5): 791-804.

- Holbrook, Morris B., and William L. Moore (1981), "Feature Interactions in Consumer Judgments of Verbal Versus Pictorial Presentations," *Journal of Consumer Research*, 8(1): 103-13.
- Lazarus, Richard S (1982), "Thoughts on the Relations between Emotion and Cognition," *American Psychologist*, 37(9): 1019-24.
- _____(1991), *Emotion and Adaptation*, New York: Oxford University Press.
- Sengupta, Jaideep, and Gerald J. Gorn (2002), "Absence Makes the Mind Grow Sharper: Effects of Element Omission on Subsequent Recall," *Journal of Marketing Research*, 39(2): 186-201.
- Spoehr, Kathryn T., and Stephen W. Lehmkuhle (1982), *Visual Information Processing*. San Francisco, CA: Freeman Company.
- Yeung, Catherine WM, and Robert S. Wyer (2004), "Affect, Appraisal, and Consumer Judgment," *Journal of Consumer Research*, 31(2): 412-24.
- Zhao, Min, Steve Hoeffler, and Darren W. Dahl (2009), "The Role of Imagination-Focused Visualization on New Product Evaluation," *Journal of Marketing Research*, 46(1): 46-55.

“I Am What You Eat”: Parents’ Morality is Inferred from the Products they Choose for their Children

Stefanie M. Tignor, Northeastern University, USA

Remi Trudel, Boston University, USA

EXTENDED ABSTRACT

The current research utilizes and extends attribution theory (Heider 1958; Kelley 1967) to develop a model of “parental surrogate consumption,” or, purchasing products or services that one’s child will subsequently consume. Most broadly, we argue that parental surrogate consumption represents a moral consumption behavior, as such consumption stands to directly impact the health and well-being of another individual (i.e., the child) who does not possess regular or complete control over the goods or services he or she consumes (Vitell 2003). From this framework, we demonstrate that perceptions of parents’ morality are influenced by the consumption choices they make for their children, and show that the strength of such moral attributions is dependent on perceptions of behavioral consistency and control.

Conceptual Background

Parental Surrogate Consumption

Parents represent a sizeable market; in the United States alone 53 percent of consumers aged 18 to 40 report having at least one child (Newport and Wilke 2013). In the European Union, nearly 30 percent of all households contain at least one child (Eurostat 2016). These parents as a group spend billions annually on products and services for their children, from toys and sports leagues to food, clothing, and medical care (Lino 2014). Yet to date consumer researchers have not examined the impact that routinely making such interdependent choices has on parental consumers. Rather, the bulk of extant research on parent-child consumption has focused on consumer socialization (e.g., John 1999) or children’s perceptions of products or advertising (e.g., Zhang and Sood 2002). Given the powerful role parents play in children’s consumption behavior, it is important for consumer researchers to examine how routinely making these interdependent choices—hereto named “parental surrogate consumption”—impacts parental consumers. Importantly, the non-elective and power imbalanced nature of parental surrogate consumption distinguishes it from previously examined forms of marketplace surrogacy (Solomon 1986). Though parental surrogate consumption can take many forms, in the current research we examine the consumption of food products, and hypothesize the following:

Hypothesis 1: Consumers view parental surrogate consumption as a moral issue, and rate parents who choose healthy products for their children as more moral than parents who choose unhealthy products for their children.

Attribution Theory

When consumers make consumption decisions, they are conveying information about themselves to onlookers (Belk 1988). Attribution theory (Heider 1958; Jones and Davis 1965) examines how people utilize choice and behavioral information to form impressions of others’ character traits (i.e., form “internal” attributions; Weiner 1985).

Consistency. According to attribution theory, character attributions are formed when behaviors are perceived as being consistent with an individual’s typical pattern of behavior (Jones and Davis

1965). One particularly salient cue that consumers utilize to infer behavioral consistency with respect to food consumption is body weight; consumers typically infer that individuals who are overweight must consistently consume calorie-laden foods (Brownell 1991). In the current research we examine moral attributions formed based on single, one-time parental surrogate consumption behaviors, and manipulate perceptions of consistency using children’s physical characteristics.

Hypothesis 2: Consumers utilize children’s physical characteristics as a proxy for consistency information, and adjust their moral attributions accordingly.

Control. The second key determinant for forming character attributions is perceptions of control. According to attribution theory, character attributions are formed only when individuals are perceived to be making a volitional, intentional choice (Jones and Davis 1965). There exists a rich body of work examining how people form attributions of consumers based on their own consumption decisions (e.g., Vartanian, Herman, and Polivy 2007; Williams and Steffel 2014). Yet, to our knowledge, researchers have not yet examined whether attributions are similarly formed based on the products consumers select for others. Attribution theory would suggest that in such instances character attributions will be formed for the individual in control of the consumption decision (the parent), but will not be extended to the eventual consumer (the child). Furthermore, parents should be relieved of blame for any unhealthy consumption behaviors made by their children outside of their supervision.

Hypothesis 3a: Consumers do not form moral attributions of children based on parental surrogate consumption information, as they are not perceived as being in control of their consumption choices.

Hypothesis 3b: Consumers only form moral attributions of parents based on parental surrogate consumption information to the degree that parents are perceived as being in control.

Experiment 1: Establishing Parental Surrogate Consumption as a Moral Consumption Behavior

Experiment 1 aims to establish parental surrogate consumption as a moral consumption behavior by demonstrating that consumers form moral attributions of parents based on the food products they select for their children.

Method

Participants were 397 Amazon Mechanical Turk workers. Two healthy and two unhealthy food items were selected from a pool of ten pre-tested snacks: apples with peanut butter, yogurt and fruit, a slice of cake, and a donut. All participants were randomly assigned to view one of these snack choices, then asked to rate its unhealthiness using two 6-point bipolar scales: healthy/unhealthy and wholesome/unwholesome ($\alpha = .92$).

After viewing each snack, participants were next presented with a hypothetical scenario stating the following: “8 year-old David has just gotten home from school, and it’s time for his after-school snack. David’s mother gives him...” followed by their assigned snack. Participants then were asked to make ratings of David’s mother’s morality, using four 6-point bipolar scales adapted from Steim and Nemeroff (1995): ethical/unethical, moral/immoral, kind-hearted/cruel, and caring/uncaring ($\alpha = .90$), interspersed with four distractor scales.

Results and Discussion

Results of a one-way ANOVA confirmed a significant difference in morality ratings between conditions ($F(3, 393) = 64.90, p < .001, \eta^2 = .33$). Mothers who fed “David” apple slices ($M = 5.23$) and yogurt and fruit ($M = 5.21$) were rated as the most moral; mothers who fed “David” a donut ($M = 3.98$) and a slice of cake ($M = 4.02$) were rated as less moral. Across conditions, participants’ perceptions of parents’ morality were negatively correlated with their perceptions of snack unhealthiness ($r(395) = -.60, p < .001$), providing support for H1.

Experiment 2: The Moderating Role of Children’s Appearance

Experiment 2 examined whether the strength of moral attributions, formed via parental surrogate consumption information, is moderated by children’s physical appearance.

Method

Participants were 314 Amazon Mechanical Turk workers. Participants were randomly assigned to one of four conditions in a 2 (child weight) x 2 (snack type) design. All participants in all conditions were presented with an image of “8-year old David.” In one condition David appeared to be of a healthy weight; in the second condition David was overweight. All participants read the same scenario presented in experiment 1, with either a donut or fruit with yogurt as the snack. After reading this scenario, participants were asked to make moral judgments of David’s mother ($\alpha = .92$).

Results and Discussion

The joint impact of child weight and snack choice on perceptions of David’s mother was tested using a 2 x 2 ANOVA. Results revealed a significant main effect of child weight, such that participants perceived David’s mother to be less moral when her child was overweight ($F(1, 310) = 58.09, p < .001, \eta_p^2 = .16$). The main effect of food choice was also significant ($F(1, 310) = 155.37, p < .001, \eta_p^2 = .33$), with David’s mother being perceived as more moral when she chose a healthy snack, once again confirming H1. The interaction of food choice and child weight was significant ($F(1, 310) = 12.57, p < .001, \eta_p^2 = .04$), providing initial support for H2. Mothers who selected an unhealthy product for their child were punished more severely when that child was overweight.

Experiment 3: The Mediating Role of Consistency

This moderating role of child weight, as established in experiment 2, may be explained via the consistency dimension of attribution theory. When a mother selects an unhealthy product for her overweight child, consumers likely assume that such a choice is reflective of a consistent pattern of behavior. In experiment 3 we test this mechanism directly.

Method

Participants in experiment 3 were 405 adult Amazon Mechanical Turk workers. Participants were randomly assigned to one of four conditions using the same 2 (child weight) x 2 (snack type) design and scenarios employed in experiment 2. After viewing “David”

with his snack, participants were asked to rate the consistency with which they believed David’s mother selects that snack using five items (e.g., “David’s mother usually selects snacks like this for David to eat”; $\alpha = .94$). Participants then provided moral judgments of David’s mother ($\alpha = .93$).

Results and Discussion

Results were analyzed via moderated mediation analysis (Hayes 2013; PROCESS Model 58). The first model regressed child weight, snack choice, and the interaction between these two on perceptions of behavioral consistency, our mediator. The second model regressed child weight, perceptions of behavioral consistency, snack choice, and the interaction between snack choice and consistency on moral judgments. For full results and variable codings. Importantly, the conditional indirect effect of child weight on morality was significant for both the yogurt condition ($B = -.54, 95\% \text{ CI} = -.81 \text{ to } -.31$) and the donut condition ($B = -.80, 95\% \text{ CI} = -1.10 \text{ to } -.52$). Together, these results confirm H2 by identifying perceptions of behavioral consistency as the mediating mechanism between child weight and moral perceptions, for both healthy and unhealthy products.

Experiment 4: The Role of Perceived Control

In experiment 4 we incorporate perceived control into our model of parental surrogate consumption, by testing whether the choices that parents make impact the moral judgments formed of the children who are subjected to such choices.

Method

Participants in experiment 4 were 315 adult Amazon Mechanical Turk workers. Participants were randomly assigned to one of four conditions in a 2 (child weight) x 2 (snack type) design, nearly identical to that utilized in experiment 2. In contrast to prior experiments, participants were asked to make moral judgments of David himself ($\alpha = .90$).

Results and Discussion

The joint impact of child weight and food choice on perceptions of David was tested using a 2 x 2 ANOVA. Results revealed a significant main effect of child weight, such that participants perceived overweight David to be less moral ($M = 4.12$) than healthy weight David ($M = 4.52; F(1, 311) = 16.15, p < .001, \eta_p^2 = .05$). Importantly, the main effect of food choice failed to reach significance ($F(1, 311) = 2.68, p = .10, \eta_p^2 = .01$), confirming H3a. The interaction of food choice and child weight also failed to reach significance ($F(1, 311) = .59, p = .44, \eta_p^2 = .00$). As David was not in control of his snack choice, consumers did not form character judgments of him based on his mother’s choices.

Experiment 5: The Joint Impact of Control and Consistency

In experiment 5 we investigate the joint impact of perceptions of control and consistency in forming moral attributions by manipulating control in our scenarios.

Method

Participants in experiment 5 were 468 adult Amazon Mechanical Turk workers. Participants were randomly assigned to one of four conditions using a 2 (child weight) x 2 (locus of control) design. Participants were first shown overweight or healthy weight “David.” They then were presented with one of two scenarios, both of which resulted in David consuming a donut as his snack. In the “mother control condition,” the scenario was identical to that utilized in previous experiments.

In the "David control condition," participants read the following: "David just got home from school and it's time for his after school snack. David's mother left him yogurt with fruit in the refrigerator to eat as a snack. David instead grabs a donut out of his backpack that he got from the school cafeteria, and eats that as his snack." This scenario was selected from a pool of six scenarios, pre-tested for perceptions of control. Participants in all conditions rated the consistency with which they believed David to consume donuts ($\alpha = .92$). Finally, all participants were asked to make moral judgments of David's mother ($\alpha = .89$).

Results and Discussion

We tested our hypotheses using a moderated mediation analysis (Hayes 2013; PROCESS Model 14). The first model regressed child weight on perceptions of behavioral consistency, our mediator. The second model regressed child weight, perceptions of behavioral consistency, locus of control, and the interaction between locus of control and consistency on moral judgments. For full results and variable codings.

The conditional indirect effect of child weight on judgments of mothers' morality was significant for the mother control condition ($B = -.24$, 95% CI = $-.38$ to $-.12$), but not for the child control condition ($B = .06$, 95% CI = $-.10$ to $.21$). These results support H3b by demonstrating that though a child's weight provides observers with information regarding the consistency with which he consumes unhealthy products, the indirect effect of weight on moral judgments is only significant for mothers who possess control.

General Discussion

The current research extends attribution theory in establishing a model of parental surrogate consumption. Across five experiments, we: 1) define and characterize parental surrogate consumption as a moral consumption behavior, 2) demonstrate that just as moral attributions are formed based on personal consumption information, so too are they formed based on parental surrogate consumption information, and 3) demonstrate that the occurrence and strength of moral attributions is dictated by perceptions of behavioral consistency and control.

Theoretical Implications

This research contributes to the consumer behavior literature in a number of ways. First, we extend attribution theory beyond judgments made based on the choices consumers make for themselves (e.g., Olson et al. 2016; Williams and Steffel 2014). In this work, we demonstrate that such attributions also can be formed based on the choices consumers make for others (specifically, their children). Second, we direct attention to an overlooked yet highly impactful consumption context: consumption on the behalf of children. Though considerable research has been conducted on child-relevant phenomena such as consumer socialization (e.g., John 1999), the moral implications of the parental surrogate consumption process remain largely unexplored. Third, we answer the call to "broaden the scope" of consumer marketplace morality by introducing parental surrogate consumption as a moral marketplace behavior (Komarova Loureiro et al. 2016).

Limitations and Future Research

Though the current research is the first of its kind, it is not without limitations. Though we define parental surrogate consumption as pertaining to any number of products, herein we only investigate food choices. Future research should investigate non-food products such as screen time, educational products, and medical care, among others. Additionally, though we define parental surrogate consumption as pertaining to the parent-child relationship specifically, there

exist many other under-studied surrogate consumption contexts characterized by an unequal distribution of power or control (e.g., consumption on the behalf of the elderly or disabled). Future research should examine these contexts in the interest of expanding our knowledge of surrogate consumption, as well as in the interest of addressing these under-served consumer populations (Pechmann et al. 2011).

REFERENCES

- Belk, Russell W. and Gregory S. Coon (1993), "Gift Giving as Agapic Love: An Alternative to the Exchange Paradigm Based on Dating Experiences," *Journal of Consumer Research*, 20 (December), 393-417.
- Brownell, Kelly D. (1991), "Personal Responsibility and Control over our Bodies: When Expectation Exceeds Reality," *Health Psychology*, 10 (February), 303-10.
- Eurostat (2016), "Household Composition Statistics," http://ec.europa.eu/eurostat/statistics-explained/index.php/Household_composition_statistics.
- Hayes, Andrew F. (2013), *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY: Guilford Press.
- Heider, Fritz (1958), *The Psychology of Interpersonal Relations*, New York, NY: Wiley.
- Kelley, Harold H. (1967), "Attribution Theory in Social Psychology," *Nebraska Symposium on Motivation*.
- John, Deborah Roedder (1999), "Consumer Socialization of Children: A Retrospective Look At Twenty-Five Years of Research," *Journal of Consumer Research*, 26 (December), 183-213.
- Jones, Edward E. and Keith E. Davis (1965), "From Acts to Dispositions: The Attribution Process in Person Perception," *Advances in Experimental Social Psychology*, 2, 219-66.
- Komarova Loureiro, Yuliya, Julia Bayuk, Stefanie M. Tignor, Gergana Y. Nenkov, Sara Baskentli, and David Webb (2016), "The Case for Moral Consumption: Examining and Expanding the Domain of Moral Behavior to Promote Individual and Collective Well-being," *Journal of Public Policy & Marketing*, 35 (November), 305-22.
- Lino, Mark. (2014). Expenditures on Children by Families, 2013. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. Miscellaneous Publication No. 1528-2013.
- Newport, Frank and Joy Wilke (2013), "Desire for Children Still Norm in U.S.," <http://www.gallup.com/poll/164618/desire-children-norm.aspx>.
- Olson, Jenny G., Brent McFerran, Andrea C. Morales, and Darren W. Dahl (2016), "Wealth and Welfare: Divergent Moral Reactions to Ethical Consumer Choices," *Journal of Consumer Research*, 42 (April), 879-96.
- Pechmann, Cornelia, Elizabeth S. Moore, Alan R. Andreasen, Paul M. Connell, Dan Freeman, Meryl P. Gardner, Deborah Heisley, R. Craig Lefebvre, Dante M. Pirouz, and Robin L. Soster (2011), "Navigating the Central Tensions in Research on at-risk Consumers: Challenges and Opportunities," *Journal of Public Policy & Marketing*, 30, 23-30.
- Solomon, Michael R. (1986), "The Missing Link: Surrogate Consumers in the Marketing Chain," *Journal of Marketing*, 50 (October), 208-18.
- Steim, Richard I. and Carol J. Nemeroff (1995), "Moral Overtones of Food: Judgments of Others Based on What They Eat," *Personality and Social Psychology Bulletin*, 21 (May), 480-90.

- Vartanian, Lenny R., Peter C Herman, and Janet Polivy (2007), "Consumption Stereotypes and Impression Management: How You Are What You Eat," *Appetite*, 28, 265-77.
- Vitell, Scott J. (2003), "Consumer Ethics Research: Review, Synthesis and Suggestions for the Future," *Journal of Business Ethics*, 43 (March), 33-47.
- Weiner, Bernard (1985), "An Attributional Theory of Achievement Motivation and Emotion," *Psychological Review*, 92 (October), 548-73.
- Williams, Elanor F. and Mary Steffel (2014), "Double Standards in the Use of Enhancing Products by Self and Others," *Journal of Consumer Research*, 41 (August), 506-25.
- Zhang, Shi and Sanjay Sood (2002), "'Deep' and 'Surface' Cues: Brand Extension Evaluations by Children and Adults," *Journal of Consumer Research*, 29 (June), 129-41.

The Implications of a Planned Development on Consumption Practices: A Case Study of an Orang Asli Community in Malaysia

Ding Hooi Ting, Universiti Teknologi PETRONAS, Malaysia
Mireya Sosa Abella, Universiti Malaya, Malaysia

EXTENDED ABSTRACT

This paper focuses on one of the Mah Meri's community, an Orang Asli community (Indigenous) in Peninsula Malaysia. The Orang Asli communities in Malaysia are dispersed in many localities all over Malaysia, and they are non-homogenous. The Mah Meri community in this case study occupied 36,000 acres of land during their ancestral time (Endicott, 2015). The government intends to upgrade the living quality of the community and in place, implemented a planned development on their land (their land was "exchanged" with a local agent who had altered the land into a plantation estate with the hope to provide employment and increased economic conditions of the community. With the intervention, the community has been relocated to places that are different from their original habitat, of which the community needs to adapt to new conditions and environment.

Though the planned development by the government (to reduce poverty eradication and to create a balanced society) have their own merits and benefits, these initiatives could be controversial for the Mah Meri community, whose spaces and natural environment are intruded. The planned development has modified the Mah Meri way of life and brought forth different consumption practices. The aim of this study is to analyze the consumption changes that the Mah Meri have had to adapt to due to the pressure of planned development—from practices of self-sustenance and minimal market transactions to a higher reliance on market transactions and material consumption.

For the Orang Asli, nature is the foundation of their subsistence and culture (Munoz, Mladenoff, Schroeder, and Williams, 2014); whereas for the contemporary world, the meaning of nature is connected mainly to development plans. During inception, the Mah Meri community believe that the local agent (who are tasked to implement the developments) will increase their welfare and economic conditions. But in reality, the development has created a different scenario to the community. The community is in conditions of the extreme marginal situation, which creates a low power defend for them.

The alterations that have been brought by planned development have impacted and changed the lifestyle of the Mah Meri. Initially, the Mah Meri has insisted that they would utilize their ancestral land, but the government believes that a planned development would provide far-reaching benefits on the community. With the land ownership changed to the local agent, the majority of the community has rejected the work opportunities provided on the plantation. With the rise of the plantation estate and settlement (a small township has been established) and the loss of the natural spaces, the self-sustenance concept dwindles. For most of the Mah Meri who suffered the loss of territories, they have to incorporate new ways of working and living.

This study used a phenomenology design to explore the Mah Meri community. The researchers had collected data from the head of the Mah Meri community and 10 villagers in two different interview sessions that lasted for nine hours. The semi-structured probing questions were: Tell us about the life of an indigenous community (before and after the development); how the developmental changes are impacting the community and how the community is adapting to the changes. Interviews were recorded and transcribed. The transcripts were analyzed using thematic analysis, involving comparing transcripts for similarities and differences, and searching for the major structural relationships that were related. The themes were then

interpreted and compared against each other, following the stages recommended by Charmaz and Belgrave (2012)—analysis and initial coding, analysis, and interpretation (focused coding), and lastly, the interpretation of the overarching themes were developed from the focused codes.

The themes that were derived from the analyses were materialistic involvement, losing connection to nature, living sources, taboo beliefs, a daily habit, political system, new subsistence and beliefs and future living. These themes were associated with the altered consumption practices that are mainly focusing on these broadly defined consumption themes: from a necessity consumption (basic, self-sustenance, subsistence, productive); and cultural consumption (self-referential, culture, reality) towards a higher order consumption practices of materialistic consumption (functional, aesthetic, reflective, sensuous); playful consumption (performance, pleasure, entertainment, imaginary); intellectualized consumption (cognitive, signs, experience); trend consumption (fashion, statement, design) and contingency consumption (incidental, emergency).

There is a gradual evolution of consumption practices from self-sustenance consumption to a more materialistic-typed consumption practices (Spronk, 2014) with the introduction of the plantation estate and small town. The presuppose consumers, still with minimal purchasing power, have contracted the habit of buying and liking practical, functional products and consumer objects which provide them with some form of consumption statement. This consumption pattern expresses a materialistic aspiration and ambition with the change in the social structure (Warde, 2017). There is also a certain reification of the mentality in the formation of consumption practices and how the boundaries of consumption are further upgraded (Wahlen and Laamanen, 2015)—breaking away from the necessity consumption purposes to a higher order consumption practices. The monetarization of small town life becomes more prevalent. It becomes evident that money quantifies qualitative differences, reduces them to the monotony of more or less and the dialectic between the poor and the rich is more visible and differentiated.

In the case of Mah Meri community, they had tried to blend in their lifestyle by adapting to the new conditions. The government's development plan has caused a trajectory in the lives of the Mah Meri and their connection to their natural spaces and cosmos. The development has opened a new perspective and dimensions in their daily lives. Achieving higher wealth and competitiveness are certainly worthy pursuits in addressing the economic challenges (Hayes, Caldwell, Licona, and Meyer, 2015). However, the condition set forth by the planned development has changed the lifestyle of the Mah Meri community. The findings showed supports that the community's views about living had been detached from the original view. The community has changed their consumption patterns from a situation of need and necessity to a relatively more aesthetic habitus practices when there are elements of development (Alba and Williams, 2013; Pilar and Emontspool, 2015; Ulver and Ostberg (2014).

REFERENCES

- Alba, Joseph W. and Elanor F. Williams (2013), "Pleasure Principles: A Review of Research on Hedonic Consumption," *Journal of Consumer Psychology*, 23(1), 2-18.

- Charmaz, Kathy and Liska Belgrave (2012), *Qualitative Interviewing and Grounded Theory Analysis*, The SAGE Handbook of Interview Research: The Complexity of the Craft, 2, 347-365.
- Endicott, Kirk (2015), *Malaysia's Original People: Past, Present and Future of the Orang Asli*, NUS Press.
- Hayes, Linda A., Cam Caldwell, Bryan Licona, and Thomas E. Meyer (2015), "Followership Behaviors and Barriers to Wealth Creation," *Journal of Management Development*, 34(3), 270-285.
- Munoz, Samuel E., David J. Mladenoff, Sissel Schroeder, and John W. Williams (2014), "Defining the Spatial Patterns of Historical Land Use Associated with the Indigenous Societies of Eastern North America," *Journal of Biogeography*, 41(12), 2195-2210.
- Pilar, Rojas Gaviria, and Julie Emontspool (2015), "Global cities and cultural experimentation: cosmopolitan-local connections," *International Marketing Review*, 32(2), 181-199.
- Spronk, Rachel (2014), "Exploring the Middle Classes in Nairobi: From Modes of Production to Modes of Sophistication," *African Studies Review*, 57(1), 93-114.
- Ulver, Sofia, and Jacob Ostberg (2014), "Moving up, down or sideways? Exploring consumer experience of identity and status incongruence," *European Journal of Marketing*, 48(5/6), 833-853.
- Wahlen, Stefan and Mikko Laamanen (2015), "Consumption, Lifestyle and Social Movements," *International Journal of Consumer Studies*, 39(5), 397-403.
- Warde, Alan (2017), "The Development of the Sociology of Consumption," in *Consumption*, UK: Palgrave Macmillan, 33-55.

Countdown or Countup: Effect of Direction of Time-keeping on Resource Deficiency and Related Downstream Preferences

Sanjeev Tripathi, Indian Institute of Management, Indore, India
Ankur Kapoor, Indian Institute of Management, Ahmedabad, India

EXTENDED ABSTRACT

Time is a scarce resource (Caroll 2008) and individuals need to accomplish tasks in a fixed time (deadlines, grocery shopping, exercise). Time-keeping can happen in two directions: countups, where time is counted upwards (time-elapsed); or countdowns, where time is counted downwards (time-left). While time-keeping is an important and commonplace phenomenon, there is little research in this domain. This research aims to study the impact of direction of time-keeping on food choices, risk preferences, and helping intentions; and explain the effects through theoretical perspective of resource deficiency. Through four studies, we infer that downward (upward) time-keeping leads to more (less) resource deficiency, as manifested in higher (lower) preference for calorie-rich food, more (less) risk-aversion and lower (higher) helping intentions.

Time is considered a resource in many decision making scenarios (Becker 1965; Leclerc, Schmitt, and Dube 1995; Festjens and Janiszewski 2015). This is supported by casual observation about individuals complaining about perpetual time shortage. The key premise of this research is that the direction in which the consumption of time is monitored influences the resource deficiency perception, leading to downstream effects. We argue that downward (upward) time-keeping leads to higher (lower) resource deficiency perception, because decreasing (increasing) sequences are implicitly associated with reducing (increasing) quantities, value or resources (Pelham, Sumarta, and Myaskovsky 1994; Pandelaere, Briers, and Lembregts 2011). There is general association of decreasing sequences with scarcity and reduction (reduction in stock prices, bank balance, calorie consumption etc.). Therefore, a decreasing sequence (especially for resource like time) signals resource reduction more strongly than an increasing sequence. Accordingly, we argue that downward (upward) time-keeping (60,59,...vs...59,60) is more (less) likely to induce resource deficiency perception. Further, such resource deficiency has been found to be associated with higher self-focused behaviors (Levontin, Ein-Gar and Lee 2014), consumption of calorie-rich foods (Briers and Laporte 2013) and risk-aversion (March and Shapira 1992; Haushofer and Fehr 2014). Hence downward (upward) time-keeping should lead to more (less) resource deficiency, as manifested in higher (lower) preference for calorie rich food, more (less) risk-aversion and less (more) willingness to help.

In Study 1, participants (N=95) were randomly assigned to 2(Downward/Upward time-keeping)x2(Evaluation of: Calorie-rich/Calorie-lean food) between-subjects conditions. They worked on a task (crossing e's) timed either in upward (0-60 seconds) or downward (60-0 seconds) direction. Next, they evaluated either a calorie-rich (chocolate cake) or a calorie-lean (fruit salad) food item on purchase likelihood (Dodds, Monroe, and Grewal 1993). Two way ANOVA revealed a significant interaction between time-keeping direction and food category ($F(1,89)=7.195, p=.009$). Planned contrasts revealed a significant difference in preference for calorie-rich food between upward and downward time-keeping conditions ($M_{\text{upward-time-keeping}}=6.97, M_{\text{downward-time-keeping}}=8.02, t(44)=2.65, p=.005$) but non-significant difference for calorie-lean food item. The results are consistent with the possibility that downward (upward) time-keeping leads to higher (lower) resource deficiency, as manifested in higher (lower) preference for calorie-rich food.

However, an alternative explanation is possible. Literature suggests that downward (upward) counting leads to higher (lower) arousal, resulting in higher (lower) preferences for hedonic foods like chocolate cake (Rook and Gardner 1993; Di Muro and Murray 2012; Edith and Morwitz 2013). Study 2 tests this alternate explanation, by exploring the effect of time-keeping direction on risk preferences. While arousal leads to risk seeking (Horvath, and Zuckerman 1993; Mano 1994), resource deficiency can lead to risk-aversion (March and Shapira 1992; Haushofer and Fehr 2014). Accordingly, if downward time-keeping results in resource deficiency perception (arousal), participants should exhibit risk-aversion (risk seeking behaviour). Participants (N=75) were randomly assigned to: upward/downward time-keeping (similar to Study 1) with risk preference (pre-tested polar scale with 1=50% chance of winning 200 units of local currency, and 11=sure amount of 90 units; lesser value means higher risk preference) as dependent measure. As expected, participants in downward time-keeping had lower preference for risk ($M_{\text{upward-time-keeping}}=5.37, M_{\text{downward-time-keeping}}=6.88, t(69)=1.86, p=.032$). These results support our earlier theorization that downward time-keeping leads to higher resource deficiency perception, and effects are not driven by arousal.

While Study 2 rules out the alternate explanation of arousal, it is still possible that the effects of downward time-keeping are due to presence of zero as hard stop. Zero symbolizes completion and exhaustion (of resources). It is possible that resource deficiency perception is induced by presence of zero as the end-point in downward time-keeping, not because of the decreasing sequence. Study 3 investigates this alternate explanation. If the phenomenon is due to presence of zero as hard stop, the effects found in earlier studies should not be observed in downward time-keeping with non-zero ending, but if it is due to decreasing sequence, this effects should be replicated. Participants (N=60) were randomly assigned to: upward (5-64 sec) or downward (64-5 sec) time-keeping (rest of the design was identical to Study 2). It was found that participants in downward time-keeping had lower preference for risk ($M_{\text{upward-time-keeping}}=6.68, M_{\text{downward-time-keeping}}=8.09, t(46)=1.84, p=.035$) than in upward time-keeping. The results suggest that it is not the end point (zero or non-zero) but the decreasing or increasing sequence of time-keeping that induces resource deficiency perception and related downstream effects.

Finally, Study 4 tests the mediation of perceived resource deficiency, and attempts to increase the validity of the results with different operationalization of timed task. Participants (N=132) were randomly assigned to: upward/ downward time-keeping with task of finding words in a word-block, while the time was ticking on the side of screen. Next, they provided responses for willingness-to-donate money to and willingness-to-help a charitable organization, followed by response to a 5-item perceived resource deficiency scale adapted from Levontin, Ein-gar and Lee (2014). It was found that participants in downward (upward) time-keeping had less (more) helping intentions ($M_{\text{upward time-keeping}}=7.25, M_{\text{downward time-keeping}}=6.73, t(128)=2.27, p=.012$). Mediation analysis (Hayes 2013; Model 4) supported mediation of perceived resource deficiency between time-keeping direction and willingness to help (95%CI for indirect effect: 0.0158-0.3089). We also measured affect (PANAS; Watson, Clark, and Tellegen 1988), and found no difference in different time-keeping con-

ditions. This helps us rule out mood or stress based explanation of results.

This research is among the first to study the direction of time-keeping and we hope that it provides direction for richer understanding of time perception.

REFERENCES

- Carroll, Joseph. (2008), "Time Pressures, Stress Common for Americans", Retrieved from: <http://www.gallup.com/poll/103456/time-pressures-stress-common-americans.aspx>
- Becker, Gary S. (1965), "A Theory of the Allocation of Time." *The Economic Journal*, 75(299), 493-517.
- Briers, Barbara, and Sandra Laporte (2013), "A wallet full of calories: The effect of financial dissatisfaction on the desire for food energy." *Journal of Marketing Research*, 50(6), 767-781.
- Di Muro, Fabrizio, and Kyle B. Murray (2012), "An arousal regulation explanation of mood effects on consumer choice." *Journal of Consumer Research*, 39(3), 574-584.
- Dodds, William B., Kent B. Monroe, and Dhruv Grewal (1991), "Effects of price, brand, and store information on buyers' product evaluations." *Journal of Marketing Research*, 28(3), 307-319.
- Edith, Shalev, and Vicki Morwitz (2013), "Does Time Fly When You're Counting Down? The Effect of Counting Direction on Subjective Time Judgement." *Journal of Consumer Psychology*, 23(2), 220-27.
- Festjens, Anouk, and Chris Janiszewski (2015), "The value of time." *Journal of Consumer Research*, 42(2), 178-195.
- Haushofer, Johannes, and Ernst Fehr (2014), "On the psychology of poverty." *Science*, 344(6186), 862-867.
- Hayes, Andrew F (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Horvath, Paula, and Marvin Zuckerman (1993), "Sensation seeking, risk appraisal, and risky behavior." *Personality and Individual Differences*, 14(1), 41-52.
- Leclerc, France, Bernd H. Schmitt, and Laurette Dube (1995), "Waiting time and decision making: Is time like money?." *Journal of Consumer Research*, 22(1), 110-119.
- Levontin, Liat, Danit Ein-Gar, and Angela Y. Lee (2015), "Acts of emptying promote self-focus: A perceived resource deficiency perspective." *Journal of Consumer Psychology*, 2(25), 257-267.
- Mano, Haim (1994), "Risk-taking, framing effects, and affect." *Organizational behavior and Human Decision Processes*, 57(1), 38-58.
- March, James G., and Zur Shapira (1992), "Variable risk preferences and the focus of attention." *Psychological review*, 99(1), 172-183.
- Pandelaere, Mario, Barbara Briers, and Christophe Lembregts (2011), "How to make a 29% increase look bigger: The unit effect in option comparisons." *Journal of Consumer Research*, 38(2), 308-322.
- Pelham, Brett W., Tin T. Sumarta, and Laura Myaskovsky (1994), "The easy path from many to much: The numerosity heuristic." *Cognitive Psychology*, 26(2), 103-133.
- Rook, Dennis W., and Meryl P. Gardner (1993), "In the mood: Impulse buying's affective antecedents." *Research in Consumer Behavior*, 6(7), 1-28.
- Watson, David, Lee A. Clark, and Auke Tellegen (1988), "Development and validation of brief measures of positive and negative affect: the PANAS scales." *Journal of Personality and Social Psychology*, 54 (6), 1063-1070.

How Incidental Confidence Influences Self-Interested Behaviors? A Double-Edged Sword

Claire Tsai, University of Toronto, Canada

Jia lin Xie, University of Toronto, Canada

EXTENDED ABSTRACT

When reading the daily news, one finds examples too numerous to count of politicians, sports stars, business executives, students from top schools, and others finding all sorts of ways to profit by behaving unethically (e.g., Netter 2010). The current research adds to the literature on self-interested behaviors by investigating a hitherto unexplored, yet ubiquitous, determinant—incidental confidence.

People make decisions and take actions based not only on what they like or believe, but also on their confidence in their likes and beliefs. For example, lower confidence can decrease charitable giving (Tsai and McGill 2011), purchases (Greenleaf and Lehmann 1995), price expectations (Mazumdar and Jun 1993; Urbany and Dickson 1991), the amount of money bet on sports games (Tsai, Klayman, and Hastie 2007), and willingness to engage in competition (Camerer and Lovallo 1999).

However, most studies of consequences of confidence have examined how characteristics of a focal event influence confidence in judgments of the same event and subsequent decisions about the event (Yates, 1990). It is curious whether changes in confidence in one domain can influence behaviors in other unrelated domains. We add to this line of work by investigating such transfer effect of incidental confidence on self-interested behaviors. Self-interested behaviors are considered by many researchers a balancing act between wanting to do good and wanting to profit from doing bad (Eisenberg and Shell 1986). The present research examines how incidental confidence might tilt the balance and increase selfish or selfless behaviors.

In the absence of a subjective sense of confidence, people often experience a state of psychological aversion that they are motivated to reduce (Kahneman, Slovic, and Tversky 1982; Payne, Bettman, and Johnson 1992). When it is not possible to restore confidence by improving judgments or ability in the same domain, people can restore confidence by gaining status or increasing rankings in unrelated domains (Coon 1994). For example, an individual who writes poorly may regain his/her confidence by excelling in mathematics. In the context of our study, the desire to compensate for lower confidence may cause people to seek status. The status motives, in turn, can increase self-interested behaviors that generate financial gains or encourage selfless behaviors, depending on whether money or altruism, respectively, is a more prominent source of status.

On the one hand, money is a prominent resource and can serve as an important signal of status (Kemper 1991). Money brings about a state of self-sufficiency, provides a feeling of confidence that problems can be solved and needs can be met (Vohs, Mead, and Goode 2006), and increases the confidence that one can obtain positive outcomes and avoid negative ones (Johnson and Krueger, 2006). We therefore propose that the motive to compensate for lower confidence can trigger self-interested behaviors that generate financial payoffs.

On the other hand, lower incidental confidence can reduce self-interested behaviors when altruism is a stronger signal of status than money (Roberts, 1998). Although status can be achieved by force, we focus on status that is achieved through prestige, freely conferred deference (Henrich and Gil-White 2001). For example, public displays of self-sacrifice for strangers in the group can increase the self-sacrificer's status and the likelihood of being selected as a leader in that group (Gurven et al. 2000). Similarly, when shopping in front

of others, people primed with status-enhancement motives are more likely to purchase costly green products to signal their willingness and ability to bear the cost of prosocial consumption (Griskevicius et al. 2010). However, this preference reverses in a private shopping context (e.g., online shopping) because prosocial consumption would have little signaling value.

In summary, we propose that lower incidental confidence increases (decreases) self-interested behaviors when money (altruism) is the primary signal of status that helps compensating for confidence. We conducted four experiments to test these hypotheses.

Study 1

Method. Study 1 ($N_{\text{target}} = 150$; $N_{\text{actual}} = 121$; 36.60% female; age = 34.21; Amazon Mechanical Turk) tested the hypothesis that lower incidental confidence would increase self-interested behaviors relating to money using a one-shot dictator game, a task commonly used to demonstrate self-interested behaviors involving monetary consequences (Camerer 2003). We had a target sample size of 75 participants per cell and managed to recruit 142 participants. Twenty-one participants failed to pass an attention check and were excluded from the analysis, resulting in 121 valid data points.

Study 1 employed a two-level single-factor (incidental confidence: lower vs. higher) between-subjects design. We first manipulated incidental confidence by asking participants to list five events in which they experienced high or low confidence in their judgments or ability, a procedure adapted from existing research (Petty et al., 2002). Pretesting ($N = 46$) ruled out power and self-esteem as potential confounds.

Next, participants were endowed with \$3.00 and allocated the fund with an unknown recipient in a one-shot anonymous dictator game. Participants kept whatever he or she did not offer; the recipient could choose to accept or reject the offer.

Results. As predicted, participants in the lower-confidence condition behaved more selfishly; they kept more money for themselves than participants in the high-confidence condition ($M_{\text{low-conf}} = \$2.31$, $SD = .64$ vs. $M_{\text{hi-conf}} = \$2.04$, $SD = .72$; $t(119) = -2.19$, $p = .03$; $d = .40$).

Study 2

Method. Study 2 ($N_{\text{target}} = 100$; $N_{\text{actual}} = 80$; 56.10% female; age = 19.52; university students) expanded the research to another self-interested behavior: prosocial consumption that involved a tradeoff between money (cost of product) and altruism.

Participants first completed the confidence manipulation task from Study 1. They then viewed an advertisement and indicated their preference (1 = non-green product, 7 = green product). The advertisement featured a cheaper non-green product and a more-expensive green product. All the other product attributes were identical.

To address the potential issue concerning negative affect, we measured mood and anxiety before and after the choice and controlled for them in the analyses. To rule out the possibility that some form of mood regulation might be involved, we measured anticipated happiness, “to what extent do you think having the product of your choice would make you feel happy (7 = extremely).”

Results. Consistent with Study 1, lower confidence reduced prosocial consumption ($M_{\text{low-conf}} = 4.38$, $SD = 1.31$ vs. $M_{\text{hi-conf}} = 3.70$, SD

= 1.63; $t(78) = -2.03$, $p = .04$; $d = .46$). (Higher number indicated weaker preference for the green product.) Mood, anxiety, and anticipated happiness did not vary across conditions (all $p > .30$). When we controlled for these variables in separate ANCOVAs, none of them had an effect on product preferences (all $p > .33$), and the effect of confidence remained significant (all $p = .04$).

Discussion. The results of Studies 1 and 2 support our hypothesis that lower confidence can increase self-interested behaviors that generate monetary payoffs. These findings show that confidence can have a transfer effect on subsequent self-interested behaviors that are unrelated to the true source of confidence.

In the next two experiments, we investigated the underlying process by manipulating source of status directly—money versus altruism. Our proposed compensatory mechanism implies that lower confidence would decrease prosocial consumption (Study 3) and increase the amount of money kept for self in a dictator game (Study 4) when money serves as the primary means for compensating for lower confidence. However, the results should reverse when altruism can better compensate for lower confidence than money.

Study 3

We expanded the research by manipulating source of status directly and using another procedure to manipulate incidental confidence. The task was an abstract elemental task (Raven's puzzles) that further ruled out power, self-esteem, and even self-efficacy because solving puzzles is unlikely to alter social relations or control over valued resources (power; Magee and Galinsky, 2008), self-acceptance or worthiness (self-esteem; Wylie, 1979), and general belief in one's own ability to complete tasks and reach goals (self-efficacy; Bandura, 1997).

Method. The study ($N_{\text{target}} = 120$; $N_{\text{actual}} = 115$; 56.10% female; age = 19.52; university students) employed a 2 (confidence: lower vs. control) \times 2 (source of status: money vs. altruism) between-subjects design. We first manipulated incidental confidence by asking participants to complete a set of 12 Ravens puzzles that were either difficult or easy. Pretesting ($N = 37$) confirmed that the puzzle task altered confidence level as intended ($M_{\text{low-conf}} = 4.06$ vs. $M_{\text{hi-conf}} = 8.80$; $t(35) = 6.61$, $p < .01$).

Next, participants encountered the manipulation of source of status. Specifically, we told half the participants to consider shopping online by themselves (a private context) or in an actual store (a public context; Griskevicius et al. 2010). Next, participants completed the shopping task from Study 2.

We expected prosocial consumption to be a stronger signal of status than money when people consider shopping in a public context (e.g., in a brick-and-mortar store). The notion of competitive altruism (Roberts 1998) suggests that people are particularly sensitive to the social and reputational aspects of altruism (Bateson, Nettle, and Roberts 2006). Therefore people are more likely to engage in prosocial consumption when shopping in public than in private.

Results. A two-way ANOVA revealed a significant interaction of confidence and source of status only ($F(1, 111) = 9.40$, $p = .002$, $\eta^2 = .075$). Planned contrasts showed that when people considered shopping in private, lower confidence reduced prosocial consumption ($M_{\text{low-conf}} = 4.81$, $SD = 1.82$ vs. $M_{\text{hi-conf}} = 3.82$, $SD = 2.14$; $F(1, 111) = 4.11$, $p = .04$, $d = .50$), replicating the results of Study 2. However, the effect reversed when people considered shopping in public ($M_{\text{low-conf}} = 4.52$, $SD = 2.02$, vs. $M_{\text{hi-conf}} = 5.69$, $SD = 1.46$; $F(1, 111) = 5.30$, $p = .02$, $d = .66$).

Discussion. The results showed that individuals primed with lower confidence appeared to be more or less prosocial in product choices, depending on whether the ownership of a green product or

the savings incurred from purchasing a non-green product was considered more effective in compensating for lower confidence. These results were consistent with the proposed compensatory mechanism. The results further ruled out negative affect, perceived fairness, and effort as alternative explanations because these alternative explanations implied a main effect of confidence regardless of the source of status. Instead, we found that the effect of confidence on product preference was not significant ($F < 1$, $p = .59$), but the two-way interaction of confidence and source of status was.

Study 4

In Study 4, we further tested the compensatory mechanism using the same one-shot dictator game from Study 1 and another procedure to manipulate source of status. Specifically, we varied the strength of group affiliation (Briley and Wyer 2002). Prior research shows that sharing similar experiences can cause people to identify with the reference group (Aronson, Wilson, and Akert 2010). We therefore predicted that group affiliation would be strengthened when participants thought their recipients took the same study.

As mentioned earlier, the display of altruism could compensate for lower confidence because selfless behaviors could help one gain status. Moreover, prior studies on competitive altruism and costly signaling (Barclay and Willer 2007; Roberts 1998; Van Vugt et al. 2007) suggested that altruism was more likely to help one gain status in a community with strong group affiliation than one with weak group affiliation. Thus, altruism should be perceived as the better means for restoring confidence when group affiliation was strengthened and thus lower confidence should decrease the amount of money that people kept for themselves, causing them to appear more altruistic. However, under the condition of weak group affiliation, money would be the better means for restoring confidence. Thus, lower confidence would increase the amount that people kept for themselves, causing them to appear more selfish.

Method. The study ($N_{\text{target}} = 120$; $N_{\text{actual}} = 103$ university students) employed a 2 (confidence: lower vs. control) \times 2 (source of status: money vs. altruism) between-subjects design. Participants received \$5 each for participation and 12 quarters at the beginning of the study. Participants first completed a puzzle task that primed incidental confidence as Study 3.

Next, participants proceeded to the one-shot dictator game from Study 1 and encountered the manipulation of source of status. Specifically, we told participants that their recipients either completed the same puzzle study as they did (strong affiliation) or did a different study (weak affiliation). They then divided their three-dollar endowment with their recipients.

Pretesting ($N = 42$ students) confirmed that lower confidence increased the motives for obtaining status-enhancing monetary resources and that our confidence manipulation task did not induce negative affect or change perceived fairness of the study. The results showed that participants in the low-confidence condition were more inclined to attribute their desire for the monetary prize to status-enhancement reasons ($M = 3.43$, $SD = 1.57$) than did participants in the high-confidence condition ($M = 2.39$, $SD = 1.39$; $t(42) = 2.32$, $p = .02$). Positive mood, anxiety, and fairness did not differ across conditions (all $p > .20$).

Results and Discussion. A two-way ANOVA revealed a significant interaction of confidence and source of status only ($F(1, 99) = 6.15$, $p = .005$, $\eta^2 = .076$). Planned contrasts showed that when participants thought that their recipients had taken a different study (weak affiliation, money as the source of status), lower confidence increased the amount of money that they kept ($M_{\text{low-conf}} = \$2.42$, $SD = .64$ vs. $M_{\text{hi-conf}} = \$2.01$, $SD = .72$; $F(1, 99) = 4.29$, $p = .04$, $d =$

.60). However, the effect reversed when participants thought their recipients had taken the same study (strong affiliation, altruism as the source of status; $M_{\text{low-conf}} = \$1.86$, $SD = 1.07$ vs. $M_{\text{hi-conf}} = \$2.37$, $SD = .72$; $F(1, 99) = 3.60$, $p = .04$, $d = .56$). These results further supported our proposed compensatory mechanism.

General Discussion

It is imperative to better understand the psychology of self-interested behaviors because they are often consequential and incur high cost to the society. Our findings contribute to the confidence literature by documenting a transfer effect of incidental confidence on self-interested behaviors. Our work provides a clearer picture for how confidence influences self-interested behavior. In a series of four experiments, we found that people in a lower confidence state may appear more selfish or selfless depending on the means for restoring confidence. Further, we tested our proposed compensatory mechanism in two studies by manipulating source of status in two different ways—shopping context (Study 3) and group affiliation (Study 4). Finally, data ruled out alternative explanations including affect, fairness, effort, self-efficacy, power, and self-esteem.

This research has important implications for the general area of studies on ethical decision making. For unethical behaviors involving monetary payoffs (e.g., theft, fraud), incidental confidence may produce similar effects to those observed in the current research. In fact, we found in a post-test ($N = 36$ university students) that lower confidence increased theft, a real transgression.

It would be fruitful to further investigate the interplay between confidence and ethical decision making. Other promising avenues for future research include examining how the numerous variables affecting confidence (e.g., processing fluency; Tsai and Thomas 2011) and source of status (e.g., expertise, respect from others; French and Raven, 1959) interact to influence self-interested behaviors.

REFERENCES

- Aronson, E., Wilson, T. D., & Akert, R. M. (2010). *Social psychology*. Upper Saddle River, NJ: Prentice Hall.
- Barclay, P., & Willer, R. (2007). Partner choice creates competitive altruism in humans. *Proceedings of the Royal Society of London B: Biological Sciences*, 274(1610), 749-753.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York, NJ: Freeman.
- Briley, Donnel and Robert R. Wyer (2002), "The Effects of Group Membership on the Avoidance of Negative Outcomes: Implications for Social and Consumer Decisions," *Journal of Consumer Research*, 29 (December), 400-15.
- Camerer, Colin F. (2003), *Behavioral Game Theory: Experiments on Strategic Interaction*, Princeton, NJ: Princeton University Press.
- Camerer, Colin F. and Dan Lovallo (1999), "Overconfidence and Excess Entry: An Experimental Approach," *American Economic Review*, 89 (1), 306-318.
- Chambers, John R. and Paul D. Windschitl (2004), "Biases in Social Comparative Judgments: The Role of Nonmotivated Factors in Above-Average and Comparative-Optimism Effects," *Psychological Bulletin*, 130 (5), 813-838.
- Coon, Dennis (1994), *Essentials of Psychology: Exploration and Application* (6th ed.), St. Paul/Minneapolis, MN: West Publishing Company.
- Eisenberg, Nancy and Rita Shell (1986), "Prosocial Moral Judgment and Behavior in Children," *Personality and Social Psychology Bulletin*, 12 (4), 426-33.
- French, John R. Jr. and Bertram Raven (1959), "The Bases of Social Power," in *Studies in Social Power*, ed. Dorwin Cartwright, Ann Arbor, MI: Institute for Social Research, 150-67.
- Greenleaf, Eric A. and Donald R. Lehmann (1995), "Reasons for Substantial Delay in Consumer Decision Making," *Journal of Consumer Research*, 22 (2), 186-99.
- Griskevicius, Vladus, Joshua M. Tybur, and Bram Van den Bergh (2010), "Going Green to be Seen: Status, Reputation, and Conspicuous Conservation," *Journal of Personality and Social Psychology*, 98 (3), 392-404.
- Gurven, M., Allen-Arave, W., Hill, K., & Hurtado, M. (2000). It's a wonderful life. *Evolution and Human Behavior*, 21, 263-282.
- Henrich, J. & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and human behavior*, 22(3), 165-196.
- Johnson, W., & Krueger, R.F. (2006). How money buys happiness: Genetic and environmental processes linking finances and life satisfaction. *Journal of Personality and Social Psychology*, 90, 680-691.
- Kahneman, Daniel, Paul Slovic, and Amos Tversky (1982), *Judgment Under Uncertainty: Heuristics and Biases*, New York, NY: Cambridge University Press.
- Kemper, Theodore D. (1991), "Predicting Emotions from Social Relations," *Social Psychological Quarterly*, 54 (4), 330-42.
- Mazumdar, Tridib and Sung Y. Jun, (1993), "Consumer Evaluations of Multiple Versus Single Price Change," *Journal of Consumer Research*, 20 (3), 441-50.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, 2, 351-398.
- Netter, Sarah (2010), Confessions of a Ghostwriter: Man's Career Thrives Helping Students Cheat. *ABC News*.
- Payne, J. W., Bettman, J. R., & Johnson, E. J. (1992). Behavioral decision research: A constructive processing perspective. *Annual Review of Psychology*, 43, 87-131.
- Petty, Richard E., Pablo Brinol, and Zakary L. Tormala (2002), "Thought Confidence as a Determinant of Persuasion: The Self-Validation Hypothesis," *Journal of Personality and Social Psychology*, 82 (5), 722-41.
- Roberts, Gilbert (1998), "Competitive Altruism: From Reciprocity to the Handicap Principle," *Proceedings of the Royal Society of London, Series B*, 265, 427-431.
- Tsai, Claire I., Joshua Klayman, and Reid Hastie (2008), "Effects of Amount of Information on Judgment Accuracy and Confidence," *Organizational Behavior and Human Decision Processes*, 107 (2), 97-105.
- Tsai, Claire I. and Ann L. McGill (2011), "No Pain, No Gain? How Construal Level and Fluency Affect Consumer Confidence," *Journal of Consumer Research*, 37 (5), 807-21.
- Tsai, Claire I. and Manoj Thomas (2011), "When Does Feeling of Fluency Matter? How Abstract and Concrete Thinking Influence Fluency Effects," *Psychological Science*, 22 (3), 348-54.
- Urbany, Joel E. and Peter R. Dickson (1991), "Consumer Normal Price Estimation: Market Versus Personal Standards," *Journal of Consumer Research*, 18 (1), 45-51.

- Van Vugt, M., Roberts, G., & Hardy, C. (2007). Competitive altruism: development of reputation-based cooperation in groups. In L. Barrett, & R. Dunbar (Eds.), *Handbook of evolutionary psychology* (pp. 531-540). Oxford, England: Oxford University Press.
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, 314, 1154-1156.

- Wylie, R.C. (1979). *The self-concept* (Vol. 2). Lincoln: University of Nebraska Press.
- Yates, J.F. (1990). *Judgment and decision making*. Englewood Cliffs, NJ: Prentice-Hall.

How Accepting Hierarchy Impacts Information Processing

Lingjiang Lora Tu, Baylor University, USA

Yinlong Zhang, University of Texas at San Antonio, USA

EXTENDED ABSTRACT

The current trend of marketers trying desperately to connect with consumers emotionally, the so-called “sadvertising” (Fera 2014) makes Aristotle’s (1354/1954) question new again: do people follow their hearts or heads? In this research, we aim to advance understanding on this important consumer decision.

Persuasive information can be put into two categories: affective information (i.e. information appealing to the heart such as feelings and emotions) and cognitive information (i.e. information appealing to the head such as attributes and beliefs of the object) (See, Petty and Fabrigar, 2008). To answer the call for more information processing research focusing on the global consumer and richer classifications of cultural differences (Johar, Maheswaran, and Peracchio, 2006), we identify Power Distance Belief (PDB hereafter) – the extent to which individuals expect and accept hierarchy and inequality in society -- as a new factor that impacts the reliance of affective and cognitive information. More specifically, we hypothesize that consumers with low PDB rely more on affective information and prefer affective ads whereas consumers with high PDB rely more on cognitive information and prefer cognitive ads. We further postulate that this PDB effect is mediated by consumption motive with low PDB inducing consummatory motive whereas high PDB inducing instrumental motive. Given the acceptance of one’s position in a hierarchy as the core of PDB, high PDB requires individuals to accommodate to socially conferred positions in a hierarchy. The external regulation of social judgments induces an external perceived locus of causality (Heider, 1958; Botti and McGill, 2011) and promotes instrumental motive for high PDB consumers’ behaviors (Ryan and Deci, 2000). The instrumental motive then induces a preference for products presented with cognitive information (Dhar and Werternbroch, 2000). In contrast, low PDB releases individuals from external regulation of social judgments and promotes a more internal perceived locus of causality, which consequently induces consummatory motive for consumption behaviors (Deci and Ryan, 1985). The consummatory motive drives a preference for products presented with affective information (Dhar and Werternbroch, 2000).

We propose external monitoring as a moderator for the PDB effect based on the classic motivation research findings that external regulation undermines consummatory motive and enhances instrumental motive (Deci, Koestner, and Ryan, 1999; Fishbach and Choi, 2012; Maimaran and Fishbach, 2014). More specifically, we predict that salient external monitoring tends to regulate low PDB individuals’ behavior by enhancing their instrumental motive. In contrast, because high PDB individuals’ baseline tendency to regulate their behaviors with external regulation is already high (Friesen et al., 2014), salient external monitoring should have little effect on high PDB individuals’ motive.

Across one content analysis and five experimental studies, we test the central proposition of the impact of PDB on consumers’ preference for affective versus cognitive information.

The pilot study analyzes print ads from US (PDB =40) and Japan (PDB =54), providing ecological support for the hypothesized PDB impact.

Study 1a and 1b demonstrate the main proposition by manipulating both PDB (Zhang et al. 2010, study 1c) and information type (i.e. affective vs. cognitive) across different product categories, thus supporting the internal validity of the main proposition.

Study 2, 3 and 4 provide convergent evidence for the proposed mechanism of consumption motive underlying the PDB effect. The bootstrapping analysis in study 2 supports the proposed mediation of consumption motive statistically. Mediation analysis was tested separately for affective and cognitive ads with Hayes (2013) Model 4 (with IV= PDB, Mediator = consumption motive, DV = Product Evaluation). The confidence intervals of the indirect effect of PDB on product evaluation through consumption motive didn’t include zero for both affective and cognitive ads (affective ad: indirect effect = -.12, Boot SE = .08, CI’s: -.33, -.01; cognitive ad: indirect effect = .12, Boot SE = .07, CI’s: .02, .29), indicating consumption motive mediates the effect of PDB on product evaluation for both the affective and cognitive ads. By manipulating consumption motive, study 3 further confirms the causal path between the proposed mediator and the dependent variable. Study 4 examines a boundary condition of the PDB effect by manipulating external monitoring. As expected, the PDB effect manifests when external monitoring is non-salient and attenuates when external monitoring is salient. With actual and fictitious ads, across different product categories including products and services, and with both student and non-student participants, the converging results demonstrate the robustness of the PDB effect on the persuasiveness of affective and cognitive information and support the proposed process. Moreover, study 1a, 1b, and study 2 repeatedly show that the PDB prime doesn’t impact situational self-construal. Study 2 demonstrates that the PDB effect is not mediated through self-construal. The experimental findings are consistent with recent PDB research (Gao et al., 2016; Lalwani and Forcum, 2016) that PDB and self-construal are orthogonal theoretical constructs and exert impacts on consumer behavior via different mechanisms.

Our research makes several significant contributions. First, our research enriches the growing body of evidence on consumers’ motivated reasoning during information processing by identifying PDB as a new factor that influences consumers’ selective preference for cognitive versus affective information. Second, this research broadens the cross-cultural persuasion research beyond the heavy reliance on the INDCOLL framework (i.e. individualism-collectivism at the cultural level and independent-interdependent self-construal at the individual level). By including PDB, this research greatly enhances the predictive accuracy of cultural orientation on persuasive effectiveness. Third, this research contributes to the PDB literature (Gao, Winterich, and Zhang, 2016; Lalwani and Forcum, 2016; Winterich and Zhang, 2014; Zhang et al., 2010) by uncovering a novel link between PDB and consumers’ processing of affective versus cognitive information and identify the underlying mechanism and a boundary condition.

REFERENCES

- Aristotle (1954), *Rhetoric*, Translated by W.Rhys Roberts and Ingram Bywater, New York: Modern Library. (Original work published 1354).
- Botti, Simona and Ann L. McGill (2011), “The Locus of Choice: Personal Causality and Satisfaction with Hedonic and Utilitarian Decisions,” *Journal of Consumer Research*, 37 (April), 1065-078.

- Deci, Edward L., Richard Koestner, and Richard M. Ryan (1999), "A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation," *Psychological bulletin*, 125 (6), 627-68.
- Dhar, Ravi and Klaus Werthenbroch (2000), "Consumer Choice between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (February), 60-71.
- Fera, Rae Ann (2014), "The Rise of Sadvertising: Why Brands are Determined to Make You Cry," <http://www.fastcocreate.com/3029767/the-rise-of-sadvertising-why-brands-are-determined-to-make-you-cry#!>
- Fishbach, Ayelet and Jinhee Choi (2012), "When thinking about goals undermines goal pursuit," *Organizational behavior and Human Decision Processes*, 118 (2), 99-107.
- Friesen, Justin P., Aaron C. Kay, Richard P. Eibach, and Adam D. Galinsky (2014), "Seeking Structure in Social Organization: Compensatory Control and the Psychological Advantages of Hierarchy," *Journal of Personality and Social Psychology*, 106 (4), 590-609.
- Gao, Huachao, Karen Page Winterich, and Yinlong Zhang (2016), "All that Glitters Is Not Gold: How Others' Status Influences the Effect of Power Distance Belief on Status Consumption," *Journal of Consumer Research*, 43 (April), 265-81.
- Heider, Fritz (1958), *The Psychology of Interpersonal Relations*, New York: Wiley.
- Johar, Gita Venkataramani, Durairaj Maheswaran, Larura A. Peracchio (2006), "MAPping the Frontiers: Theoretical Advances in Consumer Research on Memory, Affect, and Persuasion," *Journal of Consumer Research*, 33 (June), 139-49.
- Lalwani, Ashok K. and Lura Forcum (2016), "Does a Dollar Get You a Dollar's Worth of Merchandise? The Impact of Power Distance Belief on Price-Quality Judgments," *Journal of Consumer Research*, 43 (May), 317-333.
- Maimaran, M. and Ayelet Fishbach (2014). If it's useful and you know it, do you eat? Preschoolers refrain from instrumental food. *Journal of Consumer Research*, 41(3), 642-655.
- Ryan, Richard M. and Edward L. Deci (2000), "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being," *American Psychologist*, 55, 68-78.
- See, Ya Hui Michelle, Richard E. Petty and Leandre R. Fabrigar (2008), "Affective and Cognitive Meta-Base of Attitudes: Unique Effects on Information Interest and Persuasion," *Journal of Personality and Social Psychology*, 94 (6), 938-55.
- Winterich, Karen Page and Yinlong Zhang (2014), "Accepting Inequality Deters Responsibility: How Power Distance Decreases Charitable Behavior," *Journal of Consumer Research*, 24 (August), 274-93.
- Zhang, Yinlong, Karen Page Winterich, and Vikas Mittal (2010), "Power-Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47 (October), 945-54.

Acknowledging versus Ignoring the Identity-Relevance of Rivalry: Why Endorsing Dual Identities Decreases Spectator Aggression and Downplaying Makes Things Worse

Sebastian Uhrich, German Sport University Cologne, Germany

Johannes Berendt, German Sport University Cologne, Germany

EXTENDED ABSTRACT

Spectator sports are an emotional intergroup setting in which animosity tends to become overheated and crowds quickly shift from peaceful to violence. Incidents of spectator aggression mainly occur around clashes of rival teams, a problem that is prevalent across different sports and countries. While professional sport teams generally promote rivalries to generate interest and boost attendance, they are afraid to add further fuel to the fire as hostilities tend to escalate quickly between rival spectator groups. Countermeasures include public statements that remind spectators of appropriate and inappropriate behavior at sports venues. A widespread approach is the attempt to play down the importance of rivalry games, with officials stating that the game is “no war” or “only for three points.” Although the attempt to downplay the importance of the game appears intuitively useful, the effects of such statements on spectator aggression are unclear. Drawing on the intergroup conflict literature, this research identifies so-called dual identity statements and argues that such statements are more effective in reducing aggression between rival spectator groups than the managerial practice to downplay. The present research also examines the mechanisms that underlie the effects of dual identity statements and assesses the source of the statement as a potential boundary condition.

A strength of the dual identity approach is that it refers directly to consumers’ identity, which is the basis of the conflict. A public dual identity statement must include two important aspects to decrease the hostility toward the rival spectator group: 1) it acknowledges the rival spectators’ subgroup identities, including their respective distinct features (e.g., team colors, rituals) and 2) it reframes group boundaries by defining and promoting a common superordinate identity, which is accepted and valued by both spectator groups.

The dual identity approach explicitly promotes a superordinate identity that includes the rival spectators. When spectators are encouraged to reconsider previous group boundaries, the context in which social comparisons take place will contain a sense of shared existence and common identity (e.g., similarity in geography, tradition).

Holding both the subgroup identity and the superordinate identity reduces intergroup bias by creating a sense of commonality (Hornsey and Hogg 2000). This should reduce the initial ingroup-favoring bias and makes the opposing group less of a target of aggressiveness:

We also expect the strength of the superordinate identity to mediate the effects of the type of message on spectator aggressiveness.

Three famous rivalries in the German soccer league Bundesliga served as the empirical setting to test our hypotheses in experimental field studies. Study 1 used a pen-and-paper survey among supporters of Dortmund ($N = 419$; $M_{Age} = 27.32 (\pm 11.23)$, 66% male), while studies 2 and 3 used online surveys among supporters of Brunswick ($N = 949$; $M_{Age} = 42 (\pm 14.03)$, 89.5% male) and Nuremberg ($N = 625$; $M_{Age} = 33.30 (\pm 13.06)$, 89% male), respectively. In the dual identity condition, the statement in the press article promoted a superordinate identity by alluding to a shared love of the rival spectator groups for their region and tradition. In the downplay condition, the statement deemphasized the importance of the game.

To capture the dependent variable, we measured both aggressive affect (“When thinking about [rival] supporters, I feel hate / anger / disgust”, Kteily, Hodson and Bruneau 2016) and aggressive

behavioral tendencies (“I feel the desire to hurt / inflict pain on fans of [rival]”, Mackie, Devos, and Smith 2000) and collapsed these measures into an index of aggressiveness. Reactance was added as a mediator in studies 2 and 3. Team identification and trait aggression serve as controls.

The results show that sport spectator aggressiveness in rival competitions can be reduced by dual identity statements compared to both downplay statements and remaining silent. The superiority of dual identity statements over the no-statement control condition indicates that the use of public statements can help sports teams to reduce spectator aggressiveness surrounding rivalry games. The managerial practice to deemphasize the importance of rivalry games produced even higher levels of spectator aggressiveness than the no-statement condition. This finding suggests that the widespread use of downplay statements is not only ineffective but may even be counterproductive.

We contribute to the literature by unravelling the theoretical mechanisms underlying the effects of the different types of statements. Consistent with our theorizing, the superiority of dual identity statements can be explained by their ability to strengthen a superordinate identity that spectators share with rival spectators. Theoretically, rival spectators move from outgroup to ingroup to some extent and, therefore, become less of a target of aggressiveness.

Studies 2 and 3 confirm that increased levels of psychological reactance are partially responsible for the counter-intuitive finding that downplay statements increase aggressiveness compared to saying nothing. Spectators’ get upset when teams deemphasize the importance of rivalry because the conflict with the rival spectators marks a crucial part of their identity. Disentangling these causal mechanisms adds to our understanding of how team sport consumers respond to public statements from professional sport teams and spells a basis to design effective statements.

Interestingly, the source of the statement (ingroup, outgroup or both groups together) did not have an influence in our studies. Previous research provides a potential explanation for this unexpected finding. Gomez et al. (2008) show that the endorsement of a superordinate identity from the outgroup is acceptable if people know that fellow ingroup members also accept the superordinate connection. Our study participants may have assumed that fellow spectators accepted the superordinate identity and, therefore, the dual identity statement was perceived favorably even when it came from the rival team’s players.

A caveat of our field experimental approach is a higher degree of noise, limited control over the procedures and a higher number of inattentive participants compared to laboratory settings.

REFERENCES

- Berendt, Johannes and Sebastian Uhrich (2016), “Enemies with Benefits: The Dual Role of Rivalry in Shaping Sports Fans’ Identity,” *European Sport Management Quarterly*, 16 (5), 613-634.
- Brehm, Jack W. (1966), “A Theory of Psychological Reactance,” New York, NY: Academic Press.
- Converse, Benjamin A. and David A. Reinhard (2016), “On Rivalry and Goal Pursuit: Shared Competitive History, Legacy Concerns, and Strategy Selection,” *Journal of Personality and Social Psychology*, 110 (2), 191-213.

- Fiol, Marlene C., Michael G. Pratt, and Edward J. O'Connor (2009), "Managing Intractable Identity Conflicts," *Academy of Management Review*, 34 (1), 32-55.
- Fiske, Susan T. (2002), "What We Know Now About Bias and Intergroup Conflict, the Problem of the Century," *Current Directions in Psychological Science*, 11 (4), 123-128.
- Gneezy, Ayelet (2017), "Field Experimentation in Marketing Research," *Journal of Marketing Research*, 54 (1), 140-143.
- Gomez, Angel, John F. Dovidio, Carmen Huici, Samuel L. Gaertner, and Isabel Cuadrado (2008), "The Other Side of We: When Outgroup Members Express Common Identity," *Personality and Social Psychology Bulletin*, 34 (12), 1613-1626.
- Hornsey, Matthew. J and Michael A. Hogg (2000), "Assimilation and Diversity: An Integrative Model of Subgroup Relations," *Personality and Social Psychology Review*, 4 (2), 143-156.
- Kteily, Nour, Gordon Hodson, and Emile Bruneau (2016), "They See Us as Less Than Human: Metadehumanization Predicts Intergroup Conflict via Reciprocal Dehumanization," *Journal of Personality and Social Psychology*, 110 (3), 343.
- Mackie, Diane M., Thierry Devos, and Eliot R. Smith (2000), "Intergroup Emotions: Explaining Offensive Action Tendencies in an Intergroup Context," *Journal of Personality and Social Psychology*, 79 (4), 602.
- Northrup, Terrell A. (1989), "The Dynamic of Identity in Personal and Social Conflict," in *Intractable Conflicts and Their Transformation*, ed. Terrell A. Northrup., Stuart J. Thorson, and Louis Kriesberg, Syracuse, NY, Syracuse University Press, 55-82.
- Oppenheimer, Daniel M., Tom Meyvis and Nicolas Davidenko (2009), "Instructional Manipulation Checks: Detecting Satisficing to Increase Statistical Power," *Journal of Experimental Social Psychology*, 45 (4), 867-872.
- Simon, Bernd, Alex Mommert, and Daniela Renger (2015), "Reaching Across Group Boundaries: Respect from Outgroup Members Facilitates Recategorization as a Common Group," *British Journal of Social Psychology*, 54 (4), 616-628.
- Simon, Bernd, Frank Reichert and Olga Grabow (2013), "When Dual Identity Becomes a Liability Identity and Political Radicalism Among Migrants," *Psychological Science*, 24 (3), 251-257.

Optionally Green: The Role of Green Attribute Optionality in Influencing Performance Evaluations

Bryan Usrey, University of East Anglia, UK
Dayananda Palihawadana, Leeds University, UK
Charalampos Saridakis, Leeds University, UK
Aristeidis Theotokis, Leeds University, UK

EXTENDED ABSTRACT

As firms seek to develop green products, they may find that consumers are unwilling to alter their consumption behavior due to a perceived performance reduction. However, past literature has often viewed green products homogenously, whereby a product is either green or non-green. In contrast, we state that a product can feature a green attribute, but that it is not required for the base product to function (termed green attribute optionality), potentially overcoming the negative green product performance stigma.

Building on the innovation locus literature that recognizes the distinction between core and peripheral innovations (e.g. Gatignon, et al. 2002), we extend the concept of peripheral to include optionality. When optional the attribute may enhance a product's green benefits, but is not required for it to function. Thus, we posit that performance risk is not transferred from the attribute to the base product, enhancing performance evaluations.

In addition, we state that optionality includes two default policies. Based on choice architecture and default literature, a product may possess a green attribute that is default, but may be deactivated (opt-out). Alternatively, the green attribute may be deactivated, allowing the user to activate it when needed (opt-in). As defaults act as a carrier of meaning (Brown and Krishna, 2004), we posit that when the green attribute is the default option (opt-out), performance evaluations will be reduced.

Additionally, we explore the moderating role of cognitive style and the mediating variable of green product typicality. In the former, we posit that holistic thinkers will view product attributes as interconnected, focusing on the degree to which differing attributes are connected and form an entity. In contrast, analytical thinkers may be able to detach the attribute from the product, viewing each attribute as separate (Nisbett, et al., 2001). Based on this, we posit that the impact of green attribute optionality on performance evaluations will be negated when an analytical mindset is activated. In the latter, we predict that an opt-out strategy, whereby the green attribute is default, will lead to an increase in the extent to which the product is viewed as typical of similar green products, thus degrading performance evaluations.

Three experiments were conducted to examine the effect of green attribute optionality on performance evaluations. In Study 1a, we explore both the optional and non-optional conditions. In Study 1b, we introduce the default policies, investigating opt-in, opt-out and non-optional strategies. In Study 2, we examine the moderating variable of cognitive style. Finally, in Study 3, we present the mediating mechanism of green product typicality.

In Study 1a, we performed a one-factor (green attribute optionality: non-optional vs. optional) between subjects' experiment with 75 respondents. Green attribute optionality was manipulated by presenting respondents with an advertisement for a washing machine along with a heading that outlined the product's eco-friendly mode. Located at the bottom of the advertisement, a statement indicated that the eco-mode was user-activated. In the non-optional condition, no statement was presented. Finally, we measured performance evaluations. An ANOVA revealed that when the environmental attribute

was optional respondents rated the product as higher in performance ability than if it was non-optional ($F(1, 73) = 5.796, p < .05$).

Study 1b introduced choice architecture and the two default optionality policies. One hundred and twenty-five respondents were recruited to test a one-factor (green attribute optionality: non-optional vs. opt-in policy vs. opt-out policy) between-subjects experiment. All respondents were given a press release for a washing machine, like Study 1a. In the opt-in condition, participants read that the user "can activate the EcoX technology" compared to the opt-out condition that read that users "can deactivate the EcoX technology". There was no optionality information in the non-optional condition. Next, we measured performance evaluations, green evaluations and environmental consciousness. An ANCOVA, including environmental consciousness as a control variable, revealed a significant main effect ($F(1, 121) = 4.364, p < .05$), whereby opt-in was significantly higher than both the opt-out and the non-optional. Moreover, there was no significant difference between the non-optional and the opt-out conditions. Finally, no significant effect was found on green evaluations ($p = .128$).

Study 2 introduces the moderating variable of cognitive style. We recruited 245 respondents to examine a 3×2 between-subjects experiment. The manipulations for optionality were the same as in Study 1b, while cognitive style was manipulated by asking respondents to write about a meaningful event that took place in their lives alone (analytical) or with friends and/or family (holistic). A significant main effect was found ($F(1, 238) = 9.887, p < .05$), whereby opt-in enhanced performance evaluations. In addition, a significant interaction was found ($F(1, 238) = 4.363, p < .05$), where the analytical condition negated the effect of choice architecture. Finally, there was no main effect for green evaluations ($p = .764$).

Finally, in Study 3, we test a 2×2 between subjects' experiment with 149 respondents to examine the mediating variable of green product typicality, which was measured along with performance and green evaluations and environmental consciousness. In this study, the non-optional condition was removed. Cognitive style was manipulated as in Study 2, while optionality was manipulated via an advertisement for a kettle, in which the green was described similarly to Study 2. A two-way ANCOVA revealed a significant interaction between green attribute optionality policy and cognitive style ($F(1, 144) = 4.690, p < .05$). Furthermore, a significant direct effect was found ($F(1, 144) = 5.014, p < .05$). Finally using Process Model 7 (Preacher and Hayes, 2008), we found a significant moderated mediation with a 95% confidence interval excluding zero ($CI = -.3895$ to $-.0029$).

Taken together, we show that optionality enhances performance evaluations. Specifically, the optionality policy of opt-in. In addition, this perceived performance enhancement does not come at the expense of perceived greenness. Additionally, we find support for the moderating variable of cognitive style and the mediating role of green product typicality. Our results provide both theoretical implications, as well as practical contributions for green product development.

REFERENCES

- Brown, Christina L, and Aradhna Krishna. (2004). "The Skeptical Shopper: A Metacognitive Account for the Effects of Default Options on Choice." *Journal of Consumer Research*, 31 (3), 529-539.
- Gagnon, Hubert, Michael L. Tushman, Wendy Smith, and Philip Anderson. (2002). "A Structural Approach to Assessing Innovation: Construct Development of Innovation Locus, Type, and Characteristics." *Management Science*, 48 (9), 1103-1122.
- Nisbett, Richard E, Kaiping Peng, Incheol Choi, and Ara Norenzayan. (2001). "Culture and Systems of Thought: Holistic versus Analytic Cognition." *Psychological Review*, 108 (2), 291-310.

The Role of Women, Sexualization and Objectification in LGBTQ Advertising

Patrick van Esch, Moravian College, USA

Ally Geisler, Moravian College, USA

Lizabeth Kleintop, Moravian College, USA

Gavin Northey, University of Auckland, New Zealand

Jonas Heller, University of New South Wales, Australia

EXTENDED ABSTRACT

In advertising, the sexualization of women is taking place in the LGBTQ target market segment. Whilst LGBTQ advertisements continue to target males using humor as the dominant appeal; for women, the most dominant appeal is sexual. When the main character in the advertisement is portrayed in terms of LGBTQ connotation, a positive and negative connotation is fairly evenly distributed for male characters, however; for female characters, the positive LGBTQ connotation is dominant. If the main character is female, she is more likely to be portrayed as a protagonist.

Marketers and organizations alike, balance a fine line between appealing to both LGBTQ and mainstream clients without ostracizing one or the other, specifically their mainstream clients, as they are a larger portion of the population (Flounders & Mabry-Flynn (2016). Heterosexuals desire lesbian imagery over gay male imagery, therefore, advertisers targeting the gay market will use lesbian imagery because not only does it reach homosexual consumers, but also reduces the chance of heterosexuals identifying the advertisement as LGBTQ (Hootens et. al., 2009). The heterosexual audience has a positive attitude towards lesbian ads, and these results are compounded when the level of intimacy displayed in the advertisements are amplified (Oakenfull & Greenlee, 2005). It is significant to note that lesbians are often depicted as highly sexualized in mainstream media (Flounders & Mabry-Flynn, 2016).

This exploratory research examines the the portrayal of women when either the main character and/or voiceover (gender, sexuality, antagonist, protagonist) in LGBTQ TV advertisements. In the first instance, the aim was to determine the dominant appeals (emotional, fear, humor, rational, sexual) and LGBTQ connotations (positive, negative) that are associated with women in advertisements to the LGBTQ community.

The diversity of the LGBTQ community has meant there isn't one, single 'LGBTQ' identity. Oakenfull (2007) found clear distinctions between gay and lesbian consumers and argued that marketers had to use lesbian imagery and not just gay imagery in advertisements to be effective in the two communities. Um (2014) found heterosexual consumers to respond less favorably to gay themed advertising, including a differential in heterosexual males more negatively evaluating gay-themed advertising and the brand advertised than did heterosexual females. Oakenfull & Greenlee (2004) cautioned marketers to consider both the gender of their target gay or lesbian audience and the gender of the heterosexual audience likely to view the advertising when creating their advertisements.

Hypothesis 1: Women are featured less prominently in LGBTQ TV advertising campaigns

Using sex as a method of selling supports the influence of silencing a woman's' appeal by exhibiting women in an objectified manner for male pleasure and utilization. This common portrayal accentuates physical attractiveness, prominent displays of the body, and sexual mannerisms of women. Then, marketers used more explicit messages, though this was imagery that was unique and recognizable to the LGBTQ community, these methods were used to mask

the underlying LGBTQ message from the non-LGBTQ population (Peñaloza, 1996).

Hypothesis 2: For female characters in LGBTQ TV advertising campaigns, the most dominant appeal is sexual

The study examined the characteristics of LGBTQ TV advertisements (n = 300) that ranged from the years 1952 to 2016. It examined the portrayal of the main character and voiceover (gender, sexuality, antagonist, protagonist), dominant appeal (emotional, fear, humor, rational, sexual) and LGBTQ connotations (positive, negative).

When comparing the Western world (US, EU, Oceania) and less developed countries (Asia, Africa, South America), LGBTQ advertisements continue to target males ($\chi^2 = 4.74$, $df = 1$, $p < .05$). The broader focus remains on the Western world (135 ads, 46.7% male; 50 ads, 17.3% female), whilst similar in less developed countries (63 ads, 21.8% male; 41 ads, 14.2% female), the gap between genders is much smaller.

If the main character is male, then the voiceover is traditionally male as well (87%), hence it is congruent ($\chi^2 = 18.59$, $df = 1$, $p < .001$). For females, the voiceover gender is more evenly distributed (54.3% male, 45.7% female). However only very few cases occur where advertisements have a female voiceover (33 ads, 19.9%). In terms of how the main character of the advertisement is portrayed with regards to LGBTQ connotation, a positive and negative connotation is fairly evenly distributed for male characters, however, for female characters (36 ads, 62.1%), the positive LGBTQ connotation is dominant ($\chi^2 = 12.92$, $df = 2$, $p < .01$). Lastly, if the main character is female (46 ads, 79.3%), she is more likely to be portrayed as a protagonist ($\chi^2 = 6.32$, $df = 1$, $p < .05$).

The sexualization of women also takes place in the LGBTQ community ($\chi^2 = 12.94$, $df = 4$, $p < .01$). For male characters, the most dominant appeal is humor (80 ads, 36.5%), followed by sexual appeals (56 ads, 25.6%). For female characters, the most dominant appeal is sexual (24 ads, 41.4%), with all other appeals evenly distributed. If the character is male (175 ads, 63.2%), the target audience is more likely to be straight rather than identify as LGBTQ ($\chi^2 = 7.57$, $df = 1$, $p < .01$).

The dominant appeals in LGBTQ advertisements are humor, eroticism, and leisure. Reichert & Ramirez (2000) discovered four predominant traits of sexual advertisements including: physical appearance of models, behavior or movement, intimacy between models, and contextual features. Gill (2009) argues that the proliferation of sexually explicit imagery within both contemporary and LGBTQ advertising indicates that sexualization is neither a homogenous or singular process. Individuals within the LGBTQ community are sexualized in specific ways and in a visual culture, lesbian, bisexual, and queer women are often easily recognizable 'figures' in LGBTQ advertising, yet sexualization doesn't necessarily maneuver outside of class, gender and/or radicalization due to the fact that it remains overwhelmingly ageist and heteronormative (Evans, Riley & Shankar, 2010). In this respect, findings from the current research are possibly the first evidence that women are underrepresented in LGBTQ advertising and female characters are often portrayed with a positive

LGBTQ connotation. The perspectives of the sexualization of women in LGBTQ advertising highlights two key areas for consideration (1) the portrayal of women compromising the relationship they have with their own and other women's bodies, and (2) LGBTQ advertising sensibility, underwrites the discussion around the sexualization of women, including the prospects of empowering female sexuality rather than demonizing it (Randazzo, Farmer & Lamb, 2015).

REFERENCES

- Borgerson, J. L., Schroedera, Jonathan E., Blomberg, B., and Thorssénc, E. (2006a). The Gay Family in the Ad: Consumer Responses to Non-traditional Families in Marketing Communications. *Journal of Marketing Management*, 22, 955-978.
- Borgerson, J.L., Isla, B., Schoeder, J.E., and Thorssen, E. (2006b). Representation of gay families in advertising: Consumer responses to an emergent target group. In K. M. Ekstrom & H. Brembeck (Eds.), *European Advances in Consumer Research*, 7, 143-152, Goteborg, Sweden: Association for Consumer Research.
- Cunningham, George B. and Melton, E. Nicole. (2014). Signals and Cues: LGBTQ Inclusive Advertising and Consumer Attraction. *Sport Marketing Quarterly*, 23(1), 37-46.
- Evans, A., Riley, S., & Shankar, A. (2010). Technologies of sexiness: Theorizing women's engagement in the sexualization of culture. *Feminism & Psychology*, 20(1), 114-131.
- Gentzkow, M. & Shapiro, J.M. (2006). Media bias and reputation. *Journal of Political Economy*, 114(2), 280-316.
- Gill, R. (2009). Beyond the sexualization of culture thesis: An intersectional analysis of sixpacks', midriff's' and hot lesbians' in advertising. *Sexualities*, 12(2), 137-160.
- Ginder, W. & Byun, S. (2015). Past, present, and future of gay and lesbian consumer research: Critical review of the quest for the Queer dollar. *Psychology & Marketing*, 32(8), 821-841.
- Hooten, M. A., Noeva, K., & Hammonds, F. (2009). The effects of homosexual imagery in advertisements on brand perception and purchase intention. *Social Behavior and Personality: An International Journal*, 37(9), 1231-1238.
- Lambiase, J., & Reichert, T. (2003). Promises, promises: Exploring erotic rhetoric in sexually oriented advertising. *Persuasive imagery: A consumer perspective*, 247-266.
- Oakenfull, G.K. (2007). Effects of gay identity, gender and explicitness of advertising imagery on gay responses to advertising. *Journal of Homosexuality*, 53(4), 49-69.
- Oakenfull, G.K. & Greenlee, T.B. (2004). The three rules of crossing over from gay media to mainstream media advertising: lesbians, lesbians, lesbians. *Journal of Business Research*, 57, 1276-1285.
- Oakenfull, G.K. & Greenlee, T.B. (2005). Queer eye for a gay guy: Using market-specific symbols in advertising to attract gay consumers without alienating the mainstream. *Psychology & Marketing*, 22(5), 421-439.
- Oakenfull, G.K., M.S. McCarthy, and T.B. Greenlee. 2008. Targeting a minority without alienating the majority: Advertising to gays and lesbians in mainstream media. *Journal of Advertising Research*, 48, 191-198.
- Peñaloza, L. (1996). We're here, we're queer, and we're going shopping! A critical perspective on the accommodation of gays and lesbians in the U.S. marketplace. *Journal of Homosexuality*, 31(1-2), 9-41.
- Pounders, K., & Mabry-Flynn, A. (2016). Consumer Response to Gay and Lesbian Imagery. *Journal of Advertising Research*, 56(4), 426-440.
- Randazzo, R., Farmer, K., & Lamb, S. (2015). Queer Women's Perspectives on Sexualization of Women in Media. *Journal of Bisexuality*, 15(1), 99-129.
- Reichert, T., & Ramirez, A. (2000). Defining sexually oriented appeals in advertising: A grounded theory investigation. *Advances in Consumer Research*, 27.
- Rivendell Media, Inc. 2007. 2006 Press Report. Retrieved 7 August 2008 from http://rivendellmedia.com/gay_pressreports/GayPressReport_2006.pdf.
- Roth, Tom & Paisley, David. (2017). LGBTQ Marketing: What makes us different? What makes us the same? *Out & Equal Workplace Advocates 2017 Virtual Summit Series*. Webinar retrieved from <https://cc.readytalk.com/cc/playback/Playback.do?id=5dp722>
- Tuten, T. L. (2006). Exploring the Importance of Gay-friendliness and its Socialization Influences. *Journal of Marketing Communications*, 12(2), 79-94.
- Um, Nam-Hyun. (2014). Does gay-themed advertising haunt your brand? The impact of gay-themed advertising on young heterosexual consumers. *International Journal of Advertising*, 33(4), 811-832.
- Um, Nam-Hyun. (2016). Consumers' Responses to Implicit and Explicit Gay Themed Advertising in Gay vs. Mainstream Media. *Journal of Promotion Management*, 22(3), 461-477.

Personal Control and Perceived Product Efficacy

Noah VanBergen, University of Cincinnati, USA
Caglar Irmak, University of Miami, USA

EXTENDED ABSTRACT

A growing stream of research examines how individuals cope with the common experience of reduced personal control (e.g., Chen, Lee, and Yap 2016; Cutright 2012; Cutright and Samper 2014). Compensatory control theory (CCT; Kay and Eibach 2013) proposes that behavior following a loss of control is driven by two basic motivations: bolstering a sense of agency, and affirming structured and predictable relationships in the world. In turn, four strategies serve these two motivations (Landau, Kay, and Whitson 2015). The present research builds on the two strategies for bolstering agency, which are (1) affirming beliefs about personal agency or ability, and (2) affiliating with external entities that can act on the self's behalf. Specifically, we build on prior work showing that control-deprived consumers evaluate products more favorably when those products have characteristics fitting the motivation to affirm personal agency (i.e., "strategy 1"). For example, products requiring effort are evaluated more favorably because using them is empowering (Cutright and Samper 2014), and utilitarian products are evaluated more favorably because they are associated with problem-solving (Chen et al. 2014).

Extant research has not examined the possibility that products can serve as external sources of control (i.e., "strategy 2"); research in this strategy focuses on cultural sources of control (e.g., religion and governments; Kay and Eibach 2013). However, because "efficacious products" (e.g., performance-enhancers, detergents, and pharmaceuticals) can be seen as external entities that act on a user's behalf in order to bring about a desired outcome (e.g., successful performance, a clean home, and relief from ailments, respectively), it may be possible for control-deprived consumers to rely on such products as external sources of control.

In line with CCT, we thus propose that consumers experiencing low control seek external aids that can help them achieve their goals and reaffirm their ability to bring about desired outcomes. As efficacious products can help users reach desired outcomes, we hypothesize that low (vs. high) personal control increases perceived product efficacy. Moreover, as this is driven by control-deprived consumers' motivation to use the product in order to reach a desired outcome, this effect combines "strategy 2" and "strategy 1" (Landau et al. 2015) in the sense that reduced control leads consumers to give more credit to the external source (by perceiving greater efficacy) because this helps consumers accomplish desired outcomes through their own actions. This implies that the effect of personal control on perceived product efficacy should be moderated by the personal relevance of a product for achieving desired outcomes.

We tested these predictions in two studies and find support for our proposed process. Study 1 provides initial evidence through a 2 (personal control: low vs. high) x 2 (self-affirmation: neutral vs. affirmation) between-subjects design in which 98 Mturk respondents participated. As self-affirmation reduces the need to compensate for low personal control (Whitson and Galinsky 2008), we hypothesized that participants feeling low (vs. high) personal control would perceive a product as more effective, but this effect would be attenuated by an opportunity to self-affirm. To test this, participants were led to believe that they would utilize a performance-enhancing treatment (listening to music by Mozart) to assist their performance on a task, and we measured participants' expectations for the effectiveness of the music at improving performance. As expected, we found a significant 2-way interaction ($p < .05$) such that low (vs. high) personal

control increased perceived efficacy in the neutral affirmation condition ($p < .05$) but not the self-affirmation condition ($F < 1$).

Study 2 built on these findings by manipulating the personal relevance of the product under consideration, such that half the participants believed the product under consideration would be used for an upcoming task, whereas the other half merely reported efficacy perceptions without expecting to consume the product or perform the task. Thus, 209 undergraduates were randomly assigned to one of four conditions in a 2 (personal control: low vs. high) x 2 (expectation of consumption and performance: absent vs. present) between-subjects design. Participants in the expectations-present condition were led to believe that they would consume an energy drink ("Neuro SONIC") before completing a performance task, while those in the expectations-absent condition were simply informed that we were interested in their perception of the energy drink. We measured perceptions of product efficacy, as well as participants' motivation to derive efficacy from the product in order to accomplish desired outcomes. We hypothesized that low (vs. high) personal control would increase perceived efficacy in the expectations-present condition only, and that motivation to derive product efficacy would mediate this effect.

Results confirmed our predictions. We found significant two-way interactions on both efficacy perceptions ($p < .05$) and motivation ($p < .05$), such that participants in the expectations-present condition perceived significantly greater efficacy, and were also significantly more motivated to derive efficacy, under low vs. high personal control ($ps < .05$). Mediation analysis (Hayes 2013; Model 8) demonstrated that motivation mediated the effect of personal control on efficacy perceptions (95% CIs for both the two-way interaction and simple effects did not cross zero, and the direct effect of the two-way interaction on efficacy became nonsignificant when accounting for motivation).

Our research contributes to the personal control and product efficacy literatures. First, extant marketing research on products as sources of personal control has studied only evaluations of products, showing that products possessing characteristics associated with regaining agency are evaluated more favorably (Chen et al. 2016; Cutright and Samper 2014). We build on this work by showing that perceptions, not only evaluations, of products are impacted by personal control. Moreover, this effect is due to a combination of the strategies used to regain control: Control-deprived consumers perceive greater product efficacy because they are motivated to utilize external sources of control ("strategy 2") in order to accomplish personally-relevant desired outcomes ("strategy 1"; Landau et al. 2015). In contrast, previous research has only shown that product evaluations are impacted by personal control due to "strategy 1." Finally, we also contribute to the product efficacy literature by showing that personal control—a factor relating to consumers, rather than the product—impacts perceptions of product efficacy.

REFERENCES

- Chen, Charlene Y., Leonard Lee, and Andy J. Yap (2016), "Control Deprivation Motivates Acquisition of Utilitarian Products," *Journal of Consumer Research*, ucw068.
- Cutright, Keisha M. (2012), "The Beauty of Boundaries: When and Why We Seek Structure in Consumption," *Journal of Consumer Research*, 38 (5), 775–90.

- Cutright, Keisha M. and Adriana Samper (2014), "Doing It the Hard Way: How Low Control Drives Preferences for High-Effort Products and Services," *Journal of Consumer Research*, 41 (3), 730–45.
- Hayes, Andrew F. (2013), *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford.
- Kay, Aaron C. and Richard P. Eibach (2013), "Compensatory Control and Its Implications for Ideological Extremism," *Journal of Social Issues*, 69 (3), 564–85.
- Landau, Mark J., Aaron C. Kay, and Jennifer A. Whitson (2015), "Compensatory Control and the Appeal of a Structured World," *Psychological Bulletin*, 14 (3), 694-722.
- Whitson, Jennifer A. and Adam D. Galinsky (2008), "Lacking Control Increases Illusory Pattern Perception," *Science*, 322 (5898), 115–17.

How Process Explanations Impact Assessments of Predictions of Uncertain Events

Daniel Villanova, Virginia Tech, USA

Elise Chandon Ince, University of South Carolina, USA

Rajesh Bagchi, Virginia Tech, USA

EXTENDED ABSTRACT

When making predictions, experts can choose how much explanation to provide—either very little or a lot—about the process used to make inferences. While literature on consumer research suggests that providing more information generally improves evaluations (Calder, Insko, and Yandell 1974; Chaiken 1980; Stiff 1986), we show that consumers report preferences for more explanation in *choices* among predictions, but, in the context of single probability prediction *evaluations*, we demonstrate that providing process information *can lower* evaluations. This occurs because explanation sometimes leads to the inference that the prediction-making process is less complicated, and, therefore, the expert's analysis was not as in-depth, affecting inferences about both the prediction (accuracy) and the expert (trustworthiness). Thus, consumers may believe a prediction to be less accurate and trust the expert less when she offers more explanation.

We draw from the area of inference-making to develop our theory. This research stream suggests that when little information is present (e.g., other than the overall prediction), consumers use prior knowledge to make inferences. Because an expert provided this estimate, they infer that the process of arriving at the overall prediction was complicated. However, when an explanation is presented, consumers can generate new information from this content. Hence, when a brief explanation is presented, it is likely to lack details and look superficial, leading to inferences that the expert did not do an in-depth analysis, which should be less likely to occur with detailed explanations.

In study 1, participants (N=121) from Amazon's Mechanical Turk participated in this study for monetary compensation. Participants were asked to *choose* one of two analysts' predictions to share with others.

They were told that the analysts had made predictions about job prospects in various fields, one of which related to finding administrative jobs in the hoteling and tourism (HT) industry. Participants chose between an expert who did not provide any explanation (Analyst A) and one who did (Analyst B). In the brief explanation condition, Analyst B said he looked at two factors, the chances of finding an administrative job and finding a job in the HT industry, and combined them. In the detailed explanation condition, Analyst B described four steps used to arrive at the same two factors and in the fifth step combined them.

Participants overwhelmingly (87%) chose the analyst that provided an explanation, regardless of the level of detail provided by the explanation. Study 2 investigates what happens in a single evaluation context.

In study 2, participants (N=243) from Amazon's MTurk participated in this study for monetary compensation. The scenario was similar to that of study 1. In the choice conditions, participants chose between experts. In the evaluation conditions, participants evaluated a prediction with either no, a brief, or a detailed explanation.

Participants in the choice conditions then chose an analyst's prediction they would use, followed by evaluations of their relative trust in the analysts and the accuracy of the predictions. Instead of choosing an analyst, participants in the evaluation conditions completed measures of trust and accuracy. The choice results mirrored those of study 1. In the evaluation condi-

tions, separate ANOVAs with trust and accuracy as dependent variables revealed a significant effect of level of detail on accuracy and a marginal effect on trust. The patterns of the effects were similar. For both accuracy and trust, compared to providing no explanation, providing a brief explanation reduced accuracy and trust, whereas providing a detailed one did not.

Thus, providing a brief explanation resulted in reduced accuracy and trust. Study 3 replicates these effects in a stock price context, demonstrates the effect on two more downstream variables, and examines the mediating role of perceived depth of analysis.

In study 3, participants (N=259) from Amazon's MTurk participated in this study for monetary compensation. The analyst had predicted the chance that a particular company's stock price would increase by \$10 per share in the next year.

Two of the choice conditions were the same as previous studies. We also added a third choice condition in which Analyst A offered a brief explanation, and Analyst B offered a detailed explanation. In the evaluation conditions, participants evaluated a prediction with either no, a brief, or a detailed explanation.

Participants in the choice conditions then chose an analyst's prediction they would use. Then they stated which analyst they would be more likely to recommend and responded to the same trust and accuracy measures as in study 2, plus a new depth of analysis item. In the evaluation conditions, except for choosing the analyst, participants rated the same questions, adapted accordingly, and also indicated how likely they would be to purchase the stock.

The results mirrored those of the previous studies—there was a preference for explanation in choice, but brief explanations were punished in evaluations. Depth of analysis mediated the effect of brief explanation on the four evaluation variables.

Across three studies, using job and stock prediction contexts, we demonstrate the role that explanation plays in affecting choices and evaluations. We provide insights into the role of information in information products, with the counterintuitive finding that experts may be better off leaving their predictions unexplained.

REFERENCES

- Calder, Bobby J., Chester A. Insko, and Ben Yandell (1974), "The Relation of Cognitive and Memorial Processes to Persuasion in a Simulated Jury Trial," *Journal of Applied Social Psychology*, 4 (1), 62-93.
- Chaiken, Shelly (1980), "Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion," *Journal of Personality and Social Psychology*, 39 (5), 752-766.
- Garfield, Joan and Andrew Ahlgren. (1988), "Difficulties in Learning Basic Concepts in Probability and Statistics: Implications for Research," *Journal for Research in Mathematics Education*, 19 (1), 44-63.
- Stiff, James B. (1986), "Cognitive Processing of Persuasive Message Cues: A Meta-analytic Review of the Effects of Supporting Information on Attitudes," *Communication Monographs*, 53 (1), 75-89.

Extreme Marketplace Exclusion in Subsistence Marketplaces: A Study in a Refugee Settlement in Nakivale, Uganda

EXTENDED ABSTRACT

Largely excluded from marketing literature are individuals in *subsistence marketplaces*. This term refers to an approach that begins at the micro-level and is bottom-up, encompassing a range of low-income consumers and entrepreneurs (Viswanathan 2013). Indeed, these marketplaces are often characterized by exclusion. But marketplace exclusion reaches even starker levels in subsistence contexts borne out of violence, flight, and abject conditions for survival, such as in refugee settlements. Understanding such exclusion is especially critical as a refugee's average length of stay in exile is approximately 20 years (Betts et al. 2014).

We aim to understand how refugees are excluded from the marketplace. These experiences are so drastic as to stretch extant conceptualizations to cover extreme marketplace exclusion. The fundamental contribution of this paper is therefore to delineate extreme marketplace exclusion via refugee contexts. We explain such exclusion by integrating current research and providing empirical support for our conceptualization. Our synthesis of extant literature identifies elements of extreme marketplace exclusion and their interplay. We then describe our methods and present findings about the nature of extreme marketplace exclusion in our research context. We conclude with a discussion covering theoretical and practical implications.

Elements of Extreme Marketplace Exclusion

Literature on exclusion has primarily focused on 'social' exclusion (Sen 2000), examining it as a vicious cycle with multiple, reciprocal, cause-and-effect elements which intensify exclusion (Levitas 1996). Marketplace exclusion may have varying degrees, with 'deep exclusion' characterizing exclusion across multiple dimensions (Levitas et al. 2007). Similar to deep exclusion, extreme marketplace exclusion involves multiple forces. Unlike deep exclusion, however, we study exclusion in a subsistence marketplace context intensified by violence, psychological stress, economic strain, and social instability. Specific to a refugee context, our research focuses on how elements relate to form extreme marketplace exclusion, locating it vis-a-vis deep exclusion. Importantly, the marketplace does not only involve economic transactions, but melds social, cultural, political and economic realities (Granovetter 1990). Research remains to offer a theoretical model to account for these multiple elements of marketplace exclusion. We now identify and delineate four elements of this type of marketplace exclusion: geographic isolation, social ostracism, abject poverty and loss of marketplace literacy.

Studies in rural subsistence marketplaces (e.g., China; Wang and Tian 2013) in refugee settlements (Rose 2001) show *geographic isolation* as a key contributor to marketplace exclusion. Many settlements lack sufficient infrastructure, geographically isolated from public facilities including schools, hospitals, and markets (De Montclos and Kagwanj 2000). Even more drastic, refugees' geographic isolation may stem from legal restrictions enforcing segregation from the local community (Taylor 1996).

Refugees in their host countries often face the most severe form of *social ostracism*, as they bear the stigma of fleeing their home country, and are perceived as unwelcome exploiters of the host country's resources (Sartorius et al. 2013). Refugees must endure the turmoil of resettlement, separation from family and culture (Schweitzer, Greenslade, and Kagee 2007), and exclusion due to cultural/language barriers (Taylor and Stanovic 2004). Refugees are therefore

often unable to understand cultural aspects of marketplaces (Taylor and Stanovic 2014).

Abject poverty, arising from loss of income and assets, and displacement, make markets inaccessible and products unaffordable, severely inhibiting consumption capability (Deaton 1972). Poverty is rampant among refugees who have lost their livelihoods in their home countries (Sartorius et al. 2013). Refugees mostly survive on government or international aid with limited alternative means to their survival. The social and psychological conditions refugees face make it extremely difficult for them to start a new livelihood. This is coupled with the lack of economic opportunities made available to them until their legal status is settled, which can take many years (White 2007).

Loss of marketplace literacy due to relocation makes it difficult to engage in marketplace interactions (Viswanathan et al. 2009). Loss of such literacy can lead to poor consumption decisions, sometimes making individuals vulnerable to deception at the hands of sellers. Whereas in most subsistence contexts, consumers cope with the lack of basic literacy by developing marketplace literacy via interpersonal relations (Viswanathan et al. 2009), refugees face a new, unfamiliar and extremely harsh setting, where social relations are strained (Werker 2007). The loss of marketplace literacy is accentuated for those with low literacy and income, whose functional literacy in the marketplace domain is socially embedded. For those with higher literacy, there is still an effect due to situational loss of marketplace literacy (Viswanathan et al. 2010). The psychological stresses of leaving home countries and resettlement may further impair refugees' cognition, characteristic of low-income consumers living in scarcity conditions (Shah, Mullainathan, and Shafir 2012). Given the link between marketplace literacy and self-confidence (Viswanathan et al. 2009), we consider emotions and cognitions. Emotions are drastic in refugee contexts, even more so than other subsistence marketplaces and a violent past (and sometimes present) combined with deep fear of the future fixes individuals in the immediate present, accentuating cognitive elements.

Context and Methods

Context. We conducted our study in Nakivale, a refugee settlement in rural Uganda housing over 84,000 refugees managed by the United Nations High Commissioner of Refugees (UNHCR). Upon arrival, refugees are given construction materials to build shelter. Residences are allocated based on ethnicity due to potential conflict among refugees of different nations. Between the time of arrival and time spent building, they sleep under a large tent. The UNHCR distributes a limited supply of food each month, but it is gradually reduced after six months with the expectation that refugees find work. Employment is often difficult to obtain, however. Mbarrara, a mid-sized town approximately 45 minutes away from Nakivale by car, offers employment opportunities, but no formal transportation to the town exists. We also note these refugees vary widely in their educational achievements, different from traditional subsistence marketplaces where low literacy and low income often co-occurs (Hodes and Goldberg 2002). Images depicting the severe circumstances of the marketplace can be found in the Appendix.

Methods. We employed qualitative techniques including observations, depth interviews, and marketplace-learning interventions. Pertaining to field observations, two immersions took place in person (one in June 2015 and again in July 2016), and virtually from January

to May, 2015 via Skype meetings. The UNHCR and non-profit organizations on the ground facilitated access. In particular, we worked with a group of entrepreneurial refugees mentored and developed into a team by one of our partner organizations. These refugees acted as both participants and facilitators. We observed settlement facilities, various local marketplaces, the land, and a nearby town. Interviews ranged from 30 to over 90 minutes and tape recorded for coding purposes. The first part of each semi-structured interview was phenomenological (Thompson, Locander, and Pollio 1989), and the second transitioned into a structured discussion of informants' marketplace experiences. Refugee participants and translators received 3,000 shillings for participation, the equivalent to one U.S. dollar.

Findings

We examine four elements of extreme marketplace exclusion: abject poverty (economic), geographic isolation (physical), social ostracism (social), and loss of marketplace literacy (cognitive-emotional). Importantly, extreme marketplace exclusion impacts both consumption and employment.

Elements of Extreme Marketplace Exclusion

Abject poverty. In terms of economic conditions, refugees face extreme poverty. Finding food of some quality and clean water is challenging. Kevin, a middle-aged refugee employed at an UNHCR facility, states that the "Sometimes [the] water has color, sometimes it smells, and good water doesn't have all those elements." Lacking even basic necessities leaves refugees with few spending options. A young man describes his experience of abject poverty and how he spends in the local marketplace.

David: We have nowhere to borrow from.

Interviewer: Do you buy things in the market?

David: ... not much. We get soap and cooking oil.

Our informant explains how he has no accessible credit institutions to borrow funds. Due to his scarce financial resources, he buys only necessities for the immediate present. Unlike traditional subsistence contexts, any earned/inherited family assets are completely lost upon migration.

Geographic Isolation. Although refugees can travel to towns nearby, the lack of resources and mobility barriers are often insurmountable. Daniel, a 24-year old man who fled Congo and lived in the settlement since 2010, explains how this particular element impacts his work as an artist.

Daniel:...as an artist, I want to buy [tools] I [need].... [but] there's no place they sell [the art materials].... once I sent someone to buy [the materials in Kampala]....[but] he doesn't know the quality that I need.... he may just buy what [sellers] tell him.

Due to long distances and high transportation costs, he cannot even travel to the preferred marketplace in Kampala (260 kilometers away) to purchase materials either. He also cannot send others to buy on his behalf since they do not know how to purchase quality materials at reasonable prices.

Social Ostracism. Another element in understanding extreme marketplace exclusion is social ostracism. Social ostracism is associated with extreme marketplace exclusion as consumers, entrepreneurs, and employees. Individuals who fled their country can endure a much more extreme form of ostracism than those in traditional subsistence contexts. This element of extreme marketplace exclusion arises from cultural factors, and interestingly, are not confined to national/ethnic differences. Many respondents explain how sellers

from the home country or of different origin often exclude refugees via discrimination. One informant illustrates this:

Daniel: ... clearly I can speak English and those sellers can speak English, but when in Mbarara, they know I'm not Ugandan – and they can change and instead they don't speak English... just to make a complication. Here, I used a different language, I do not negotiate and sometimes they increase price.

Daniel explains how social ostracism manifests in the marketplace. The exclusion he experiences cannot be neatly categorized into being indirectly ignored or directly rejected (Lee and Shrum 2012). The shopkeepers clearly acknowledge him (he is not ignored), and they do not explicitly refuse his shopping ability (he is not directly rejected). Instead, shopkeepers acknowledge him in an attempt to coerce a 'penalty price' for not being Ugandan. Consequently, the sellers exclude the refugees from fully participating in the marketplace.

Loss of Marketplace Literacy. Another element leading to extreme marketplace exclusion is the loss of marketplace literacy, defined as encompassing skills, self-confidence, and awareness of rights and capturing know-why, know-how, and know-what as consumers and entrepreneurs (Viswanathan et al. 2009). We note that refugees may range in income and literacy levels in their home country, with the refugee status drastically lowering the former while maintaining the latter for relatively higher incomes and education levels. We focus on cognitive and emotional dimensions.

Concrete thinking in the here and now arising from difficulty with abstractions is likely to be accentuated with geographic isolation, abject poverty, and social ostracism. Similarly, pictographic thinking and a rudimentary dependence on senses is also particularized in the immediate. Veronica, a 20-year-old woman, illustrates her present-state orientation explaining, "I don't have savings..." and when discussing leisure activities, "Never I have the time to think of that." Mary, a 43-year-old woman, explains how difficult it is to fall asleep. She elaborates, "I don't get sleep thinking how will I push the next day and make living for my children." Cognitively, fathoming a future is difficult for these women. Emotionally, Veronica describes how she cannot engage in leisure activities. Ray even explains how he attempts to actively repress his emotions just to function saying "Such [bad feelings] you cannot permit. You know we are human beings, yeah? When something is very bad, you [will] have some emotions, but maybe [they] can cause you trauma..." The cognitive predilections of being in the here and now arising from low literacy and the immediacy of basic needs are further accentuated by severe emotional trauma.

Interplay between Elements of Extreme Marketplace Exclusion

The economic, geographic, social and cognitive-emotional realms of life described all amplify and reinforce extreme marketplace exclusion. In a context of abject poverty, geographic isolation precludes opportunities outside the settlement, narrowing refugees to the abject poverty there and extreme marketplace exclusion. Social ostracism combines with geographic isolation to reinforce such exclusion. And the individual level cognitive and emotional aspects associated with marketplace literacy further narrow individuals to the immediate present, and reinforce the inability to overcome extreme marketplace exclusion. In a sense, these are the levers of marketplace exclusion. We offer Figure 1 as a theoretical framework to illustrate how these elements relate to each other.

Discussion

Our findings offer contributions to the areas of exclusion, marketplace exclusion, and subsistence contexts. First, we study marketplace exclusion in a refugee context where these subsistence consumers face the most severe challenges, demonstrating extreme marketplace exclusion as a novel phenomenon. Second, we describe how this phenomenon operates in this context, delineating its elements informed by prior research. Third, we illustrate how the elements of extreme marketplace exclusion are interlinked and reinforce each other, creating a vicious cycle of exclusion from the marketplace. In doing so, we integrate aspects of exclusion from previous studies in refugee contexts and explain it from the marketplace perspective.

Implications

Theoretically, we study a qualitatively different level of marketplace exclusion and the elements associated with it. Specifically, *abject poverty*, *geographic isolation*, *social ostracism*, and *loss of marketplace literacy* are elements leading to extreme marketplace exclusion. Even compared with studies of deep exclusion, the severe nature of extreme marketplace exclusion is distinctly unique. Despite potentially having valued skills and education, refugees are often excluded from the marketplace's workforce due to the elements we outline. Our work also highlights how individual cognitive and emotional aspects associated with marketplace literacy accentuate marketplace exclusion. These individual elements combine with elements rooted in the external environment to lead to the complex phenomenon of extreme marketplace exclusion. Future research should focus on extreme marketplace exclusion in a variety of contexts to better understand how the elements of such exclusion manifest in the harshest of human conditions, ranging from areas devastated by natural disasters to war. Moreover, future work should examine the coping strategies consumers employ in such drastic exclusion circumstances. For example, even when faced with extreme exclusion, our participants still navigate their realities to pursue and attain belongingness and acceptance. The specific tactics these consumers leverage to achieve belonging experiences have yet to be closely examined but hold important implications for studying consumers' agency and resilience.

In term of practical implications, we highlight the importance of providing refugees with capacity-building learning experiences that address skills, self-confidence, and awareness of rights. In this regard, the role of marketplace literacy education is particularly relevant to extreme marketplace exclusion. Rather than focus on access or financial resources, marketplace literacy education is related to capacity-building that begins with a deeper understanding of the marketplace (know-why) as a basis for know-how and know-what. Moreover, such education also addresses issues of self-confidence and identity, critically important in these settings. In conclusion, our study of what we term extreme marketplace exclusion provides a foundation to study consumers and employees in the harshest of subsistence contexts, with important theoretical and practical implications.

REFERENCES

- Adkins, Natalie Ross, and Julie L. Ozanne. "The Low Literate Consumer." *Journal of Consumer Research* 32, no. 1 (2005): 93-105.
- Atkinson, Anthony Barnes, and John Hills. "Exclusion, Employment and Opportunity." (1998).
- Betts, Alexander, Louise Bloom, Josiah Kaplan, and Naohiko Omata. *Refugee Economies: Rethinking Popular Assumptions*. University of Oxford, Refugee Studies Centre, 2014.
- Cooper, Elizabeth, and Jo Boyden. "Questioning the Power of Resilience: Are Children Up to the Task of Disrupting the Transmission of Poverty?." (2007).
- Castles, Stephen. "Towards a Sociology of Forced Migration and Social Transformation." *Sociology* 37, no. 1 (2003): 13-34.
- Deaton, Angus S. "Wealth Effects on Consumption in a Modified Life-Cycle Model." *The Review of Economic Studies* 39, no. 4 (1972): 443-453.
- De Montclos, Marc-Antoine Perouse, and Peter Mwangi Kagwanja. "Refugee Camps or Cities? The Socio-Economic Dynamics of the Dadaab and Kakuma Camps in Northern Kenya." *Journal of Refugee studies* 13, no. 2 (2000): 205-222.
- Dommer, Sara Loughran, Vanitha Swaminathan, and Rohini Ahluwalia. "Using Differentiated Brands to Deflect Exclusion and Protect Inclusion: the Moderating Role of Self-Esteem on Attachment to Differentiated Brands." *Journal of Consumer Research* 40, no. 4 (2013): 657-675.
- Doron, Esther. "Working with Lebanese refugees in a Community Resilience Model." *Community Development Journal* 40, no. 2 (2005): 182-191.
- Duhachek, Adam. "Coping: A Multidimensional, Hierarchical Framework of Responses to Stressful Consumption Episodes." *Journal of Consumer Research* 32, no. 1 (2005): 41-53.
- Edwards, Anne. "Working Collaboratively to Build Resilience: A CHAT Approach." *Social Policy and Society* 6, no. 2 (2007): 255.
- Fazel, Mina, and Alan Stein. "Mental Health of Refugee Children: Comparative Study." *Bmj* 327, no. 7407 (2003): 134.
- Granovetter, Mark. "The Old and the New Economic Sociology: A History and an Agenda." *Beyond the Marketplace: Rethinking Economy and Society* (1990): 89-112.
- Haskell, Jane E., and Ashley Storrow. "Using Refugee Voices to Improve Cross Cultural Conversations: Research with New Mainers." (2014).
- Hodes, Matthew, and David Goldberg. "The Treatment of Refugees." *BJPsych Bulletin* (2002): 1-2.
- Korac, Maja. "Integration and How We Facilitate It: A Comparative Study of the Settlement Experiences of Refugees in Italy and the Netherlands." *Sociology* 37, no. 1 (2003): 51-68.
- Kuo, Chun-Tung, and Tung-liang Chiang. "The Association between Relative Deprivation and Self-Rated Health, Depressive Symptoms, and Smoking Behavior in Taiwan." *Social Science & Medicine* 89 (2013): 39-44.
- Lee, Edward Ou Jin, and Shari Brotman. "Identity, Refugeeeness, Belonging: Experiences of Sexual Minority Refugees in Canada." *Canadian Review of Sociology/Revue Canadienne de Sociologie* 48, no. 3 (2011): 241-274.
- Lee, Jaehoon, and L. J. Shrum. "Conspicuous Consumption versus Charitable Behavior in Response to Social Exclusion: A Differential Needs Explanation." *Journal of Consumer Research* 39, no. 3 (2012): 530-544.
- Levitas, Ruth. "The Concept of Social Exclusion and the New Durkheimian Hegemony." *Critical Social Policy* 16, no. 46 (1996): 5-20.
- Levitas, Ruth, Christina Pantazis, Eldin Fahmy, David Gordon, Eva Lloyd, and Demy Patsios. "The Multi-Dimensional Analysis of Social Exclusion." (2007).
- Loveland, Katherine E., Dirk Smeesters, and Naomi Mandel. "Still Preoccupied with 1995: The Need to Belong and Preference for Nostalgic Products." *Journal of Consumer Research* 37, no. 3 (2010): 393-408.

- Luthar, Suniya S., Dante Cicchetti, and Bronwyn Becker. "The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work." *Child Development* 71, no. 3 (2000): 543-562.
- Mead, Nicole L., Roy F. Baumeister, Tyler F. Stillman, Catherine D. Rawn, and Kathleen D. Vohs. "Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation." *Journal of Consumer Research* 37, no. 5 (2011): 902-919.
- Phillimore, Jenny, and Lisa Goodson. "Problem or opportunity? Asylum Seekers, Refugees, Employment and Social Exclusion in deprived Urban Areas." *Urban Studies* 43, no. 10 (2006): 1715-1736.
- Power, Anne, and William Julius Wilson. "Social Exclusion and the Future of Cities." (2000).
- Rose, Damaris. "The Housing Situation of Refugees in Montreal Three Years After Arrival: The Case of Asylum Seekers Who Obtained Permanent Residence." *Journal of International Migration and Integration/Revue de l'integration et de la migration internationale* 2, no. 4 (2001): 493-529.
- Sartorius, Kurt, Benn Sartorius, Stephen Tollman, Enid Schatz, Johann Kirsten, and Mark Collinson. "Rural Poverty Dynamics and Refugee Communities in South Africa: A Spatial-Temporal Model." *Population, space and place* 19, no. 1 (2013): 103-123.
- Schweitzer, Robert, Jaimi Greenslade, and Ashraf Kagee. "Coping and Resilience in Refugees from the Sudan: A Narrative Account." *Australian and New Zealand Journal of Psychiatry* 41, no. 3 (2007): 282-288.
- Sen, Amartya. "Social Exclusion: Concept, Application, and Scrutiny." (2000).
- Shah, Anuj K., Sendhil Mullainathan, and Eldar Shafir. "Some Consequences of Having Too Little." *Science* 338, no. 6107 (2012): 682-685.
- Shah, Anuj K., Eldar Shafir, and Sendhil Mullainathan. "Scarcity frames value." *Psychological Science* 26, no. 4 (2015): 402-412.
- Sridharan, Srinivas, and Madhu Viswanathan. "Marketing in Subsistence Marketplaces: Consumption and Entrepreneurship in a South Indian Context." *Journal of Consumer Marketing* 25, no. 7 (2008): 455-462.
- Stein, Barry N. "Resettlement of Khmer Refugees in the United States." (1982).
- Taylor, Savitri. "Australia's Safe Third Country Provisions-Their Impact on Australia's Fulfillment of Its Non-Refoulement Obligations." *U. Tas. L. Rev.* 15 (1996): 196.
- Taylor, Janet. "Refugees and Social Exclusion: What the Literature Says." (2004).
- Taylor, Janet., and D. Stanovic. "Services and Entitlements: Refugees, Migrants and Asylum Seekers." *Migration Action* 26, no. 2 (2004): 32-35.
- Thompson, Craig J., William B. Locander, and Howard R. Pollio. "Putting Consumer Experience back into Consumer Research: The Philosophy and Method of Existential-Phenomenology." *Journal of consumer research* 16, no. 2 (1989): 133-146.
- Troisi, Jordan D., and Shira Gabriel. "Chicken Soup Really Is Good for the Soul "Comfort Food" Fulfills the Need to Belong." *Psychological Science* (2011).
- UNHCR 2004, Basic facts, Who is a Refugee?, viewed 20 January 2016.
- Viswanathan, Madhubalan, *Subsistence Marketplaces*, eBookpartnership, eText, and Stipes Publishing (2013).
- Viswanathan, Madhubalan, *Bottom-Up Enterprise: Insights from Subsistence Marketplaces*, eBookpartnership, eText, and Stipes Publishing (2016).
- Viswanathan, Madhu, Carlos Torelli, Sukki Yoon, and Hila Riemer. "'Fish Out of Water': Understanding Decision-Making and Coping Strategies of English as Second Language Consumers through a Situational Literacy Perspective." *Journal of Consumer Marketing* 27, no. 6 (2010): 524-533.
- Viswanathan, Madhu, and José Antonio Rosa. "Understanding Subsistence Marketplaces: Toward Sustainable Consumption and Commerce for a Better World." *Journal of Business Research* 63, no. 6 (2010): 535-537.
- Viswanathan, Madhu, José Antonio Rosa, and Julie A. Ruth. "Exchanges in Marketing Systems: the Case of Subsistence Consumer-Merchants in Chennai, India." *Journal of Marketing* 74, no. 3 (2010): 1-17.
- Viswanathan, Madhubalan, Srinivas Sridharan, Roland Gau, and Robin Ritchie. "Designing Marketplace Literacy Education in Resource-Constrained Contexts: Implications for Public Policy and Marketing." *Journal of Public Policy & Marketing* 28, no. 1 (2009): 85-94.
- Walker, Iain, and Heather J. Smith. *Relative Deprivation: Specification, Development, and Integration*. Cambridge University Press, 2002.
- Wang, Jeff Jianfeng, and Qian Tian. "Consumer Vulnerability and Marketplace Exclusion: A Case of Rural Migrants and Financial Services in China." *Journal of Macromarketing* 34, no. 1 (2014): 45-56.
- Weidner, Kelly L., José Antonio Rosa, and Madhu Viswanathan. "Marketing to Subsistence Consumers: Lessons from Practice." *Journal of Business Research* 63, no. 6 (2010): 559-569.
- Werker, Eric. "Refugee Camp Economies." *Journal of Refugee Studies* 20, no. 3 (2007): 461-480.
- White, Judy. *Enhancing and Developing Policies, Models and Practices to Address the Mental Health Needs of Immigrant and Refugee Women in Saskatchewan*. ProQuest, 2007.
- Winlow, Simon, and Steve Hall. *Rethinking Social Exclusion: The End of the Social?.* Sage, 2013.

Large Steps Toward Small Donations: Reputational Benefits of Nominal Corporate Generosity

Tiffany Vu, University of Michigan, USA
Scott Rick, University of Michigan, USA

EXTENDED ABSTRACT

One prevalent and increasingly lucrative prosocial practice is for brands to donate some portion of sales or profits to designated charitable causes via “cause marketing” campaigns (e.g., Krishna, 2011; Small & Cryder, 2016). Descriptions of such campaigns often highlight two attributes: the percent-of-profits (or percent-of-revenues) from each purchase that the brand will donate, and the maximum amount of money the brand will donate. For example, a 2014 campaign by Chipotle locations in Minnesota pledged that “50% of [its] proceeds up to \$35,000 will benefit Como Park Zoo and Conservatory.”

We examine how these numerical attributes of cause marketing campaigns influence perceptions of brands’ generosity. We anticipate that the percent-of-proceeds donated from each purchase will be a stronger predictor of generosity perceptions than maximum donations. Our rationale builds on research by Hsee and colleagues on attribute evaluability. Hsee and Zhang (2010) proposed that sensitivity to variation in the value of an attribute (i.e., the attribute’s evaluability) is partly a function of knowledge of the attribute’s distribution (e.g., its range or mean). In the cause marketing context, consumers are unlikely to recall typical values of the percent-of-proceeds and maximum donation attributes. Nevertheless, consumers are likely to be more sensitive to variation in the percent-of-proceeds attribute than variation in maximum donations, because the former attribute has a clear upper bound (100%), but the latter attribute does not.

A novel implication of our reasoning is that cause marketing campaigns may allow brands to appear highly generous without actually being highly generous (by donating a high percent-of-proceeds and a low maximum donation). In what follows, we investigate that implication and more broadly examine whether the percent-of-proceeds attribute is in fact more predictive of generosity perceptions than the maximum donation attribute. We explore whether this effect holds over a range of percentages. To test our evaluability account, we manipulate the number of different cause marketing campaigns participants encounter (and thus the evaluability of the campaigns’ numerical attributes). In addition, we attempt to rule out several alternative accounts (e.g., that the percent-of-proceeds attribute is more influential because it is the first attribute presented or because it is especially memorable).

Experiment 1

Our first experiment aimed to document initial evidence of consumers’ greater sensitivity to the percent-of-proceeds attribute of cause marketing campaigns than to the maximum donation attribute. We also investigated whether this effect is an artifact of the order in which the two attributes are presented. Typically, the percent-of-proceeds attribute appears first (e.g., when companies pledge to donate X% up to \$Y). If people are indeed more sensitive to variation in the percent-of-proceeds attribute, it could be because they simply paid greater attention to the first numerical information they encountered. We therefore counterbalanced which attribute appeared first.

Participants and Procedure

We recruited 600 adults (49% female; mean age: 33) via Amazon Mechanical Turk (MTurk) to participate in exchange for a small payment. We told participants that we were interested in how con-

sumers form impressions of companies based on limited information. In all conditions, we described a clothing retailer with annual profits of \$10 million that had conducted a donation campaign over the past year to help raise money for local charities.

We either described the retailer as donating 1% of its profits from each purchase, up to a maximum amount of \$26,000 (Lower%/Higher\$ condition) or donating 30% of its profits from each purchase, up to a maximum amount of \$25,000 (Higher%/Lower\$ condition). Because we noted that the retailer has annual profits of \$10 million, it should be clear to participants that the retailer would ultimately donate the maximum amount. We emphasized this fact by noting that the retailer “ultimately donated that maximum amount.” Thus, normatively, the retailer should be viewed as (slightly) more generous when they donate \$26,000 than when they donate \$25,000.

We also counterbalanced the order in which the campaign attributes were presented. Half of the participants were randomly assigned to view the percent-of-proceeds attribute first (e.g., in the Lower%/Higher\$ condition, the retailer pledged to “donate 1% of its profits from each purchase, up to a maximum amount of \$26,000”). The other half of participants were randomly assigned to view the maximum donation attribute first (e.g., in the Lower%/Higher\$ condition, the retailer “pledged to donate up to a maximum amount of \$26,000, based on 1% of its profits from each purchase”).

We then asked participants to indicate on 0-10 scales (where 0=*not at all* and 10=*very*) the extent to which they found the retailer to be generous. Next, we asked participants two open-ended recall questions: “What percentage of profits from each purchase did the company donate?” and “What was the total amount of money the company ultimately donated?” Finally, participants provided demographic information.

Results and Discussion

We first conducted a factorial ANOVA treating generosity ratings as the dependent variable and numerical campaign attributes (Lower%/Higher\$ vs. Higher%/Lower\$) and attribute presentation order as independent variables. We found a significant main effect of numerical campaign attributes ($F(1,596) = 12.30, p < .001$). As predicted, perceived generosity was significantly greater when the company donated a higher percentage of profits and lower maximum amount than when the company donated a lower percentage of profits and higher maximum amount ($M = 6.69, SD = 2.57$ vs. $M = 5.93, SD = 2.73; t(598) = 3.49, p < .001, d = .29$). We observed this difference despite the fact that participants were assured that the retailers would ultimately donate their maximum amount. Normatively, we would expect the Lower%/Higher\$ campaign to be viewed at least as generous as the Higher%/Lower\$ campaign, if not slightly more generous.

There was no main effect of attribute presentation order ($F(1,596) = .12, p = .73$), and no interaction between numerical campaign attributes and attribute presentation order ($F(1,596) = 1.65, p = .20$). This suggests that greater sensitivity to the percent-of-proceeds attribute is not an artifact of attribute presentation order.

We also examined whether the percent-of-proceeds attribute was more memorable than the maximum donation attribute. Participants were not significantly more likely to correctly recall the percent-of-proceeds donated from each purchase than the maximum

donation amount (90% vs. 87%; $p = .10$, Fisher's Exact Test). If we focus only on the 486 participants who correctly recalled both attributes, perceived generosity was still greater when the retailer donated a higher percentage of profits and lower maximum amount than when the retailer donated a lower percentage of profits and higher maximum amount ($M = 6.76$, $SD = 2.57$ vs. $M = 6.04$, $SD = 2.71$; $t(484) = 3.05$, $p < .01$, $d = .27$).

Experiment 1 provides initial evidence that, when presented with a description of a cause marketing campaign, consumers' perceptions of the brand's generosity are more sensitive to the percent-of-proceeds to be donated than to the maximum donation amount. As a result, in this experiment, the brand was viewed as significantly less generous when it was objectively more generous. We found that this was not driven by the order in which the two key attributes were described or differences in the memorability of the two attributes.

Experiment 2

Our explanation for the greater perceived generosity of the Higher%/Lower\$ brand is that the percent-of-proceeds attribute is easier to evaluate and thus more influential. However, it is possible that the effect may have been driven by reactions to the 1% figure in particular, rather than the greater evaluability of (all) percentages. That is, the 1% of profits donated in the Lower%/Higher\$ condition may have appeared to be an insultingly trivial gesture. Experiment 2 therefore examined whether generosity perceptions are more sensitive to the percent-of-proceeds attribute even when that percentage is not trivially low.

Participants and Procedure

We recruited 600 adults (52% female; mean age: 34) via MTurk to participate in exchange for a small payment. People who had already participated in Experiment 1 were not eligible to participate in this experiment. As in Experiment 1, we told participants that we were interested in how consumers form impressions of companies based on limited information. In all conditions, we described a clothing retailer with annual profits of \$10 million that plans to conduct a donation campaign during the current fiscal year to help raise money for local charities.

We randomly assigned participants to one of four conditions. Half of participants were randomly assigned to either a Lower%/Higher\$ condition (retailer donates 1% of profits from each purchase, up to a maximum amount of \$26,000) or a Higher%/Lower\$ condition (retailer donates 25% of profits from each purchase, up to a maximum amount of \$25,000). We increased these percentages by 20% for the other half of participants. That is, the other half of participants were randomly assigned to a Lower%+20 condition (retailer donates 21% of profits from each purchase, up to a maximum amount of \$26,000) or a Higher%+20 condition (retailer donates 45% of profits from each purchase, up to a maximum amount of \$25,000).

Next, we asked participants to rate the extent to which they viewed the retailer as generous on a 0-10 scale, where 0=*not at all generous* and 10=*very generous*. We also asked participants to recall the percent-of-proceeds and maximum donation values from the campaign they had read about (two open-ended questions). As in Experiment 1, participants were not significantly more likely to correctly recall the percent-of-proceeds value than the maximum donation value (90% vs. 87%; $p = .11$, Fisher's Exact Test). Finally, participants provided demographic information.

Results and Discussion

Consistent with Experiment 1, generosity ratings were significantly greater in the Higher%/Lower\$ condition than in Lower%/

Higher\$ condition ($M = 6.53$, $SD = 2.65$ vs. $M = 5.13$, $SD = 2.57$; $t(302) = 4.66$, $p < .001$, $d = .54$). Generosity ratings were also significantly greater in the Higher%+20 condition than in the Lower%+20 condition ($M = 6.72$, $SD = 2.70$ vs. $M = 5.97$, $SD = 2.70$; $t(294) = 2.37$, $p = .019$, $d = .28$).

These patterns suggest our results were not merely driven by aversive reactions to a somewhat trivial donation of 1% of profits. Instead, these results suggest that generosity perceptions are generally more sensitive to the percent-of-proceeds attribute, even when that percentage is not trivially low.

Experiment 3

One implication of our conceptual framework is that providing information about other cause marketing campaigns should increase the evaluability of both the percent-of-proceeds attribute and the maximum donation attribute; it should especially increase the evaluability of the maximum donation attribute (cf. Hsee, 1996). When maximum donations become more evaluable, the objectively less generous campaign should no longer be viewed as more generous.

Participants and Procedure

We recruited 297 adults (49% female, mean age: 33) via MTurk to participate in exchange for a small payment. People who had already participated in prior experiments were not eligible to participate in this experiment. As in previous experiments, we told participants that we were interested in how consumers form impressions of companies based on limited information. In all conditions, we described a clothing retailer with annual profits of \$10 million that plans to conduct a donation campaign during the current fiscal year to help raise money for local charities.

We randomly assigned participants to one of three conditions. In two separate evaluation conditions, participants either learned of a cause marketing campaign that donates 1% of its profits from each purchase, up to a maximum amount of \$40,000 (SE:Lower%/Higher\$) or donates 20% of its profits from each purchase, up to a maximum amount of \$10,000 (SE:Higher%/Lower\$). In a third joint evaluation condition (JE), participants viewed both campaigns. The two campaigns were presented as the efforts of two different clothing retailers.

In all three conditions, participants read that all donations would be made at the end of the fiscal year. We included this information to rule out the potential interpretation that the Higher%/Lower\$ campaign could reach its target amount faster and donate faster than the Lower%/Higher\$ campaign. In other words, we did not want the assumed speed of donation to be confounded with the numerical attributes of the campaign.

We then asked participants to indicate the extent to which they found the company to be generous on a 0-10 scale, where 0=*not at all generous* and 10=*very generous*. Next, we asked participants to recall the percent-of-proceeds and maximum donation values from the donation campaign(s) they had read about (open-ended questions). As before, the percent-of-proceeds and maximum donation attributes were about equally likely to be recalled accurately, in both the separate evaluation and joint evaluation conditions ($ps > .45$).

Results and Discussion

Figure 1 displays perceived generosity by condition. Consistent with previous experiments, in the separate evaluation conditions, perceived generosity was significantly greater in the SE:Higher%/Lower\$ condition than in the SE:Lower%/Higher\$ condition ($M = 5.99$, $SD = 2.82$ vs. $M = 5.21$, $SD = 2.59$; $t(197) = 2.03$, $p = .044$, $d = .29$). However, in the joint evaluation condition, where participants could see both campaigns, the numerical attributes of the cam-

paing did not significantly influence perceived generosity (Higher%/ Lower\$ $M = 6.17$, $SD = 2.38$ vs. $M = 6.44$, $SD = 2.52$, $t(97) = 1.02$, $p = .31$). Using the analysis outlined in Hsee (1996, footnote 2), we found that this was a significant Separate Evaluation/Joint Evaluation interaction ($t(296) = 2.29$, $p = .023$). Thus, as predicted, we found the percent-of-proceeds attribute was more influential only when a single cause marketing campaign was evaluated in isolation (which is likely how consumers encounter cause marketing campaigns in the real world – i.e., one at a time). The percent-of-proceeds attribute is less influential when consumers have some comparison information that makes the maximum donation attribute more evaluable.

General Discussion

A recent report by Engage for Good (a popular cause marketing forum; Chansky, 2015) expressed concern that, in cause marketing campaigns, a “generous-sounding percentage” of proceeds can be “misleading” (cf. Olsen, Pracejus, & Brown, 2003) and “naturally, what matters, is the actual amount donated.” Our work suggests that this concern is well-placed. In three experiments, we found that brands were viewed as significantly more generous when donating a higher percent-of-proceeds and a lower maximum amount than when donating a lower percent-of-proceeds and a higher maximum amount. This occurred despite descriptions that made it clear that the brand would always make its maximum donation. The effect is not driven by the greater memorability of percentages (Experiment 1) and is not limited to cases in which the percent donated is obviously low (Experiment 2). The presence of comparative context especially helps people evaluate the maximum donation attribute and reduces the undue influence of the percent-of-proceeds attribute (Experiment 3).

Several open questions remain. The extent to which brands and retailers intentionally capitalize on the effect documented here is unclear. Some companies have likely benefitted from the effect documented here, whether intentionally or not (e.g., Chipotle’s offer to donate 50% of sales, up to \$35,000). In addition, in many cause marketing campaigns, there will be some uncertainty about whether the brand will reach its maximum donation amount. It would be interesting to examine how consumers form expectations about how close brands will get to their maximum. Questions like these seem worthy of future research.

REFERENCES

- Aaker, J., Garbinsky, E. N., & Vohs, K. D. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the “golden quadrant.” *Journal of Consumer Psychology*, 22, 191-194.
- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Non-profits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, 37(2), 224-237.
- Chansky, E. (2015). *For goodness sake: Legal regulation and best practices in the field of cause marketing*. Retrieved from <http://engageforgood.com>
- Chernev, A., & Blair, S. (2015). Doing well by doing good: The benevolent halo of corporate social responsibility. *Journal of Consumer Research*, 41(6), 1412-1425.
- Desvousges, W. H., Johnson, F. R., Dunford, R. W., Hudson, S. P., Wilson, K. N., & Boyle, K. J. (1993). Measuring natural resource damages with contingent valuation. In *Contingent valuation: A critical assessment* (pp. 91-164). Emerald Group.
- Hayes, A. F. (2013). *An Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hsee, C. K. (1996). The evaluability hypothesis: An explanation for preference reversals between joint and separate evaluations of alternatives. *Organizational Behavior and Human Decision Processes*, 67(3), 247-257.
- Hsee, C. K., & Zhang, J. (2010). General evaluability theory. *Perspectives on Psychological Science*, 5(4), 343-355.
- Krishna, A. (2011). Can supporting a cause decrease donations and happiness? The cause marketing paradox. *Journal of Consumer Psychology*, 21(3), 338-345.
- Lin-Healy, F., & Small, D. A. (2012). Cheapened altruism: Discounting personally affected prosocial actors. *Organizational Behavior and Human Decision Processes*, 117(2), 269-274.
- Malone, C., & Fiske, S. T. (2013). *The human brand: How we relate to people, products, and companies*. John Wiley & Sons.
- Newman, G. E., & Cain, D. M. (2014). Tainted altruism: When doing some good is evaluated as worse than doing no good at all. *Psychological Science*, 25(3), 648-655.
- Olsen, G. D., Pracejus, J. W., & Brown, N. R. (2003). When profit equals price: Consumer confusion about donation amounts in cause-related marketing. *Journal of Public Policy and Marketing*, 22(2), 170-180.
- Small, D. A., & Cryder, C. (2016). Prosocial consumer behavior. *Current Opinion in Psychology*, 10, 107-111.

More Harm is Less Dangerous

Monica Wadhwa, INSEAD, Singapore

Mustafa Karatas, Koc University, Turkey

EXTENDED ABSTRACT

Health has become a global challenge, with health problems increasing across the world. Worldwide obesity rate, for example, has doubled (NCD-RisC 2016). Flu viruses have become stronger over the years (Savage 2008). Many health problems can be avoided through simple preventive actions. Exercising, for example, could help prevent obesity. Thus, policy makers are focused on understanding how preventive behaviors could be encouraged. A significant part of this focus is on making preventive health messages more effective (Gerend & Shepherd, 2007). Preventive messages commonly inform the readers of different health risks associated with a health condition. An anti-obesity message, for example, might inform readers of obesity-related health risks, such as high blood pressure and diabetes. Current research explores whether the number of health risks a preventive message communicates could affect preventive decision making. To illustrate, an anti-obesity message could communicate both high blood pressure and diabetes as obesity-related risks or it could communicate one of these two equally threatening and likely health risks. Which of these two strategies would be more effective in encouraging preventive behavior adoption?

Normatively speaking, a reader should find the health condition more dangerous and thus be more likely to adopt the target preventive action when the message communicates multiple equally threatening and likely health risks (e.g., high blood pressure and diabetes), compared with when it communicates only one of the two risks. Consistently, to encourage adoption of preventive behaviors, policy makers and health experts typically communicate all major risks associated with the health condition.

In contrast to the normative view, we propose that presenting multiple equally threatening health risks is a less effective strategy than presenting only one of these risks—a proposition drawn upon research on imagery. Research in this domain suggests that one's capacity to simulate mental images is limited (Baddeley & Andrade, 2000). Drawing upon this research on imagery, current research is the first to argue that due to mental imagery capacity limitations, health risks should be less vividly imagined when one has to mentally simulate multiple health risks simultaneously, compared with when one has to simulate only one health risk.

Vivid imagery has been shown to be an important determinant of people's behaviors, such that a message that evokes more vivid mental images is likely to be more effective in persuading behaviors (Nisbett & Ross, 1980). Drawing upon a synthesis of these findings, we propose that a health message communicating multiple equally threatening health risks would lead to less vivid imagery and, therefore, be less effective in encouraging adoption of preventive behaviors, compared with a message that communicates only one of the two health risks.

Research suggests that when people use affective processing, vivid imagery is an important determinant of their behaviors (Keller & McGill, 1994). However, when people use a deliberative mode of processing, they tend to rely on logical, calculation-based reactions (Hsee & Rottenstreich, 2004). Therefore, we further propose that when a deliberative mindset is induced, people should be more sensitive to the number of health risks. Thus, when people are in a deliberative mindset, communicating multiple health risks in the message should be a more effective in encouraging adoption of preventive behaviors than presenting only one of these risks.

Four experiments, including two field experiments, examined these hypotheses. To provide a strong test of our hypotheses, we compare effectiveness of a message communicating two equally threatening risks with that of a message communicating only one of these two risks. Studies were conducted in Turkey and all health messages were communicated in Turkish. There were no exclusions unless otherwise reported.

Experiment 1

Experiment 1, conducted at a health center, examined the primary hypothesis in the context of obesity—people exposed to two obesity-related risks are less likely to engage in the target preventive action (exercise) and less likely to join an obesity prevention program as opposed to those exposed to only one of the two risks.

During regular check-ups, as is required, the general physician handed over pamphlets describing obesity-related risks to incoming patients ($N=240$) with a BMI of 25 or over. These pamphlets included affect-laden pictures of a family on the front page and a description of obesity risk(s) on the second page. One version of the pamphlet communicated two risks of obesity—high blood pressure and Type 2 diabetes—pretested to be equally threatening and likely (see figure-1 for the sample message). The visual position of the two risks was counterbalanced across participants in all experiments. The other version communicated one of these two risks—high blood pressure or diabetes. The message encouraged patients to walk regularly to prevent obesity, an advice typically given by the physician. Patients were also asked by the physician to join the obesity prevention program run by the health ministry at the center.

One week after each patient's visit, a nurse contacted the patient and measured the frequency as well as the duration of the patient's walks during the week. This nurse also recorded whether the patient had joined the obesity clinic—this information was checked against the clinic records.

Results and Discussion

We used a two-part model to examine the impact of the number of risks on walking duration. The two-part model analysis revealed that those in the two-risk condition were less likely to walk (30.83%) than those in the one-risk condition (47.5%; $z=-2.63$, $p=.009$, $B=-.707$, $CI [-1.23, -.180]$). Amongst those who walked, those in the two-risks condition ($M=33.15$ minutes; $SD: 17.13$) walked less than those in the one-risk condition ($M=44.49$ minutes; $SD: 27.55$; $z=-2.24$; $p=.025$; $CI [-21.275, -1.396]$; $d=.49$).

Finally, a binary logistic regression revealed that patients were less likely to join the obesity program when informed of two risks (3.33%) compared with when exposed to one risk (10.83%; $Wald \chi^2 = 4.599$; $p=.032$; $B=-1.259$, $Odds Ratio=.284$; $CI [.090, .897]$).

This study provides support for our primary hypothesis: Communicating multiple health risks in a preventive message reduced the likelihood of engaging in preventive behaviors than presenting only one of the multiple risks.

Experiment 2

Experiment 2, conducted at a pharmaceutical store, sought to replicate the effect found in previous study in the context of flu.

Customers ($N=432$) at the store were informed of flu-related risks using posters, which were posted at the entrance and at the check-out counter. These posters communicated either two equal-

ly threatening and likely flu-related risks—muscle aches and sore throat, or only one of these two risks—and encouraged customers to keep their hands clean to prevent flu. Additionally, the posters referred to Flu as *Grip-Nezle*, an affective term used by lay people to refer to flu in Turkey. In order to examine whether presenting two risks would be as good as sharing a generic health message, in a third condition, a neutral poster communicating a generic health message was posted. Hand-sanitizing wipes packets were available for sale at the check-out counter; sale of wipes was our main dependent variable.

Results and Discussion

We ran a logistic regression with two contrasts. The first contrast showed that there was no difference in the likelihood to purchase hand-sanitizing wipes between those exposed to two-risks (6.16%) and those exposed to neutral health message (5.59%; $p=.837$). The second contrast showed that in line with the findings of the previous study, those exposed to a single risk were more likely to buy the hand-sanitizing wipes (13.29%) than those exposed to two risks or neutral message (5.88%; $Wald \chi^2 = 6.541$; $p=.011$; $B=.908$; $Odds Ratio=2.478$; $CI[1.236, 4.968]$). Findings of Experiment 2 replicated the effect found in the previous study in the context of flu.

Given the previous experiments employed affective pictures or affective terms, we assume that participants relied on their affective reactions while making the decision. However, the previous experiments do not explicitly test this assumption. The next two experiments take care of this limitation.

Experiment 3

Experiment 3 examines the moderating role of affective versus deliberative processing. We argue that when cued to rely on affective reactions, we should replicate the effect found in previous studies. When cued to rely on more deliberative reactions, the effect should be reversed such that participants should be more likely to engage in the preventive action when exposed to multiple risks as opposed to only one risk.

Participants ($N=273$) first engaged in a task, which cued them to focus on either their affective or deliberative reactions. Drawing upon past research (Hsee & Rottenstreich, 2004), those in the affective-cue condition responded to questions that required them to examine and report their feelings toward different affect-laden words. Participants in the deliberative-cue condition solved simple math problems. Subsequently, participants viewed one of the two versions of an anti-obesity message encouraging them to eat health. As in Experiments 1 and 3, one version communicated two risks of obesity—high blood pressure and diabetes. The other versions communicated only one of these two risks—high blood pressure or diabetes. Participants then chose a free snack between an apple and a brownie.

A logistic regression revealed a significant type of cue by number of risks interaction ($z=4.4134$; $p<.0001$; $CI[1.3490, 3.5043]$). In the affective-cue condition, participants were less likely to choose an apple when informed of two risks (28.89%), compared with when informed of one of the two risks (60%; $z=-3.3236$; $p=.0009$; $B=-1.3063$; $CI[-2.0766, -.5359]$; $Odds Ratio=.2708$). In contrast, in the deliberative-cue condition, participants were more likely to choose an apple when informed of two risks (68.89%), compared with when informed of only one risk (41.93%; $z=2.9137$; $p=.0036$; $B=1.1204$; $CI[.3667, 1.874]$; $Odds Ratio=3.066$).

Providing support for the underlying conceptualization, the current study shows that increasing the number of health risks communicated in the message can negatively (positively) impact the likelihood of adopting the target preventive action when one is cued to rely on affective (deliberative) reactions.

Experiment 4

In the last experiment, we further examined our underlying conceptualization by examining the mediating role of vivid imagery. We predicted that when relying on affective reactions, preventive message should evoke less vivid images when it communicates two health risks as opposed to one of the two health risks. However, when participants are cued to focus on their deliberative reactions, number of health risks should not impact vivid imagery. Moreover, we expected vivid imagery to mediate the impact of number of health risks on preventive action in the affective-cue condition, but not in the deliberative-cue condition.

To examine the aforementioned hypotheses, during flu season, participants ($N=146$) were exposed to a preventive message encouraging them to keep their hands clean to prevent flu. This message communicated either two equally threatening and likely flu-related risks—muscle aches and sore throat, or only one of these two risks.

Drawing upon research (Sinaceur, Heath & Cole 2005), which shows that using an affective (vs. scientific) frame to refer to a disease can induce affective (vs. deliberative) processing mode, we varied the frame (affective versus scientific) used to refer to flu. One set of messages used in the current study referred to flu as *Grip-Nezle*, an affective term used for flu by laypeople in Turkey (affective frame). Another set of messages (scientific-frame) referred to flu as *A Tipi Enflüanza* (Influenza-Type A), a term used by doctors in Turkey. These terms were chosen based on a pretest.

After evaluating the message, participants chose a gift between two items—a pen and a hand-sanitizing wipes pack, which served as the dependent measure. Participants then responded to a final survey, which asked them to evaluate the viewed message on six nine-point scale items (Keller & Block 1997) measuring how vividly they could imagine the message. Four participants did not take this survey, leaving us with a sample of 142 participants for these measures.

Results and Discussion

A logistic regression revealed a significant interaction between the frame-type and number of risks ($z=3.9615$; $p=.0001$; $CI[1.4346, 4.2442]$). In the affective-frame condition, fewer participants chose hand-sanitizing wipes when informed of two risks (36.11%) compared with when informed of one of the two risks (75.75%; $z = -3.2008$; $p=.0014$; $B=-1.71$; $CI[-2.757, -.663]$; $Odds Ratio=.1808$). In the scientific-frame condition, participants were more likely to choose hand-sanitizing wipes when two flu-related risks were communicated (58%) than when one risk was communicated (30%; $z = 2.363$; $p=.018$; $B=1.129$; $CI[.193, 2.066]$ $Exp(B)=3.092$).

An ANOVA conducted on the vivid imagery measure revealed a significant interaction between number of risks and frame-type factors ($F(1,138)=29.63$, $p < 0.001$). In the affective-frame condition, images elicited by the message were less vivid when the message communicated two risks ($M=3.143$; $SD=1.379$) than when it communicated one risk ($M=4.887$; $SD=1.163$; $F(1,138)=35.15$, $p < 0.001$; $CI[-2.326, -1.163]$; $d=1.36$). No such corresponding difference was found in the scientific-frame condition ($F(1,138)=2.62$, $p>.1$; $CI[-.098, .984]$). We further conducted a moderated mediation using PROCESS model 7 (Hayes 2013), which revealed that vivid imagery mediated the impact of number of risks on likelihood to choose hand-sanitizing wet wipes in the affective-frame condition ($B=-1.3034$, $CI=[-2.1902, -0.6375]$) but not in the scientific-frame condition ($B=0.3310$, $CI=[-0.0398, 0.8615]$).

This experiment provides further support for our conceptualization related to vivid imagery. In the affective frame condition, presenting two health risks elicited weaker images of the message, which mediated the impact of the number of risks on the likelihood of adopting preventive behavior. However, there was no such cor-

responding difference in vivid imagery in the scientific frame condition.

General Discussion

Current research is the first to reveal that people's likelihood of adopting a preventive action non-normatively decreases when the health message communicates two health risks associated with the condition as opposed to one of the risks. Our findings further show that when nudged to rely on deliberative reactions, people focus on the number of health risks, thus increasing the likelihood to adopt a preventive action when the message communicates multiple risks as opposed to only one risk.

These findings make important theoretical contributions—First, our findings contribute to the affective decision making research. This is the first research to show that in the context of negative outcomes, people are less likely to adopt a preventive action when it can potentially prevent multiple equally threatening health risks as opposed to a single health risk. Second, our findings contribute to research on vivid imagery. Our findings show that increasing the number of negative outcomes communicated in a message can reduce the vividness with which one can imagine the risks, but only when relying on affective reactions, not when one is cued to rely on deliberative reactions.

We believe our findings have important policy making implications. Public health campaigns often tend to communicate all primary risks associated with a health condition. Given a significant amount of decision making is driven by people's intuitive, affective reactions (Larrick 1993), current research findings suggest that communicating multiple risks is a strategy which can unintentionally reduce the likelihood of adopting preventive behaviors. Our findings further suggest that for experts, who tend to rely on deliberative cues, presenting multiple health risks is likely to be a more effective strategy than presenting a single health risk. In essence, our findings present insights into how health communication could be made more effective depending on the audience.

REFERENCES

- Baddeley, Alan D. and Jackie Andrade (2000), "Working Memory and the Vividness of Imagery," *Journal of Experimental Psychology: General*, 129(1), 126-45.
- Gerend, Mary A., and Janet E. Shepherd (2007), "Using Message Framing to Promote Acceptance of the Human Papillomavirus Vaccine," *Health Psychology*, 26 (6), 745-52.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Press.
- Hsee, Chris K., & Yuval Rottenstreich (2004), "Music, pandas, and muggers: on the affective psychology of value," *Journal of Experimental Psychology: General*, 133(1), 23.
- Keller, Punam Anand, and Lauren G. Block. "Vividness effects: A resource-matching perspective." *Journal of Consumer Research* 24.3 (1997): 295-304.
- Larrick, Richard P. "Motivational factors in decision theories: The role of self-protection." *Psychological Bulletin* 113.3 (1993): 440.
- NCD Risk Factor Collaboration (NCD-RisC) (2016), "Trends in Adult Body-Mass Index in 200 countries from 1975 to 2014: A Pooled analysis of 1698 Population-based measurement studies with 19.2 million participants," *The Lancet*, 387(10026), 1377-1396.
- Nisbett, Richard E. and Lee Ross. (1980). Assigning Weights to Data: The "Vividness Criterion." In R. Nisbett & L. Ross (Eds.), *Human inference: Strategies and shortcomings of social judgment* (pp. 43-62). Englewood Cliffs, NJ: Prentice-Hall.
- Savage, S. (2008, May 20). Flu getting stronger, more resistant. *Red Orbit*. Retrieved from http://www.redorbit.com/news/health/1395429/flu_getting_stronger_more_resistant
- Sinaceur, Marwan, Chip Heath, and Steve Cole (2005), "Emotional and Deliberative Reactions to a Public Crisis: Mad Cow Disease in France," *Psychological Science*, 16 (3), 247-54.

When Numbers Make You Feel: The Impact of Round versus Precise Numbers on Preventive Health Behavior

Monica Wadhwa, INSEAD, Singapore
Kuangjie Zhang, Nanyang Technological University, Singapore

EXTENDED ABSTRACT

Prevention is better than cure—this adage has shaped the US healthcare spending, with about 75% of healthcare expenditure spent on preventive care (Begley 2013). Many health problems can be avoided through simple preventive actions. Policy makers are, therefore, keen on understanding how preventive health messages can be made more persuasive (Gerend and Shepherd 2007). To make messages more persuasive, preventive health messages often incorporate numerical cues, such as the probability with which a preventive action can reduce a health risk (Reyna et al. 2009). The current research makes a novel prediction that incorporating numerical cues that appear round (e.g., 15.00%) versus precise (e.g., 15.23%) can increase people's likelihood of adopting preventive behaviors.

Research shows that round numbers are more easily processed than precise numbers, in part because people are more frequently exposed to round numbers in everyday language (Kettle and Häubl 2009; Wadhwa and Zhang 2015). Moreover, research on affective decision-making suggests that exposure to fluent stimuli is likely to engage the default affective system, leading people to rely on their intuitive, affective reactions while making decisions (Alter et al. 2007). Drawing upon this logic, we propose that exposure to round numbers should lead people to rely on their more intuitive, affective reactions, compared with exposure to precise numbers.

Following from the idea that stronger affective reactions can motivate preventive health behaviors (Loewenstein et al. 2001; Sinauer, Heath, and Cole 2005), we further hypothesize that when numerical cues in preventive messages are presented in a round (e.g., 15.00%) versus a precise (e.g., 15.23%) format, people are more likely to adopt preventive behaviors. We examine this hypothesis across five studies.

Study 1A

Study 1A examines our primary hypothesis—round numerical cues should increase preventive behavioral intention, compared to precise numerical cues.

This study was conducted in two stages. In the first stage, 200 US participants were presented with a health message featuring an obese person. The only difference between conditions being the probability numbers (see below):

30.00% (vs. **31.57%**) of the US population suffer from obesity today.

15.00% (vs. **15.29%**) of deaths in the US were caused by obesity.

Eat Healthy!

Twenty-four hours after being exposed to the message, participants were emailed the second survey. 156 participants (48.1% women, $M_{\text{age}}=31.7$) completed the second survey. In this second survey, participants first reported the number of unhealthy, as well as healthy food items they had consumed in the past 24 hours. Participants then listed all the items with approximate portion size they had consumed in the last 24 hours. Our main dependent variable was the amount of unhealthy eating participants had engaged in 24 hours, subsequent to the preventive health message exposure.

Results and Discussion

We measured the amount of unhealthy eating in the following two ways. First, a linear regression analysis conducted on the number of unhealthy food items participants reportedly ate revealed that those exposed to round numbers consumed significantly less unhealthy food items ($M=1.90$) than those exposed to precise numbers ($M=2.65$; $t(154) = -2.91$, $p=.004$). While, these participants also reported consuming a slightly higher number of healthy food items ($M=4.65$), than those in the precise number condition ($M=4.08$), this difference was not significant ($t(154)=1.30$, $p=.20$).

Second, to further examine if round versus precise numbers impacted unhealthy eating behaviors, we recruited 202 independent coders from the same population to rate the food items. Each coder was assigned to rate the food items listed by 15 to 16 participants on an 8-point scale (1=very unhealthy, 8=very healthy). We computed an unhealthy eating score (reverse-coded) by averaging the ratings of all the food items each participant had consumed. An ANOVA conducted on this score revealed that those exposed to round numbers had a lower unhealthy eating score ($M=3.97$) than those exposed to precise numbers ($M=4.28$, $t(154)=-2.29$, $p=.02$). Study 1A shows that presenting obesity-related risks using round versus precise numbers in a health message reduced participants' unhealthy food consumption.

Study 1B

This study, conducted in two stages, sought to conceptually replicate study 1A in the context of water consumption. In the first stage, 260 US participants were presented with a health message featuring a man and a woman suffering from flu. The only difference between conditions being the probability numbers:

20.00% (vs. **20.37%**) of the US population suffered from flu last year.

The number of people being hospitalized due to flu complication has increased by **40.00%** (vs. **40.21%**).

Drinking water frequently can reduce the risk of getting flu.

Drink More Water!

Twenty-four hours later, participants were emailed the second survey. Out of the 260 participants recruited in the first stage, 184 (45.1% women, $M_{\text{age}} = 33.9$) completed the second survey. In this second survey, participants reported the number of glasses of water and the number of times they had consumed water in the last 24 hours on a 21-point scale (ranging from 1 to 20+; 20+ was coded as 21). Finally, participants indicated how many glasses of water and how many times they generally consume water in one day (excluding the last 24 hours) using the same 21-point scale items (ranging from 1 to 20+). Our main dependent variable was the change in water consumption from the regular water consumption, in 24-hours subsequent to message exposure.

Results and Discussion

We first computed the change in the number of glasses of water participants drank by subtracting the number of glasses of water they

usually consumed from the number of glasses they drank subsequent to being exposed to the preventive message. A linear regression revealed that those exposed to round numbers showed a significant increase in the number of glasses of water they drank ($M=0.55$), compared with those exposed to precise numbers ($M=-0.01$; $t(182)=2.23$, $p=.03$). Further, one-sample t tests confirmed that the increase (0.55) in number of glasses of water consumed in the round number condition was significantly different from zero ($p=.002$), whereas the change (-0.01) in the precise number condition was not ($p=.95$).

Similarly, a linear regression revealed that participants in the round number condition showed a significant increase in the number of times they drank water ($M=0.68$) than those in the precise number condition ($M = -0.29$; $t(182)=2.73$, $p=.007$). One-sample t test confirmed that the increase (0.68) of number of times water was consumed in the round number condition was significantly different from zero ($p=.007$), whereas the change (-0.29) in the precise number condition was not ($p=.26$). Study 1B provides further support for the round number hypothesis in the context of flu.

Study 2

We measured actual behavior in the current study. Participants were exposed to a dental hygiene message, which encouraged them to floss to avoid gum diseases. We measured the time participants spent on flossing. 202 participants recruited from a major university in Singapore (62.4% women, $M_{\text{age}}=21.3$) were randomly assigned to either the round or the precise number condition. Participants were shown a message related to gum diseases. This message, which incorporated a gender-neutral picture of an individual suffering from bleeding gum, indicated gum disease related risk estimates as either precise or round numbers:

60.00% (vs. **60.41%**) of people in Singapore suffer from gum diseases leading to swollen and painful gums.

Gum diseases could increase the risk of losing teeth by **40.00%** (vs. **40.37%**).

Flossing Helps Prevent Gum Diseases.

Subsequently, participants were given an opportunity to floss their teeth. Participants were asked to pick up envelopes carrying individual floss sticks, a paper glass and napkins. Unbeknownst to the participants, we recorded the time participants took for flossing. Two participants reported not being able to floss due to their braces. Another ten participants did not pick up the flossing materials and missed this part of the task. Data from these 12 participants could not be used, leaving us with a total sample of 190 participants.

Results and Discussion

Due to the large variation in the flossing time measure, we first examined the data for outliers. Based on the three SD above or below the mean criterion (McClelland 2000), we identified and removed an outlier (>3.5 SD above the mean) prior to further analyses. A linear regression revealed that participants spent longer time flossing their teeth after reading the gum disease message with round numbers ($M=58.38$ seconds), compared with those who read the gum disease message with precise numbers ($M=46.58$ seconds; $t(187)=2.02$, $p=.045$). This study replicated the round number effect using actual behavioral measures.

Study 3

The degree to which affective reactions can drive behaviors depends on whether people trust their feelings would direct them in

the right direction (Lee, Amir, and Ariely 2009). Affective reactions are more likely to drive behaviors when people believe trusting their affective reactions would help them make the right decision. In this study, therefore, we explicitly manipulated participants' situational trust in their feelings. We predicted that when participants' trust in feelings is high, exposure to round numbers in a preventive message should increase the likelihood to engage in preventive behaviors. In contrast, when participants' trust in feelings is low, impact of round numbers on preventive behavioral intentions should get attenuated.

The study followed a 2 (number: round vs. precise) \times 2 (trust in feelings: high vs. low) between-subjects design. 345 US participants (47.0% women, $M_{\text{age}}=34.8$) completed the study. One participant reported being below age 18 and thus data from this participant was removed prior to any analyses. Another participant who took approximately 24 hours to complete the experiment was removed from further analyses. A post-hoc check revealed that including these two participants' data do not change our results.

Participants were informed that the first part of the experiment sought to understand how people use feelings when making a decision. In this task, participants were asked to recall and describe either a situation in which they followed their feelings and it was the right thing to do (high-trust in feelings) or a situation in which they followed their feelings and it was the wrong thing to do (low-trust in feelings; adapted from Lee et al. 2009). Fifty-seven participants did not indicate any experience, and thus data from these participants could not be used for analyses. Additionally, five other participants responded to the question in non-English languages and thus were removed prior to any analyses. Removing these participants left us with a total sample of 286 participants.

Subsequently, in a purportedly unrelated study, participants read the following scenario (adapted from Sinaceur et al. 2005) with the only difference across conditions being the probability number:

You have just finished eating your dinner. While watching the evening news on TV, you find out that eating chicken may expose you to the human variant of Bird Flu. According to the recent report, one type of vaccination was recently launched in the US, which can reduce the chance of getting this disease by 60.00% (vs. 60.41%).

Participants were asked to indicate their intention to take the vaccination on a nine-point scale (1=very unlikely, 9=very likely).

Results and Discussion

An ANOVA revealed a significant two-way interaction between the number exposure and the trust in feelings ($F(1, 282)=5.44$, $p=.02$; see Figure 1) factors. Follow up analyses reveal that in the high-trust in feelings condition, participants indicated a higher intention to take the vaccination when the numerical cues presented in the message were round ($M=5.56$), than when those cues were precise ($M=4.68$; $t(282)=2.15$, $p=.03$). However, in the low-trust in feelings condition, this effect of number on the intention to take the vaccination was eliminated ($M_{\text{round}} = 4.90$ vs. $M_{\text{precise}} = 5.38$; $t(282) = -1.33$, $p=.25$).

Study 4

This study examines the reliance on affective reactions conceptualization in two ways: 1) We argue that if round versus precise numbers lead people to focus on their affective reactions, then incidental exposure to round versus precise numbers in an unrelated task could also subsequently increase people's preventive behavioral intention and 2) we examine the role of reliance on affective reactions in moderating this effect.

In this study, 483 US participants (60.2% women, $M_{\text{age}}=35.3$) were randomly assigned to one of the two number conditions. Participants engaged in eight consecutive trials of a number sorting task, which asked them to sort four different images of numbers in an as-

cending order of the *physical size* of the images. Participants sorted either round number images (e.g., 10.00, 60.00) or precise number images (e.g., 10.32, 63.74). The time participants spent on the task did not differ between conditions ($F < 1$, $p = .38$). A pretest with 42 participants indicated that the image sorting task was perceived to be equally difficult ($M_{\text{round}} = 2.17$ vs. $M_{\text{precise}} = 1.85$, $F < 1$, $p = .37$) and effortful ($M_{\text{round}} = 4.32$ vs. $M_{\text{precise}} = 4.43$, $F < 1$, $p = .84$) between the two conditions.

Subsequently, participants read a purportedly unrelated preventive message featuring a picture of an obese person, accompanied by the following message: “Increasing numbers of the US adults suffer from obesity today. **Eat Healthy!**”

Participants then indicated their likelihood of avoiding eating anything unhealthy for dinner that day (1=very unlikely, 9=very likely). We then measured negative affective reactions by asking participants two questions: “How worried do you feel about becoming overweight or obese?” (1=not at all worried, 9=very worried) and “How concerned do you feel about becoming overweight or obese?” (1=not at all concerned, 9=very concerned; $\alpha = .96$).

Results and Discussion

First, a linear regression analysis revealed that participants were more likely to avoid eating unhealthy after being exposed to round ($M = 5.89$) versus precise ($M = 5.43$; $t(481) = 2.24$, $p = .026$) numbers.

Next, we examined if number condition impacted the degree to which affective reactions predicted intention to avoid unhealthy eating. In order to do so, we computed an interaction term between number factor and affective reactions. Our analysis (process model 1; Hayes 2013) revealed a significant two-way interaction between the number exposure manipulation and affective reaction ($b = .21$, $t(479) = 2.51$, $p = .01$). In the round number condition, negative affective reactions significantly predicted intention to avoid unhealthy eating ($\beta = 0.26$, $t(479) = 4.45$, $p < .0001$). However, in the precise number condition, negative affective reactions did not predict intention to avoid unhealthy eating ($\beta = 0.05$, $t(479) = 0.86$, $p = .39$).

General Discussion

Simple preventive actions, such as getting immunized, avoiding unhealthy eating etc., could prevent many health problems and their associated costs. Across different settings using both intentional and behavioral measures, this research shows that exposure to round versus precise numbers can lead people to respond more affectively and thereby increase people’s likelihood to adopt preventive behaviors. These findings contribute both to literature on numerical cognition and affective decision making.

Access to health-related information has never been easier. Whether it is understanding more about effectiveness of different medical treatments or the risks associated with getting a disease, people can now easily access information through online and offline sources. Much of this information is presented numerically. Our findings show that a simple strategy of expressing such numerical information using round (vs. precise) numbers can increase adoption of preventive behaviors, thereby reducing health risks and ultimately saving lives.

REFERENCES

- Alter, Adam L., Daniel M. Oppenheimer, Nicholas Epley, and Rebecca N. Eyre (2007), “Overcoming Intuition: Metacognitive Difficulty Activates Analytic Reasoning,” *Journal of Experimental Psychology: General*, 136 (4), 569-76.
- Begley, Sharon (2013), *Think Preventive Medicine Will Save Money? Think Again*, Retrieved from <http://www.reuters.com/article/2013/01/29/us-preventive-economics-idUSBRE90S05M20130129>.
- Gerend, Mary A., and Janet E. Shepherd (2007), “Using Message Framing to Promote Acceptance of the Human Papillomavirus Vaccine,” *Health Psychology*, 26 (6), 745-52.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Press.
- Kettle, Keri, and Gerald Häubl (2010), “Numeric Fluency and Preference,” In Campbell, M. C., Inman, J., & Pieters, R. (Eds.) *Advances in Consumer Research*, Vol. 37, Duluth, MN: Association for Consumer Research.
- Lee, Leonard, On Amir, and Dan Ariely (2009), “In Search of Homo Economicus: Cognitive Noise and the Role of Emotion in Preference Consistency,” *Journal of Consumer Research*, 36 (2), 173-87.
- Loewenstein, George F., Elke U. Weber, Christopher K. Hsee, and Ned Welch (2001), “Risk as Feelings,” *Psychological Bulletin*, 127 (2), 267-86.
- McClelland, Gary H. (2000), “Nasty Data,” *Handbook of Research Methods in Social Psychology*, 393-411.
- Reyna, Valerie F., Wendy L. Nelson, Paul K. Han, and Nathan F. Dieckmann (2009), “How Numeracy Influences Risk Comprehension and Medical Decision Making,” *Psychological Bulletin*, 135 (6), 943-73.
- Sinaceur, Marwan, Chip Heath, and Steve Cole (2005), “Emotional and Deliberative Reactions to a Public Crisis: Mad Cow Disease in France,” *Psychological Science*, 16 (3), 247-54.
- Wadhwa, Monica, and Kuangjie Zhang (2015), “This Number Just Feels Right: The Impact of Roundedness of Price Numbers on Product Evaluations,” *Journal of Consumer Research*, 41 (5), 1172-85.

Range Goals as Dual Reference Points: Insights for Effective Goal-Setting and Pursuit

Scott G. Wallace, Duke University, USA

Jordan Etkin, Duke University, USA

EXTENDED ABSTRACT

Goal-setting is a crucial determinant of performance and well-being. But how should goals be set? The prevailing answer focuses on the specificity and difficulty of a goal's objective (Locke and Latham 1990, 2002). Specific, challenging goals generally improve performance relative to non-specific "do-your-best" goals, and "moderately vague" goals like range goals (e.g., lose 10-15 pounds) fall in between. Specific goals are thus widely considered the "gold standard" of effective goal-setting.

We propose an alternative approach to understanding range goals. Drawing on the theory of goals-as-reference points (Heath, Larrick, and Wu 1999), we construe range goals as offering two possible reference points (vs. the single reference point of specific goals; Scott and Nowlis 2013), and posit that these dual reference points can be leveraged to improve performance. Extending prior work treating range goals as less precise (and thus less motivating) than specific goals (Locke and Latham 1990; Wright and Kacmar 1994), we demonstrate that range goals can sometimes be more motivating than specific goals.

When pursuing a range goal, people can adopt one of three reference-point strategies: focusing on just the lower endpoint, just the upper endpoint, or switching between the lower and upper endpoints. The lower endpoint of the range defines the outcome that avoids failure, so intuitively, some people may adopt it as their (sole) reference point. The upper endpoint, in contrast, demarcates a high level of performance, so more motivated individuals may adopt it as their (sole) reference point (treating it like a high specific goal). Alternatively, some people may use both range endpoints as reference points by, for example, initially focusing on the lower endpoint (e.g., lose 10 pounds) then switching to the upper endpoint (e.g., lose 15 pounds) after accumulating goal progress.

We propose that treating the dual endpoints of a range goal as sequential targets and switching from the lower to the upper endpoint produces the highest level of performance—even compared to a specific goal set at the top end of the range. A key tenet of goals-as-reference-points theory is that motivation increases with proximity to a salient reference point (Heath et al. 1999; Kivetz, Urminsky, and Zheng 2006). Relative to focusing on one endpoint or setting an equivalent specific goal, switching from the lower to the upper endpoint should keep goal pursuers closer to their salient reference point for more of the goal pursuit process, improving motivation and performance. Thus while high specific goals may be the gold standard in the aggregate, range goals can match ('select upper') or even exceed ('switching') the performance of specific goals, depending on the reference-point strategy used.

Three experiments test these predictions in the context of an effortful proofreading task, identifying what strategies consumers naturally adopt when pursuing range goals ("find 8-12 errors") and how those strategies affect performance. Study 1 identifies reference-point strategy using a funneled debrief and Study 2 measures reference point focus (lower or upper endpoint) repeatedly over the course of the task. In both cases, results show that the proposed 'switching' strategy (31% of participants in Study 1, 45% in Study 2) and the 'select upper' strategy (32% in Study 1, 26% in Study 2) are most common. Furthermore, as predicted, range goal pursuers who use the 'select upper' strategy perform no worse than those with a high specific goal ("find 12 errors") and those who use the 'switch-

ing' strategy perform significantly *better*. Thus the lower aggregate performance of range (vs. specific) goal pursuers, as observed in our data and in prior research, is driven by a relatively small number of individuals who adopt an ineffective strategy for pursuing their range goal (i.e., 'select lower,' 18% in each study).

To test the causal effect of reference-point strategy on performance, Study 3 manipulates strategies using instructions to encourage either a 'select upper' or a 'switching' strategy. Range goal pursuers who received the 'switching' instructions performed significantly better than those who received the 'select upper' instructions. This demonstrates the causal effect of the proposed 'switching' strategy as a way to enhance motivation by leveraging both range endpoints as reference points. Furthermore, it indicates the possibility of improving range goal performance through simple instructions to encourage the adoption of more effective strategies.

From earning a promotion to losing weight to saving for retirement, effective goal-setting is crucial to obtaining desired outcomes. While the notion that specific goals improve performance is widely accepted, the current research shows that when the dual endpoints of a range goal are treated as sequential reference points, range goals can outperform specific goals set at the top of the range. This insight can help consumers succeed at a variety of personal goals, and can also help to enhance motivation and improve outcomes in group goal pursuits (e.g., charitable fundraising), marketing initiatives (e.g., loyalty reward programs), and organizational or educational settings.

Our findings contribute to understanding how multiple reference points influence judgment and decision-making. Although several disciplines have studied the effects of goals-as-reference points (Abeler, Falk, Goette, and Huffman 2011; Allen, Dechow, Pope, and Wu 2016; Dai, Milkman, and Riis 2014, 2015; Heath et al. 1999; Pope and Simonsohn 2011), how people choose (or switch) between multiple available reference points is less well understood. A few investigations have included both a specific goal and a baseline or starting point (Bonezzi, Brendl, and De Angelis 2011; Koo and Fishbach 2008; March and Shapira 1992), but none consider the dual endpoints of a range goal. By identifying strategies people adopt for range goals (and consequences for performance), the present investigation furthers understanding of this important question.

Why do some people focus on just one endpoint of the range rather than switch? Properties of the task (e.g., difficulty, enjoyment) or the range goal itself (e.g., width, incentives, being self-set vs. assigned) might influence what reference-point strategy people adopt, but this merits further investigation. Examining these and other factors that shape range goal pursuers' strategies can allow for further refinement of the present findings, which offer valuable insights for effectively setting and pursuing range goals.

REFERENCES

- Abeler, J., Falk, A., Goette, L., & Huffman, D. (2011). Reference points and effort provision. *The American Economic Review*, 101(2), 470-492.
- Allen, E.J., Dechow, P.M., Pope, D.G., & Wu, G. (2016). Reference-dependent preferences: Evidence from marathon runners. *Management Science*, forthcoming.
- Bonezzi, A., Brendl, C. M., & De Angelis, M. (2011). Stuck in the Middle The Psychophysics of Goal Pursuit. *Psychological science*, 22(5), 607-612.

- Dai, H., Milkman, K. L., & Riis, J. (2014). The fresh start effect: Temporal landmarks motivate aspirational behavior. *Management Science*, *60*(10), 2563-2582.
- Dai, H., Milkman, K. L., & Riis, J. (2015). Put your imperfections behind you: Temporal landmarks spur goal initiation when they signal new beginnings. *Psychological Science*, *0956797615605818*.
- Heath, C., Larrick, R.P., & Wu, G. (1999). Goals as reference points. *Cognitive Psychology*, *38*, 79-109.
- Kivetz, R., Urminsky, O., & Zheng, Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research*, *43*, 39-58.
- Koo, M., & Fishbach, A. (2008). Dynamics of self-regulation: How (un)accomplished goal actions affect motivation. *Journal of Personality and Social Psychology*, *94*, 183-195.
- Locke, E. A., & Latham, G. P. (1990), *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice-Hall.
- _____ (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American psychologist*, *57*(9), 705.
- March, J.G., & Shapira, Z. (1992). Variable risk preferences and the focus of attention. *Psychological Review*, *99*(1), 172-83.
- Pope, D., & Simonsohn, U. (2011). Round numbers as goals evidence from baseball, SAT takers, and the lab. *Psychological science*, *22*(1), 71-79.
- Scott, M. L., & Nowlis, S. M. (2013). The effect of goal specificity on consumer goal reengagement. *Journal of Consumer Research*, *40*(3), 444-459.
- Wright, P. M., & Kacmar, K. M. (1994). Goal specificity as a determinant of goal commitment and goal change. *Organizational Behavior and Human Decision Processes*, *59*(2), 242-260.

Counterfeits Can Benefit Original Brands When People are Caught Using Counterfeits: The Role of Face Restoration

Liangyan Wang, Shanghai Jiaotong University, USA

Qin Wang, Arizona State University, USA

L. Robin Keller, University of California Irvine, USA

Eugene Chan, Monash University, Australia

EXTENDED ABSTRACT

Counterfeit products are typically inferior-quality imitations of genuine products, especially ones that carry a high brand value (Lai and Zaichkowsky 1999), usually sold at a much lower price to be affordable for everyday consumers. As for the impact of counterfeit on the genuine products, previous research revealed mixed findings. On the one hand, counterfeits can reduce consumers' demand for genuine products, particularly luxury ones (Wilcox et al. 2009). However, Nia and Zaichkowsky (2000) found that over 70% of survey respondents indicated that the availability of counterfeits does not decrease their faith in and purchase intention for genuine (luxury) brands. Thus, there are different views regarding whether counterfeit products benefit or harm the image and equity of genuine products. This incongruity illustrates the complexity of understanding counterfeit consumption, as well as the need for further study to understand its impact for both consumers and marketers.

In the current investigation, we add to this literature by examining how a specific phenomenon, namely being caught with counterfeits, would increase consumers' preference for the genuine products. We propose an interactive effect between consumers' self-construal (interdependent vs. independent) and product type (symbolic vs. functional). Specifically, we hypothesize that consumers with an interdependent self-construal who are caught using symbolic (vs. functional) products increase their preference for genuine products because they are embarrassed and wish to restore face – and one (but not the only) way to do so is by consuming the genuine version of the counterfeit product that they use or wear. We also predict no effect on preference for genuine products among consumers with an independent self-construal because they are not embarrassed when caught using such products. We test and confirm our hypotheses in a series of four experimental studies.

Theoretical Background

Caught Using Counterfeit Products

Research on counterfeit consumption has predominantly explored its pre-purchase antecedents, such as how and why consumers procure counterfeit products. For example, Wilcox et al. (2009) argued that consumers buy counterfeits when the genuine product, especially in the case of luxuries, provides a social-adjustive function. Other studies have focused on other factors such as the product attributes and cultural norms that determine consumers' decisions to purchase counterfeit products (Eisend and Schuchert-Güler 2006). Interestingly, only a few studies have examined the *post*-purchase phases. Nia and Zaichkowsky (2000) and Amaral and Loken (2016) investigated how the owners of genuine products feel and value their authentic merchandise when they see that other consumers are sporting counterfeit products. However, it is not known how consumers who buy, use, and/or wear counterfeit products themselves subsequently change their preference for genuine products. This motivated our present inquiry in which we focus specifically on consumers who are *caught* using counterfeit products.

Consumers buy counterfeit products primarily because they typically resemble, superficially at least, genuine or luxury products in

terms of the prestige that they convey, but they cost far less than originals (Cordell et al. 1996; Grossman and Shapiro 1988). Purchasing based on a desire to convey prestige to others means that, if they are caught using counterfeits, consumers should feel embarrassed for using a product that only *superficially* appears prestigious but is actually not. *Embarrassment* results from a public observation of an action that others consider inappropriate; it threatens the positive public self-image that people convey; and it impairs the effectiveness of social interactions (Dahl, Manchanda, and Argo 2001). The emphasis is on *public* action, in that embarrassment is distinct from what an individual feels alone (Keltner and Buswell 1997). Behaviorally, embarrassment motivates individuals to take actions that restore their self-image (Feinberg, Willer, and Keltner 2012), also known as restoring face. According to Goffman (1967), *face* is a positive self-image that is affirmed through interaction with others. It is a social resource that is maintained, enhanced, or lost through interpersonal interactions. In our case, being caught with counterfeits should result in embarrassment and drive consumers to restore their face because they are observed using products that go against socially-approved norms and that elicit social disapproval.

We hypothesize that one (but not the only) way to restore face – that is, engaging in *facework* (Jiang and Cova 2012) – is to opt for the genuine version of the counterfeit product that consumers are caught using. Given that consumers caught using counterfeits are embarrassed because their products only *convey* prestige but are not actually prestigious, this should motivate them to restore their face by acquiring and possessing the product that *is* actually prestigious – that is, the genuine article.

Interdependent Consumers and Symbolic Products

However, not *every* consumer who is caught using counterfeit products should demonstrate a greater preference for genuines, and she/he should not show a greater preference for genuines when caught with *any* product. Rather, the preference for genuine products should be strongest for consumers with interdependent (vs. independent) self-construals who are caught using counterfeit symbolic (vs. functional) products. The distinction in product type is crucial (Penz and Stottinger 2005). Symbolic products allow consumers to express their actual or ideal self-image (Onkvisit and Shaw 1987). Functional products provide consumers with utility or other functional benefits (Yoo, Chung, and Han 2006). It is important to note that the *same* product can be either symbolic or functional depending on how consumers view and use it. A handbag can be symbolic since it offers feelings of status or professionalism, but it can also be functional because it allows women to carry everyday articles. Thus, given that symbolic products are more important for consumers' self-image, we firstly expect that consumers who are caught with counterfeit *symbolic* products should show a greater preference for genuine articles to than those who are caught with counterfeit *functional* products.

We secondly – and perhaps more importantly – predict that consumers with *interdependent* self-construals should express a greater preference for genuine articles when caught with a counterfeit symbolic product, compared to those with *independent* self-construals. Purchase of symbolic products is strongest by consumers high on

face consciousness (Chen et al. 2014), namely those with interdependent self-construals (Hwang, Francesco, and Kessler 2003). Members of interdependent cultures view the self as part of a collective identity with others, and they view face as a socially-defined aspect. This concern for face makes Asian consumers less tolerant of social failures (Chan, Wan, and Sin 2009). Consumers with interdependent self-construals should be more embarrassed when caught using counterfeit symbolic products because they lose an aspect of the self that they define and convey socially. They are likely to be seen as frugal, vain, or that they intend to impress others without putting in the effort (Commuri 2009). This also makes it more likely that interdependent consumers who have been embarrassed when “caught in the act” should express a *stronger* preference for genuine products, in comparison to independent consumers. Indeed, negative evaluations motivate interdependent consumers to protect their public self-image to maintain their well-being that is largely defined by their social self-worth (Dickerson, Gruenewald, and Kemeny 2004).

In sum, we hypothesize that interdependent (vs. independent) consumers feel embarrassed when they are caught using counterfeit symbolic (vs. functional) products, motivating their preference for the genuine versions as a means to restore face. We test our proposed framework in four studies.

Study 1

Study 1 demonstrated our main hypothesis that interdependent (vs. independent) consumers caught with counterfeit symbolic (vs. functional) products express a greater preference for genuine products, compared to a baseline condition in which they sport the counterfeit products but are not caught using them.

Method. This study used a 2 (self-construal: interdependent, independent) \times 2 (product type: symbolic, functional) \times 2 (caught: yes, no) between-participants design. Participants ($n = 173$) from a large university in China first finished a pronoun circling task which primed them either an interdependent or independent self-construal (Brewer and Gardner 1996). Then they randomly received one of two ad copy conditions for a Longines watch that highlighted either its symbolic or functional benefits, which we adapted from Wilcox et al. (2009). Subsequently, participants were shown an *actual* counterfeit Longines watch and asked to wear the watch, ostensibly as market research for Longines (the actual company) to understand consumers’ interest in counterfeit versions of its products. Afterwards, participants proceeded to a different room while wearing the counterfeit Longines watch, ostensibly to help another researcher with their study while we were preparing the second part of the Longines watch study. They were either “caught” or “not caught” by a confederate in this unrelated task. We obtained participants’ preference change for a genuine Longines watch by subtracting the purchase intent measured before the counterfeit Longines watch usage task from the intent measured afterwards.

Results. We first conducted manipulation check for our manipulations of self-construal as well as product type and got results validating the manipulations. Then we conducted a $2 \times 2 \times 2$ ANOVA and found a main effect of being caught or not with a counterfeit watch, with participants who were caught scoring higher on preference than those not caught ($\beta = 3.92$, $S.E. = 1.71$, $t = 2.29$, $p = .02$). This offers evidence for our fundamental hypothesis that being caught with counterfeits in general can shift preference towards genuine products, relative to not being caught at all. Crucially, the three-way interaction was marginally significant ($F = 3.43$, $p = .07$). As such, we analyzed the 2 (self-construal) \times 2 (product type) interaction within each of the caught and not caught conditions to further decompose the effects. When the participants were caught using counterfeits, the 2×2 inter-

action was significant ($F = 3.89$, $p = .05$). Subjects with interdependent self-construals indicated a more positive preference change for a genuine Longines watch in the symbolic than functional conditions ($M_{\text{symbolic}} = 1.17$ vs. $M_{\text{functional}} = .17$, $t = 2.87$, $p = .005$). In contrast, students with independent self-construals did not show such a preference change for a genuine Longines watch ($M_{\text{symbolic}} = .51$ vs. $M_{\text{utilitarian}} = .47$, $p = .90$). However, when the students were not caught by others, there was neither a main effect nor a two-way interaction ($ps > .55$).

Study 1 provided beginning evidence for our proposition. Since there is no effect in the condition where consumers use counterfeit but are not caught by others, we only focused on the “caught” situation in the following studies.

Study 2

Study 2 aims to replicate the results from Study 1 and also demonstrate that being caught with counterfeit symbolic products increases interdependent consumers’ embarrassment, which then mediates their preference for genuine products.

Method. This study used a 2 (product type: symbolic, functional) \times 2 (self-construal: interdependent, independent) between-participants design. 135 undergraduate students from a large university in Australia participated in this study. We first primed self-construal using the Sumerian warrior story task (Trafimow, Triandis, and Goto 1991). The manipulation of product type was the same as in Study 1 except using a different brand Tissot. Then participants imagined being caught with a counterfeit Tissot watch at a friend’s party. Upon completion, participants completed willingness to pay for genuine Tissot watch that we adapted from Rucker and Galinsky (2008). Participants also indicated on separate 9-point scales (1 = “Not at all” to 9 = “Very much”) the extent they felt the following emotions at the current instant: ashamed, embarrassed, insecure, and vulnerable.

Results. As predicted, a 2×2 ANOVA on students’ willingness to pay (WTP) for a genuine Tissot watch revealed only an interaction between the two factors ($F = 10.10$, $p < .002$). Participants primed with interdependence expressed a higher WTP for genuine Tissot watches when they imagined being caught with counterfeit symbolics rather than with counterfeit functionals ($M_{\text{symbolic}} = 6.26$ vs. $M_{\text{functional}} = 4.30$, $t = 3.32$, $p < .001$). No such effect emerged for participants with independent self-construal ($M_{\text{symbolic}} = 4.83$ vs. $M_{\text{functional}} = 5.64$, $p = .21$). A moderated mediation analysis with embarrassment as mediator was significant (95% CI: -1.51, -.07), supporting our hypothesis.

Study 3

In Study 3, we aim to demonstrate that being caught with counterfeit symbolic products also increases their motivation to restore face, which then also mediates their preference for genuine articles.

Method. This study used a 2 (self-construal: interdependent, independent) \times 2 (product type: symbolic, functional) between-participants design, in which self-construal was measured and product type was manipulated. Participants ($n = 129$) completed a similar manipulation of product type of iPhone 5s and the self-construal measurement (Singelis 1994). We also assessed participants’ motivation to restore face by asking them to indicate their agreement with the following statement on a single 7-point scale (1 = “Strongly disagree” to 7 = “Strongly agree”): “After being caught wearing a counterfeit iPhone 5s, I can restore face by purchasing and using a genuine iPhone”.

Results. As predicted, the product type \times self-construal interaction was significant ($\beta = .70$, $S.E. = .29$, $t = 2.43$, $p = .02$). Specifically, students with an interdependent self-construal (+1 $S.D.$) indicated a more positive preference for a genuine iPhone after getting caught using counterfeit symbolics than counterfeit functionals ($\beta = 1.04$,

$S.E. = .42, t = 2.78, p = .01$). But for participants with an independent self-construal ($-1 S.D.$), there was no such difference ($p = .31$). A moderated mediation analysis with face restoration as mediator was significant (95% CI: .03, .49).

Study 4

In Study 4, we present a boundary condition for the effect. Interdependent consumers no longer prefer genuine symbolic products even when they are caught with them when they do not expect to see again the other individuals who caught them.

Method. The study used a 2 (expected re-encounter: yes, no) \times 2 (product type: symbolic, functional) \times 2 (self-construal: interdependent, independent) between-participants design ($n = 284$). We manipulated self-construal and product type using the same tasks as in Study 2. In the scenarios in which participants imagined being caught while wearing a counterfeited Tissot watch at a party, half of them specifically imagined that they expected to attend another party the week after with the same party attendees, while the other half did not have such an expectation.

Results. A $2 \times 2 \times 2$ ANOVA revealed that the three-way interaction of product type, self-construal, and expected re-encounter was significant ($F = 3.73, p = .05$). When participants expected to see the same party attendees again, the 2×2 interaction was significant ($F = 5.44, p = .02$). Participants primed with interdependence expressed a greater preference for genuine Tissot watches when they imagined being caught with counterfeit symbolics rather than with counterfeit functionals ($M_{\text{symbolic}} = 5.88$ vs. $M_{\text{functional}} = 4.60, t = 2.43, p = .016$). In contrast, participants primed with independence expressed a similar preference whether they imagined being caught with counterfeit symbolics or with counterfeit functionals ($M_{\text{symbolic}} = 5.34$ vs. $M_{\text{functional}} = 5.46, p = .69$). But when participants did not expect to see the same party attendees again, there was no two-way interaction between self-construal and product type (c).

In conclusion, this research focus on being caught with counterfeits, thus adding a component to this domain of study that is largely missing in the literature. Our findings offer contributions for academic scholars, policy makers, and marketing practitioners.

REFERENCES

- Amaral, Nelson B. and Barbara Loken (2016), "Viewing Usage of Counterfeit Luxury Goods: Social Identity and Social Hierarchy Effects on Dilution and Enhancement of Genuine Luxury Brands", *Journal of Consumer Psychology*, 26 (4), 483-95.
- Brewer, Marilynn B. and Wendi Gardner (1996), "Who is This 'We'? Levels of Collective Identity and Self Representations", *Journal of Personality and Social Psychology*, 71 (1), 83-93.
- Chan, Haksin, Lisa C. Wan, and Leo Y. M. Sin (2009), "The Contrasting Effects of Culture on Consumer Tolerance: Interpersonal Face and Impersonal Fate", *Journal of Consumer Research*, 36 (August), 292-304.
- Chen, Yun-Qing, Hong Zhu, Meng Le, and Yi-Zhen Wu (2014), "The Effect of Face Consciousness on Consumption of Counterfeit Luxury Goods", *Social Behavior and Personality*, 42 (6), 1007-14.
- Commuri, Suraj (2009), "The Impact of Counterfeiting on Genuine-Item Consumers' Brand Relationships", *Journal of Marketing*, 73(3), 86-98.
- Cordell, Victor V., Nittaya Wongtada, and Robert L. Kieschnick (1996), "Counterfeit Purchase Intentions: Role of Lawfulness Attitudes and Product Traits as Determinants", *Journal of Business Research*, 35 (1), 41-53.
- Dahl, Darren W., Rajesh V. Manchanda, and Jennifer J. Argo (2001), "Embarrassment in Consumer Purchase: The Roles of Social Presence and Purchase Familiarity", *Journal of Consumer Research*, 28 (3), 473-81.
- Dickerson, Sally S., Tara L. Gruenewald, and Margaret E. Kemeny (2004), "When the Social Self is Threatened: Shame, Physiology, and Health", *Journal of Personality*, 72 (6), 1191-216.
- Eisend, Marin and Pakize Schuchert-Güler (2006), "Explaining Counterfeit Purchases: A Review and Preview", *Academy of Marketing Science Review*, 12(6), 1-25.
- Feinberg, Matthew, Robb Willer, and Dacher Keltner (2012), "Flustered and Faithful: Embarrassment as a Signal of Prosociality", *Journal of Personality and Social Psychology*, 102 (1), 81-97.
- Goffman, Erving (1967), *Interaction Ritual: Essays on Face-to-Face Behavior*, London: Doubleday.
- Grossman, Gene M. and Carl Shapiro. (1988). "Foreign Counterfeiting of Status Goods", *Quarterly Journal of Economics*, 103 (1), 79-100.
- Hwang, Alvin, Anne Marie Francesco, and Eric Kessler (2003), "The Relationship Between Individualism-Collectivism, Face, and Feedback and Learning Processes in Hong Kong, Singapore, and the United States", *Journal of Cross-Cultural Psychology*, 34 (1), 72-91.
- Jiang, Ling and Veronique Cova (2012), "Love for Luxury, Preference for Counterfeits: A Qualitative Study in Counterfeit Luxury Consumption in China", *International Journal of Marketing Studies*, 4 (6), 1-9.
- Keltner, Dacher and Brenda N. Buswell (1997), "Embarrassment: Its Distinct Form and Appeasement Functions", *Psychological Bulletin*, 122 (3), 250-70.
- Lai, Kay Ka-Yuk and Judith Lynne Zaichkowsky (1999), "Brand Imitation: Do the Chinese Have Different Views?", *Asia Pacific Journal of Management*, 16(2), 179-92.
- Nia, Arghavan and Judith Lynne Zaichkowsky (2000), "Do Counterfeits Devalue the Ownership of Luxury Brands?", *Journal of Product & Brand Management*, 9 (7), 485-97.
- Onkvisit, Sak and John Shaw (1987), "Self-Concept and Image Congruence: Some Research and Managerial Implications", *Journal of Consumer Marketing*, 4 (1), 13-23.
- Penz, Elfriede and Barbara Stottinger (2005), "Forget the 'Real' Thing – Take the Copy! An Explanatory Model for the Volitional Purchase of Counterfeit Products", *Advances in Consumer Research*, 32, 568-75.
- Rucker, Derek and Adam D. Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption", *Journal of Consumer Research*, 35 (2), 257-67.
- Singelis, Theodore M. (1994), "The Measurement of Independent and Interdependent Self-Construals", *Personality and Social Psychology Bulletin*, 20 (5), 580-91.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction Between the Private Self and the Collective Self", *Journal of Personality and Social Psychology*, 60 (5), 649-55.
- Wilcox, Keith, Hyeong Min Kim, and Sankar Sen (2009), "Why Do Consumers Buy Counterfeit Luxury Brands?", *Journal of Marketing Research*, 46 (2), 247-59.
- Yoo, Shijin, Seh-Woong Chung, and Jin K. Han (2006), "A Durable Replacement Model for Symbolic Versus Functional Consumption: An Integrated Cultural and Socio-Economic Perspective", *Global Economic Review*, 35 (2), 193-206.

Design an Experience Bundle: The Role of Experience Structure

Juan Wang, University of Guelph, Canada
Miranda Goode, Western University, Canada
June Cotte, Western University, Canada

EXTENDED ABSTRACT

Imagine planning a spring vacation and coming across an ad that features a six-day voluntour trip. The ad suggests an itinerary where half of the trip involves volunteering in jungle restoration in the Amazon and the other half sightseeing in Peru. This is an example of an *experience bundle*, a bundle that is composed of two or more experiences (e.g., volunteering and sightseeing) that are usually consumed independently of one another. To maximize desire for this bundle, an important decision must be made by marketers: how should the experiences in the bundle be structured? Should the trip be structured such that consumers will complete sightseeing in the first three days before jungle restoration (i.e., sequential structure), or should the trip be structured to include sightseeing experiences and jungle restoration (i.e., alternating structure) during each day?

With three studies involving a variety of experience bundles, we find that alternately (vs. sequentially) structured experience bundles are more preferred. This is because an alternating structure allows consumers to infer greater value with an experience bundle, which leads to higher complementarity perception. For example, when the voluntour trip is structured sequentially, consumers may infer that the jungle restoration experience will be spiritually rewarding and that the touring experience will be fun. In other words, the multisensory elements, events, and benefits of each experience are processed mainly independently of one another. In contrast, consumers may infer additional benefits when the jungle restoration and sightseeing experiences are alternated throughout the trip. Not only will consumers identify that the jungle restoration will be spiritually rewarding and the sightseeing will be fun, but they may also infer that boating along the Amazon River (touring event) will be relaxing after finishing a half-day of tree-planting (volunteer event). Further, appreciation of the river-maintenance activity (volunteer event) on the following day may also be enhanced. It is these inferred values that enhances complementarity perception and high evaluations for alternately structured experience bundles.

In study 1, participants (N=110) evaluated a French Festival event in a between-subjects design. The festival was composed of three films (different genres) and three acrobatic shows (different themes), and was structured either alternately or sequentially. Supporting our expectations, the alternately (vs. sequentially) structured French festival was perceived more favorably to consumers. Notably, a follow-up study with 80 participants found no differences in variety perceptions (Kahn and Wansink 2004) between the alternately and sequentially structured bundles, ruling out this perception as an alternative explanation to our hypothesized effect.

In study 2, participants (N=97; between-subjects design) were asked to evaluate a full-day Toronto trip and indicate how complementary the trip seemed to be (Koukova, Kannan, and Kirmani 2012). This trip was a bundle of two historic and two modern tours and was structured alternately or sequentially. We also included an inference-impairment condition, where subjects again evaluated an alternating trip, but the individual tour descriptions were displayed on four separate pages. The descriptions, however, appeared on one page in the alternating condition. In this condition, we expected that complementarity perceptions would be reduced if participants had to flip back and forth between descriptions to identify meaningful connections among the tours. Consequently, we expected the alternating trip would also be perceived less favourably. Support for the expectation that an alternat-

ing structure would be more preferred was also found in this study. In addition, complementarity perception was found to mediate this preference (Hayes 2013). Notably, the fact that the experience bundle was evaluated less favourably in the condition with descriptions on separate pages (vs. alternating) condition suggests that variety perception is not the underlying mechanism.

In study 3, participants (N=175; between-subjects design) were asked to list their thoughts about the sequencing of activities in an educational trip to Singapore and then evaluated the experience. This trip was a bundle of sightseeing and educational engagements, and was structured either alternately or sequentially. Participants' thoughts were coded for complementarity inferences. Greater number of complementarity inferences implies greater complementarity between bundled experiences. As expected, complementarity perception mediated preference for the educational trip, such that a greater number of complementarity inferences were generated for the alternately structured trip. Further, some participants were provided with complementarity inferences in the sequentially structured experience condition, and their evaluations increased in comparison to when complementarity inferences were not provided.

To the best of our knowledge, we are the first to examine experience bundles, an increasingly popular market offering. Theoretically, we contribute to the bundling literature in several ways. First, we show that complementarity perception, an important determinant in bundle evaluation (Gaeth et al. 1990; Popkowski Leszczyc and Häubl 2010; Stremersch and Tellis 2002), is quite malleable. Prior literature often assumes, implicitly, that complementarity perceptions are stable. We show these perceptions can be influenced by varying the structure of an experience bundle. More importantly, we show that complementarity perception is malleable because consumers engage in an inferential process when learning about experience bundles. This process has not received attention in the bundling literature. Equally important, we offer insights on how to better design and market experience bundles.

REFERENCES

- Gaeth, Gary J., Irwin P. Levin, Goutam Chakraborty, and Aron M. Levin (1990). "Consumer Evaluation of Multi-Product Bundles: An Information Integration Analysis," *Marketing Letters*, 2(1), 47-57.
- Hayes, A.F. (2013). "An introduction to mediation, moderation, and conditional process analysis: A regression-based approach," New York, NY: Guilford Press.
- Kahn, Barbara.E. and Brian Wansink (2004). "The Influence of Assortment Structure on Perceived Variety and Consumption Quantities," *Journal of Consumer Research*, 30(4), 519-533.
- Koukova, Nevena T., P.K. Kannan, and Amna Kirmani (2012). "Multiformat Digital Products: How Design Attributes Interact with Usage Situations to Determine Choice," *Journal of Marketing Research*, 49(1), 100-114.
- Popkowski Leszczyc, Peter T.L. and Gerald Häubl (2010). "To Bundle or not to Bundle: Determinants of the Profitability of Multi-item Auctions," *Journal of Marketing*, 74(4), 110-124.
- Stremersch, Stefan and Gerard J. Tellis (2002). "Strategic Bundling of Products and Prices: A New synthesis for Marketing," *Journal of Marketing*, 66(1), 55-72.

Ironic Consumption

Caleb Warren, University of Arizona, USA
Gina S. Mohr, Colorado State University, USA

EXTENDED ABSTRACT

Consumers typically covet the meanings associated with the products they use (Belk 1988; Levy 1959). Rolex wearers want to seem classy, gangsta rap fans want to seem tough, and flag wavers want to seem patriotic. But sometimes consumers use a product while trying to dissociate from the tastes, meanings, associations, or ideals that the product typically signifies. That is, they consume the product *ironically*. For example, consumers wear “ugly Christmas sweaters” to holiday parties, emulate infamous cultural figures (e.g., Bill Cosby) on Halloween (DailyMail 2015), and watch TV shows like “The Jersey Shore” and “The Bachelor” that they consider categorically awful (McCoy and Scarborough 2014; Thompson 2000). Similarly, when Donald Trump announced his candidacy, liberal urbanites made Trump’s red hat the “ironic accessory of the summer” (Parker 2015).

Although there is an established literature on sincere symbolic consumption – that is, using products to signal who you are or avoiding products to signal who you are not (Belk, 1988; Berger and Heath 2007; Douglas and Isherwood 1978; Veblen 1899) – far less is known about ironic consumption. We ask three questions in attempt to bridge this gap in the literature: Why do people consume ironically? When do observers detect ironic consumption? And, what impression do ironic consumer makes on others?

Why Consume Ironically?

The literature suggests several reasons why consumers might use products ironically. Ironic consumption potentially signals status (Brooks 1981). Ironically adopting “kitch” products (e.g., reality TV, soul food), might help distinguish knowledgeable consumers both from lower class consumers, who genuinely like the products, and less knowledgeable upper-class consumers, who don’t know about the product or how to consume it ironically (Bourdieu 1984; Johnston and Baumann 2010). Another possibility is that irony offers consumers an indirect way to criticize social institutions, consumption practices, or people (Wompole 2012). Klein (2000), for example, suggests that consumers can express dissent for commercialism by ironically consuming mass-marketed goods, like “Baywatch” or Disneyworld (Klein 2000). A third possibility is that people consume ironically to be humorous. People report using verbal irony to be funny (Roberts and Kreuz 1994); they may use products ironically for the same reason.

Study 1

The primary purpose of study 1 was to examine consumers’ motivations for consuming ironically. Participants from Mechanical Turk ($N = 408$) read a definition of ironic consumption, answered whether or not they had “ever used a product or brand to be ironic,” and, if so, explained why they used the product ironically. As a control condition, half of the sample alternatively indicated if they had “ever used a product or brand to be symbolic,” and, if so, explained why. Two coders (89% agreement) indicated whether the responses mentioned one or more of the following motivations: status, criticism, humor, identity signaling, belonging, signaling support, enjoyment, functional benefits.

Reports of ironic consumption were not rare, but only a minority of the sample ironically used a product (23%). Participants ironically consumed a range of brands (e.g., Hollister, Polly Pocket),

products (e.g., trucker hat, Mickey Mouse watch), and styles (e.g., punk, goth, grunge). The most common reason for consuming ironically was to be humorous, a motive mentioned by 45% of ironic consumers but none of the control consumers ($\chi^2 = 41.89, p < .001$). For ironic consumers to successfully be funny, however, the audience needs to both recognize that the consumer is being ironic and perceive the ironic consumption to be humorous. Our subsequent studies thus investigate when observers detect ironic consumption and how they evaluate ironic consumers.

When is Ironic Consumption Detected?

Under what conditions will people recognize that another consumer is being ironic? People detect verbal irony when they think that an utterance is the opposite of what the speaker intends (Utsumi 2000), just as they detect situational irony when an occurrence is the opposite of what they would normally expect (Lucariello 1994). We similarly expect that people will detect ironic consumption only when the meaning of a consumption behavior is different than the meaning the consumer (hereafter, an incongruent product). However, a product can be incongruent either because it has an aspirational incongruent meaning or dissociative incongruent meaning (Englis and Solomon 1995; White and Dahl 2006). Because consumers want to distance themselves from dissociative meanings but not aspirational meanings (Berger and Heath 2007; White and Dahl 2006), irony should be detected more frequently when a consumer uses a product with a dissociative meaning. A popular high school student who dresses like a nerd, for example, might seem ironic because others would recognize that (a) the popular kid is not a nerd, and (b) he probably doesn’t want to be a nerd. On the other hand, people should be less likely to detect irony when a nerd dresses like a popular kid (an aspirational identity), a nerd dresses like other nerds (a congruent identity), or a popular kid dresses like other popular kids (also a congruent identity).

Study 2

Study 2 tested the hypothesis that an observer is only likely to detect irony when a consumer uses an incongruent product with a dissociative meaning. Undergraduate students ($N = 374$) were randomly assigned to a condition in a 2 (consumer: cool, uncool) x 2 (product: congruent, incongruent) x 2 (cool style: grunge, preppy) between-subjects experiment.

Participants read about two high school students, “John” and “Chris,” who are part of different social cliques. One clique was described as being cool upper classmen, the other as uncool freshman. The incongruent dissociative condition described a cool high school student adopting a style associated with an uncool clique. The incongruent aspirational condition described an uncool high school student adopting a style associated with a cool clique. The congruent conditions described a cool student adopting a style associated with a cool clique and an uncool student adopting a style associated with an uncool clique, respectively. To ensure that the effects did not depend on the type of style adopted, we counterbalanced whether the cool clique was associated with a “grunge” style or a “preppy” style (the results generalized across the two styles).

We measured irony detection in two ways. As a conservative measure, we asked a general, open-ended question: “Based on what you’ve read, why do you think John (Chris) chose to wear this to-

day?" Two coders (100% agreement) assessed whether or not the participant mentioned irony or a synonym. We subsequently asked participants to indicate the extent to which they disagree (1) or agree (7) with the following items: "He is being ironic," and "He is wearing the clothing ironically."

Irony detection was low overall, but it was most common when the consumer used an incongruent product linked to a dissociative group (i.e., when the cool kid dressed like uncool kids). In contrast, participants detected less irony when the consumer dressed like an aspirational incongruent group (i.e., the uncool kid dressing like cool kids) or an associative, congruent group (consumer-by-product interaction: ($F(1,366) = 12.16, p < .001$).

What are the Consequences of Consuming Ironically?

Consumers use products ironically in attempt to be humorous, but whether being ironic actually makes a consumer seem more or less humorous (as well as more or less likable) should depend on whether the audience identifies with the product being consumed. Sincerely consuming a product signals that the consumer belongs to the same in-group as others who use the product (Berger and Heath 2007; Douglas and Isherwood 1979). Irony, however, distances the consumer from the product and, by extension, those who use it sincerely. Because people have a more favorable impression of members of an in-group than members of an out-group (Tajfel 1982), people who identify with a product should evaluate consumers more favorably if they think the consumer is using the product sincerely rather than ironically. For example, drivers with a Donald Trump bumper sticker should make a more favorable impression on Trump supporters than on people who do not support Trump, but only if the consumption of the sticker seems sincere rather than ironic.

Study 3

Study 3 attempted to replicate study 2 by showing that an audience is most likely to detect irony when a consumer uses a product with a dissociative meaning. It also attempted to extend study 2 by examining the effects of being ironic on impressions from others.

U.S. citizens on Mechanical Turk ($N = 295$) completed the study during a presidential primary race that featured democrat Bernie Sanders and republican Donald Trump. Leveraging the fact that most Americans dissociate from people with opposing political views (Murray et al. 2014), we created two dissociative incongruent conditions and two congruent conditions using a 2 (consumer: liberal, conservative) \times 2 (product: liberal, conservative) between-subjects design.

Participants viewed an image of an automobile with a political bumper sticker and reported their impression of the driver. In the conservative-congruent condition the driver had a Donald Trump sticker on a Hummer with an NRA logo. In the conservative-incongruent condition, the Hummer instead displayed a Bernie Sanders bumper sticker. In the liberal-congruent condition, the driver displayed a Bernie Sanders sticker on a Toyota Prius with a peace sign. Finally, in the liberal-incongruent condition, the Prius displayed a Donald Trump bumper sticker. A pretest confirmed that a Hummer, the NRA, and Donald Trump were all associated with conservatives whereas a Prius, a peace symbol, and Bernie Sanders were all associated with liberals.

After viewing the car, participants completed the irony detection measures from study 2 and indicated the extent to which they considered the driver humorous (e.g., "He/She seems like a funny person) and likable (e.g., "I have a favorable impression of him/her"). Finally, to assess participants' identification with the focal

product (i.e., the bumper sticker), we asked if they personally identified with the politician in the bumper sticker (either Bernie Sanders or Donald Trump, depending on the condition) on a seven-point scale from "not a lot/1" and "a lot/7."

Despite relatively low average levels of irony detection, both the open-ended and closed-ended measures revealed that irony was most likely to be detected when the consumer used a product with a dissociative meaning, in this case a sticker of a politician with opposing political views ($ps < .01$). Importantly, the effect of detecting ironic consumption on the impression of the consumer depended on the participants' identification with the political bumper sticker. A moderated mediation analysis (Hayes 2013; model 14) confirmed that the participant's political identification moderated the mediating effect of irony detection on the extent to which the consumer seemed both humorous (Index of moderated mediation = $-.076$; 95% C.I.: $-.13$ to $-.03$) and likable (Index of moderated mediation = $-.11$; 95% C.I.: $-.16$ to $-.06$). Participants were significantly more likely to detect irony when the consumer used an incongruent rather than a congruent product ($b = .80$; $t = 7.94, p < .001$). Moreover, the effect of irony detection on the extent to which the consumer seemed both humorous ($b = -.09$; $t = -5.01, p < .001$) and likable ($b = -.14$; $t = 7.86, p < .001$) depended on the participant's identification with the consumed product. Participants who scored relatively low on identification with the consumed product rated the target consumer as more humorous and more likable if they thought the consumer was being ironic, whereas participants who scored relatively high on identification rated ironic consumers as being less likable (see figure 1). Thus, detecting irony blunted the positive (and negative) impressions that people typically have of consumers who use products with which they identify (do not identify).

Study 4

The purpose of study 4 was to examine the effects of ironic consumption on impressions by directly manipulating whether a consumer uses a product sincerely or ironically and whether or not the audience identifies with the product being consumed. Participants recruited from Mechanical Turk ($N = 238$) evaluated a consumer who was wearing a tee-shirt either ironically or sincerely as part of a 2 (consumption: ironic, sincere) \times 2 (product identification: high, low) between-subjects experiment.

Depending on the identification condition, participants either listed a musician who they consider a favorite (high identification) or who they dislike (low identification). Participants subsequently imagined encountering a consumer wearing a tee-shirt of this musician and asking him or her about the shirt. In the "sincere consumption" condition, the consumer ostensibly responded: "I'm wearing the shirt because I'm a fan." In the "ironic consumption" condition, the person ostensibly responded: "I'm only wearing the shirt to be ironic." Participants subsequently indicated how the interaction would influence the extent to which they considered the consumer humorous (e.g., less funny/more funny) and likable (e.g., less likable/more likable).

Consistent with study 3, a 2 (consumption: ironic, sincere) \times 2 (product identification: high, low) ANOVA revealed a significant interaction on the extent to which the consumer seemed both humorous ($F(1, 234) = 13.52, p < .001$) and likable ($F(1,234) = 31.27, p < .001$). When participants identified with the musician on the tee-shirt, they saw the consumer as being less humorous ($F(1, 234) = 12.22, p < .001$) and less likable ($F(1,234) = 23.03, p < .001$) when (s)he wore the tee-shirt ironically. In contrast, when participants did not identify with the musician on the tee-shirt, they saw the consumer as being marginally more humorous ($F(1, 234) = 2.75, p < .10$)

and significantly more likable ($F(1,234) = 9.41, p < .01$) when (s)he wore the shirt ironically. Thus, wearing a shirt of a musician that the audience likes (doesn't like) led to a more (less) favorable impression of the consumer, but not if the consumer was being ironic.

General Discussion

Our research addresses a gap in the literature on symbolic consumer behavior by investigating ironic consumption. Not all consumers engage in ironic consumption, but those who do say that they use products ironically to be funny rather than to signal a particular identity or group membership. For example, a music snob might wear a Justin Bieber tee-shirt ironically as a joke. Whether the audience recognizes and appreciates the joke depends on whether they detect the irony, and this is most likely to happen when they recognize that the consumer wants to dissociate from the product's conventional meaning or identity. For example, people are more likely to think that the music snob is being ironic if they recognize that he disdains Justin Bieber and his "Beliebers" than if they think the music snob is or wants to be a Belieber. Importantly, rather than making a consumer seem funny outright, being ironic appears to blunt both positive and negative impressions from others. People who don't care for Justin Bieber will think that Bieber shirt-wearers have a poor sense of humor, unless they think they are wearing the shirt ironically. On the other hand, Beliebers will tend to like Bieber shirt-wearers more, unless they think they are wearing the shirt ironically. By blunting the impression that consumers make on others, ironic consumption potentially offers a safer way to consume products with uncertain, contentious, or even undesirable meanings.

REFERENCES

- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15(2), 139-168.
- Berger, Jonah, and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34(2), 121-134.
- Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*, Harvard University Press.
- Brooks, John (1981), *Showing Off in America*, Boston/Toronto: Little, Brown and Company Limited.
- Douglas, Mary, and Baron Isherwood (1978), *The World of Goods: Towards an Anthropology of Goods*, London: Allen Lane.
- Englis, Basil G., and Michael R. Solomon (1995), "To Be and Not to Be: Lifestyle Imagery, Reference Groups, and the Clustering of America," *Journal of Advertising*, 24(1), 13-28.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY, US: Guilford Press.
- Johnston, Josée, and Shyon Baumann, (2014), *Foodies: Democracy and Distinction in the Gourmet Foodscape*, New York: Routledge.
- Klein, Naomi (2000), *No Logo: taking Aim at the Brand Bullies*, New York: Picador.
- Levy, Sidney J. (1959), "Symbols for Sale," *Harvard Business Review*, 37(4), 117-124.
- Lucariello, Joan (1994), "Situational Irony: A concept of events gone awry," *Journal of Experimental Psychology: General*, 123(2), 129-145.
- McCoy, Charles Allan, and Roscoe C. Scarborough (2014), "Watching "Bad" Television: Ironic Consumption, Camp, and Guilty Pleasures," *Poetics*, 47, 41-59.
- Murray, Alan, et al. (2014), "Political Polarization in the American Public," Pew Research Center Report, published June 12, 2014, accessed 11/22/2016 from <http://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/>
- Parker, Ashley (2015), "Trump's Campaign Hat Becomes an Ironic Summer Accessory," *New York Times*, September 11, uploaded on 11/22/2016 from <http://www.nytimes.com/2015/09/13/fashion/trumps-campaign-hat-becomes-an-ironic-summer-accessory.html>.
- Roberts, Richard M., and Roger J. Kreuz (1994), "Why Do People Use Figurative Language?" *Psychological Science*, 5(3), 159-163.
- Simmel, Georg (1957), "Fashion," *American Journal of Sociology*, 62(6), 541-558.
- Tajfel, Henri (1982), "Social Psychology of Intergroup Relations," *Annual Review of Psychology*, 33(1), 1-39.
- Thompson, Craig J. (2000), "Postmodern Consumer Goals Made Easy," *The Why of Consumption: Contemporary Perspectives on Consumer Motives, Goals, and Desires*, New York: Routledge, 120-39.
- Utsumi, Akira (2000), "Verbal Irony as Implicit Display of Ironic Environment: Distinguishing Ironic Utterances from Nonirony." *Journal of Pragmatics* 32(12), 1777-1806.
- Veblen, Thorstein (1899), *The Theory of the Leisure Class*, New York: The New American Library.
- Wampole, C. (2012), "How to Live Without Irony," *New York Times*, November 18, SR1.
- White, Katherine, and Darren W. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Psychology*, 16(4), 404-414.

The Biographies of Things: Provenance and the Pursuit of Moral Consumption

Todd Weaver, Point University, USA
Pam Ellen, Georgia State University, USA
Carolyn Curasi, Georgia State University, USA

EXTENDED ABSTRACT

Anecdotal evidence suggests that consumers are increasingly concerned with the background of the products they consume. These product biographies relate to the provenance of products: the people, places, resources, and processes involved in creating and distributing products for consumption. In this research, we show that some consumers want to know the biographies of products they buy so they can choose items with backgrounds consistent with their moral values, such as environmental concerns or social justice. Furthermore, we find product biographies can create tensions and dilemmas for consumers as they attempt to balance multiple consumption goals with their moral values.

Kopytoff (1986) introduced the idea of a *product biography* as a way of conceptualizing meanings relating to a product's background, proposing that products, like people, have "life histories" that inform and influence the meanings attached to them by consumers. He notes that product biographies would have many facets covering a wide range of culturally-constituted and objective meanings, including where a product is made and by whom, and that biographical meanings can have important moral implications for consumers. Our goal in this research was to explore whether consumers sought geographical information when purchasing and, if so, to understand the types of biographical information that consumers seek. We also sought to understand how these biographies impact consumption decisions as consumers attempt to consume morally.

To explore product biographies and their impact on consumers, we selected the pseudonymous Springs Landing as the site for our research, a neighborhood within a major metropolitan area in the southeastern U.S., where residents agree to live by certain community values, such as "Diversity" and "Sustainability." Twenty-five residents were interviewed, and follow-up interviews were conducted with 10 of them. The sample included diverse age groups, household types, and professions. Semi-structured (i.e., open-ended and non-directive) interviews were used to allow flexibility to explore novel or unexpected themes. Individual interviews were coded to illuminate themes within each individual discourse. After coding individual transcripts, a thorough analysis of the data set as a whole was conducted. The overall thematic structure emerged via consensus of the research team. As a test of the credibility of the analysis, we performed member checks by meeting with informants after research team consensus was reached (Hirschman, 1986; Lincoln & Guba, 1986).

Informants repeatedly referred to various processes involved in systems of provenance in accounts of their consumption. *Process biographies* stemmed from all stages of provenance, from the extraction of raw materials to the retailing of finished goods. Respondents frequently used these meanings to distinguish the morality of one product from another. For example, the PlayStation video game system brought to mind negative meanings related to the materials necessary for their construction for Neil. Although it did not prevent him from buying a game system, he clearly feels guilt for consuming something whose provenance might involve human suffering, even though he is not confident in this knowledge.

Informants also demonstrated an awareness of product biographies related to the resources invested in making and marketing products. These *resource biographies* frequently related to natural

resources, particularly the natural resources contained in products or those used or affected by the provenance of products. One example is David's concern about the natural resources used in building his own housing community. David notes the irony of building or purchasing something new to be more sustainable: the new thing uses up more of the Earth's scarce resources, which is often contradictory to sustainability.

The third type of provenance biography mentioned by our informants, *person biographies*, concerns the people involved in provenance. Our informants frequently expressed concern for the workers involved in the production of consumer goods. For example, Dorothy is uncertain about who specifically benefits from Fair Trade certification and how exactly they might benefit, but she still seeks Fair Trade certification with the hope that she might be helping the workers in the supply chain in terms of work conditions and pay.

Meanings associated with the geographical background, *place biographies*, constituted a fourth type of provenance biography mentioned by our informants. In some instances, informants even discussed distant or abstract places they had never visited. Lacey, a working mother with young children, is uncertain exactly where the apple juice she buys at Publix comes from, but infers that the United States is "a pretty good place" for making apple juice and that Indonesia is less desirable.

Our informants noted that product biographies could pose a number of *dilemmas* in their decision making. Informants frequently encountered a conflict between moral values, such as environmentalism and altruism, and pragmatic goals to conserve time and money. For example, Lacey feels great moral conflict when she shops at Walmart:

Our location makes it hard because there is a Walmart superstore right around the corner. And with a child, sometimes it's just easier to go to the Walmart superstore, and that place is just full of evilness. (Lacey, 30s, healthcare professional)

Like most consumers, Lacey values convenience and will sometimes prioritize it over competing objectives. In this case, her beliefs about the biographies of the products available at Walmart make her feel guilty about shopping there because she feels she is not being true to her moral consumption identity.

Another conundrum was presented by prices. Several informants noted that the low prices of some consumer goods did not make sense given their provenance biographies. For example, Bill, a retiree living on a fixed income, reported that he primarily shops at a local organic grocer, in part, because he feels that prices at national grocery chain Publix and other mainstream stores do not fairly represent the value of the natural resources required to create the products. For Bill, shopping for groceries brings to mind the production processes involved, a thought that compels him to shop for groceries that are more expensive, despite his fixed income and their less convenient location.

REFERENCES

- Hirschman, Elizabeth C. (1986), "Humanistic Inquiry in Marketing Research: Philosophy, Method, and Criteria," *Journal of Marketing Research*, 23 (August), 237-249.

Kopytoff, Igor (1986), "The Cultural Biography of Things: Commoditization as Process," *The Social Life of Things: Commodities in Cultural Perspective*, 68, 70-73.

Lincoln, Yvonna S., and Egon G. Guba (1986), "But is it Rigorous? Trustworthiness and Authenticity in Naturalistic Evaluation," *New Directions for Program Evaluation*, 30, 73-84.

Possession Substitutability: Identity and Usage of Rented (Versus Owned) Products

Liad Weiss, University of Wisconsin-Madison, USA

EXTENDED ABSTRACT

Despite availability of good rental options, many consumers still prefer to haul or ship their own gear for various activities (e.g., skiing). Understanding psychological antecedents for consumer preference for owned (versus rented) gear is pivotal for marketers in the access-based industry. However, such antecedents remain understudied.

Previous research on consumer preference for owned (vs. un-owned) items finds that, when a good is more identity-relevant, owners respond more negatively to its loss (Dommer and Swaminathan 2013; Ferraro, Escalas, and Bettman 2011). Relatedly, we propose that when identity (e.g., skier) is more self-central, a consumer will perceive relevant possessions (e.g., skis) as less substitutable due to the classification of such possessions as more self-central (i.e., more “me;” Weiss and Johar 2013). Consequently, the consumer will be less inclined to use rented gear to temporarily substitute a possession even when the rental is better. Thus, the very consumers who could most appreciate using superior gear (e.g., “die-hard” skiers) would be ironically the least likely to do so (due to being the most reluctant to forgo using their own gear). Indeed, such ironic consequences of identity directionally align with the aforementioned prior research. However, that prior research studied the preference for owned goods only in the context of a possible loss of ownership over the good (e.g., due to sale; Kahneman, Knetsch, and Thaler 1990). In contrast, we uniquely test preference for owned goods in choices that eliminate a possible loss of ownership, specifically in dilemmas of whether to temporarily substitute an owned item.

Consistent with low possession substitutability as the driver for low renting, we predicted that impeding the effect of identity centrality on low possession substitutability will reverse the ironic effect of identity. We theorized that construing the self in terms of an identity that does not depend on gear for engaging in identity activities (e.g., a “chef” requires equipment to cook, but a “foodie” only needs her taste buds to eat) will impede the effect of identity centrality on possession substitutability. In such situations, greater identity centrality may actually predict more (vs. less) usage of superior rentals.

Results from five studies were consistent with our predictions. In study 1, while planning an out-of-state cycling vacation, participants learned that the local shop rents out bikes identical to theirs. The rental cost was either higher or lower than the cost of shipping their bike there. After choosing between shipping and renting (DV), participants reported the extent to which cycling was central to their identity in real-life. Consistent with lower possession substitutability, identity centrality predicted (1) lower renting and (2) smaller positive effect of lower (vs. higher) renting price on renting likelihood.

To rule-out a “renting-aversion” account, whereby identity centrality simply increases dislike of the unfamiliar, study 2 manipulated whether the gear in one’s possession (i.e., the familiar gear) was owned or borrowed. Further, to rule out a “sunk-cost” explanation involving initial investment in gear, any initial investment in the gear was eliminated. Participants in the [“borrowed” / “owned”] condition imagined planning a cycling vacation, deliberating between shipping there the quality bike family friends recently left for them [to use for the year they are away / as a hand-me-down right before going away for a year] (option 1) and renting gear at the local shop (option 2). Consistent with predictions, identity centrality predicted lower renting when the gear in one’s possession was owned, but not when it was borrowed.

To rule-out a “mere-involvement” account, whereby, when identity is central, consumers care more about what gear they use and prefer their own because they think it is better, study 2 manipulated the rental’s quality. Further, to promote a causality argument, identity-centrality was manipulated. Participants imagined owning high-quality fishing gear they used when fishing was central to their identity. Subjects in the [“identity-central” / “identity-peripheral”] condition read that fishing is [still / no-longer] central to their identity. Then, after finding damage to their gear before an upcoming fishing trip, participants chose between paying to expedite repairs and renting similar gear (DV). Subjects in the [higher / lower] quality condition learned that the rental gear was [better / worse] than the gear they owned. Consistent with low substitutability, fishing identity centrality (vs. peripherality) (1) lowered renting preference and (2) attenuated the positive effect of higher (vs. lower) quality of the rental on renting likelihood. Mediation analysis showed that identity centrality increased gear classification as “me,” and subsequent possession unsubstitutability – expectation that the experience would be different without one’s possession. Consequently, subjects expressed lower desire to rent regardless of the rental’s quality.

Studies 4a and 4b tested the moderating role of whether the activated identity is product-centric, or whether it pertains to activities that require gear (e.g., listening to music as an “audiophile” requires hi-fi speakers), or product-agnostic, or whether it pertains to activities that can be engaged in directly through the senses (e.g., listening to music as a “musicophile” only requires the ability to hear). Activating a product-agnostic identity was predicted to hinder construal of objects in terms of “self” (Weiss and Johar 2016). Consequently, consumers were predicted to be unmindful of object “me-ness,” and thus not to perceive possessions with higher “me-ness” as less substitutable. To test this prediction, Study 4a participants in the [“musicophile” / “audiophile”] condition wrote two things about themselves that reflect their [music-lover / audiophile] side. Participants then imagined owning high quality headphones. In the scenario, they were online, buying tickets to a silent concert, “where music is transmitted via radio waves and the audience listen to it through headphones.” Subjects chose between paying to use a high-fidelity radio connector they could plug their own headphones to (option 1) and paying a bit more to use the event’s wireless headphones, known for their better sound reproduction (option 2, DV). Results showed that greater “audiophile” centrality predicted lower renting when the activated identity was “audiophile,” but higher renting when the activated identity was “musicophile.” Study 4b replicated the results in incentive-compatible settings. Consequences for identity research and for marketers in the booming access-based economy are discussed.

REFERENCES

- Dommer, Sara L. and Vanitha Swaminathan (2013), “Explaining the Endowment Effect through Ownership: The Role of Identity, Gender, and Self-Threat,” *Journal of Consumer Research*, Forthcoming.
- Ferraro, Rosellina., Jennifer E. Escalas, and James R. Bettman (2011), “Our Possessions, Our Selves: Domains of Self-Worth and the Possession-Self Link,” *Journal of Consumer Psychology*, 21 (2), 169-77.

958 / Possession Substitutability: Identity and Usage of Rented (Versus Owned) Products

- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1990), "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, 98 (6), 1325-48.
- Weiss, Liad and Gita V. Johar (2013), "Egocentric Categorization and Product Judgment: Seeing Your Traits in What You Own (and Their Opposite in What You Don't)," *Journal of Consumer Research*, 40 (1), 185-201.
- (2016), "Products as Self-Evaluation Standards: When Owned and Unowned Products Have Opposite Effects on Self-Judgment," *Journal of Consumer Research*, Forthcoming.

The Influence of Purchase Motivation on Assortment Size Preferences

Sarah C. Whitley, Boston University, USA

Remi Trudel, Boston University, USA

Didem Kurt, Boston University, USA

EXTENDED ABSTRACT

Consumers' decisions to purchase a product are often driven by different motivations. Personal pleasures (i.e., hedonic motivations) trigger consumption in some cases and functional needs (i.e., utilitarian motivations) drive consumption in others (Botti and McGill 2011; Choi and Fishbach 2011) — even when the product is the same. In the present research, we ask a novel question: do consumers prefer different assortment sizes when choosing a product for a hedonic versus a utilitarian motivated purchase?

We argue that the number of alternatives consumers plan to review for a purchase is influenced by whether their motivation for that purchase is hedonic versus utilitarian. More specifically, we believe that consumers exhibit different perceptions about the uniqueness of their ideal product preferences under hedonic versus utilitarian purchase motivations, which in turn affect the number of products they review. We argue that consumers believe that their product preferences for hedonic purchases are inherently more unique and different from those of other consumers, due to the idiosyncratic nature of hedonic purchase preferences. Consequently, consumers believe they will have a more difficult time finding a product matching their preferences under a hedonic purchase motivation, leading them to consider a larger assortment of product alternatives. In contrast, consumers with utilitarian purchase motivations tend to perceive their product preferences as less unique compared to others and thus anticipate less difficulty in preference matching, resulting in an inclination to choose from smaller assortments.

Across 7 studies, we find that consumers with hedonic purchase motivations prefer larger assortments than those with utilitarian purchase motivations. Our results show that consumers exhibit differences in their perceptions of preference uniqueness and the level of anticipated difficulty in preference matching between the hedonic and utilitarian purchase motivations, and these two variables underlie the effect of purchase motivation on preferred assortment size.

Our research contributes to the literature in three important ways. We extend the literature on hedonic and utilitarian purchases by uncovering how these two purchase motivations influence consumers' preference for assortment size. Second, we add to the literature on the determinants of consumers' preferences for large and small assortments. Lastly, a major contribution of our research is our finding that hedonic and utilitarian purchase motivations have different implications for consumers' perceptions of uniqueness about their ideal product preferences.

Study 1A serves as an initial test for the effect of purchase motivation on assortment size preference. Similar to Botti and McGill (2011), we manipulate the purchase motivations for the same product, but emphasize the hedonic or utilitarian nature of the end-goal of the purchase. Since hedonic and utilitarian purchases are motivated by a desire to experience affective pleasure and by a desire to fulfill a need or accomplish a task (Dhar and Wertenbroch 2000; Pham 1998; Strahilevitz and Myers 1998), respectively, we characterize hedonic and utilitarian purchase motivations in our scenarios as pleasure-seeking and task-driven. Participants were assigned to either a utilitarian or hedonic purchase motivation condition and asked their preference between a small (6) or large (24) assortment of product alternatives. Participants were told to imagine they taking a class on Classical music; those in the utilitarian motivation condition imag-

ined purchasing a CD to listen to for a class assignment while those in the hedonic condition considered purchasing a CD to listen to for pleasure. 56% of participants in the hedonic motivation condition preferred to choose from a large (versus small) assortment, whereas only 24% of participants in the utilitarian purchase motivation condition preferred the large assortment ($\chi^2(1) = 9.17, p < .01$). Study 1B uses a similar class-based manipulation, design, and assortment size measure for the purchase of a book. 65% of participants purchasing the book to read for pleasure (hedonic) preferred the large assortment, whereas only 27% of participants purchasing the book for a class assignment (utilitarian) felt similarly ($\chi^2(1) = 18.89, p < .01$). Studies 1C and 1D replicate this main effect of purchase motivation on assortment size using computers and paint colors, respectively.

In study 2, participants imagined selecting a song to listen to as part of an online study (utilitarian) or as break between studies (hedonic). Participants the number of songs they would like to choose from (between 2-24), before being presented with a selection of songs matching that size. Participants then selected a song, listened to it, and rated their satisfaction with the song and the song assortment. In addition to replicating our main effect of hedonic versus utilitarian motivation on assortment size ($M_H = 8.76, SD = 7.03$ vs. $M_U = 5.43, SD = 5.62$; $F(1, 149) = 10.31, p < .01$) using real choice, there were no differences in satisfaction with the song or the assortment. This null effect on satisfaction provides confidence that our pre-choice assortment size scenarios accurately reflect consumers' real preferences.

Lastly, we argue that consumers with hedonic purchase motivations tend to perceive their preferences as unique (compared to others' preferences) to a greater extent than consumers with utilitarian purchase motivations. As a result, consumers with hedonic versus utilitarian purchase motivations anticipate greater difficulty in finding a product that matches their preferences, resulting in predilection for larger assortments. In study 3A, we measure both perceived preference uniqueness and anticipated difficulty in preference matching to evaluate our sequential process model (purchase motivation \rightarrow perceived preference uniqueness \rightarrow anticipated difficulty in preference matching \rightarrow assortment size). Participants were randomly assigned to a hedonic utilitarian or motivation for the book purchase, analogous to study 1B. Participants then indicated their perceptions of preference uniqueness as agreement (7-point Likert) with the following statement: "I believe my preferences for books are unique and different from others' book preferences." Participants subsequently indicated how difficult they felt it would be to find a book that satisfies their goal (1=Not at all Difficult, 7=Very Difficult). Lastly, participants stated how many books they would like to review in an assortment. The effect of purchase motivation on assortment size was replicated ($F(1, 208) = 4.96, p < .05$). Additionally, participants in the hedonic condition felt their preferences were more unique ($F(1, 208) = 10.32, p < .01$; $M_H = 4.58, SD = 1.28$ vs. $M_U = 3.96, SD = 1.51$) and perceived finding a preference matching product to be more difficult ($F(1, 208) = 5.95, p < .05$; $M_H = 4.07, SD = 1.73$ vs. $M_U = 3.50, SD = 1.66$) than participants in the utilitarian condition. Bootstrapping results from a serial multiple mediator analysis (Model 6; Hayes 2013) confirmed a positive and significant indirect effect ($\beta = .13$; 95% CI = (.05, .35)) verifying our full mediation pathway. We replicated our process model in study 3B using the same paint color manipulation

as study 1D. Alternative explanations of maximizing/satisficing, anticipated enjoyment of choosing, efficiency of choosing, intrinsic motivation, and goal importance were explored but not supported.

REFERENCES

- Botti, Simona and Ann L. McGill (2011), "The Locus of Choice: Personal Causality and Satisfaction with Hedonic and Utilitarian Decisions," *Journal of Consumer Research*, 37, 1065-78.
- Choi, Jinhee and Ayelet Fishbach (2011), "Choice as an End Versus a Means," *Journal of Marketing Research*, 48, 544-54.
- Dhar, Ravi and Klaus Wertenbroch (2000), "Consumer Choice between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (Feb.), 60-71.
- Hayes, Andrew F. (2013), *Methodology in the Social Sciences: Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York, NY: Guilford Press.
- Pham, Michel T. (1998), "Representativeness, Relevance, and the use of Feelings in Decision Making," *Journal of Consumer Research*, 25, 144-59.
- Strahilevitz, Michal and John G Myers (1998), "Donations to Charity as Purchase Incentives: How Well they Work may Depend on what You are Trying to Sell," *Journal of Consumer Research*, 24 (March), 434-46.

Gifts of Consolation: Gifts as Substitutes for Emotional Support

Hillary Wiener, SUNY-Albany, USA
Tanya Chartrand, Duke University, USA

EXTENDED ABSTRACT

Most research on gifts has examined celebratory gifts, or gifts that are given in response to others' positive events, such as birthdays or holidays. However, consumers also give gifts in response to others' negative life events, such as a loved one's death or a break-up. In this research, we introduce the term "gifts of consolation" to refer to gifts given in response to negative events and examine when and why consumers give them.

We propose that gifts of consolation are a form of social support and thus that giving a gift can be a substitute for providing someone with emotional support. People have the existing psychological ability to substitute a product for a psychological construct (Chen, Wan, and Levy 2017), and we argue that giving gifts and providing emotional support both satisfy a person's obligation to provide social support to close others (Clark 1987). Therefore, if givers are unable to provide emotional support, they should be more likely to give a gift and vice versa.

Studies 1a and 1b test the basic effect, examining whether givers spend more on gifts when have not provided emotional support. Participants ($n_{\text{Study1a}} = 208$; $n_{\text{Study1b}} = 209$) were asked to imagine that their friend's mother died and that they were able or unable to provide them with emotional support. Then in study 1a, participants chose between giving their friend one of three arrangements of sympathy flowers (small—\$40, medium—\$60, and large—\$80) or not sending flowers, and in study 1b they chose how much they wanted to donate to a memorial fund for their friend's mother. Participants who provided less emotional support condition spent more on gifts, than did those who provided more support ($p_{\text{Study1a}} = .006$; $p_{\text{Study1b}} = .029$), suggesting that givers use gifts to compensate for not providing emotional support.

Prior research (Clark 1987) has found that people feel less obligated to provide social support to people they are distant from, so in study 2 we examine whether the givers' closeness to the support recipient moderates the effect. Participants ($n = 414$) first read that a friend's (close condition) or coworker's (distant condition) mother had died, and they attended (did not attend) the funeral. Then they were asked how much they would donate to a memorial fund. There was an interaction between the level of emotional support provided and closeness ($p = .06$). Participants in the friend condition donated significantly less money (\$54) when they attended the funeral than when they did not ($p < .0001$), but the effect was marginal in the coworker condition (\$21; $p = .1$). When feelings of obligation are low, givers do not compensate for a lack of emotional support with a gift.

Study 3 tests whether givers substitute gifts for emotional support in celebratory situations or whether this effect is unique to gifts of consolation. Participants ($n = 415$) read about a friend's positive event (another friend was throwing them a birthday party) or negative event (their mother died), and that they did or did not attend the birthday party (funeral). Then they indicated how much they would spend on a gift for their friend. There was a significant interaction between gift giving occasion and level of emotional support provided ($p < .0001$) such that participants said they would spend more on a gift when they did not attend their friend's mother's funeral than when they did ($p < .0001$), but whether or not they had attended their friend's birthday party did not influence how much they chose to spend on a gift ($p = .36$), showing that givers substitute more for negative than positive events.

Study 4 examines whether the substitution effect works in reverse: If a giver gives a gift, are they then less likely to provide the recipient with emotional support? Participants ($n = 203$) first read that a friend's (coworker's) mother had died and that they decided to send flowers and a sympathy note or just a note. Then they were asked to write the note they would send. These notes were coded for how emotionally supportive they were. Participants who gave flowers wrote significantly less supportive notes than did those who did not give flowers ($p < .0001$). This effect was moderated by a marginal interaction ($p = .09$) such that giving a gift led to less supportive notes in the friend condition ($p < .0001$) but only marginally less supportive ones in the coworker condition ($p = .07$). This shows that givers compensate for not giving a gift by providing more emotional support.

Study 5 looks at *when* givers prefer to give gifts rather than provide emotional support. We propose that when a giver wants to support someone who they think will be difficult to support (e.g., someone who is negative or has low self-esteem; Forest, Kille, Wood, and Holmes 2014), they will give a gift to fulfill their obligation to provide support while avoiding an unpleasant interaction. We test this idea in a lab study. Participants ($n = 48$) were told that they would provide another participant with social support and were shown the profile of the person they would support. The profile was actually not from another participant but manipulated how easy the person was to support by varying how pessimistic and low in self-esteem they were. Then participants were asked if they wanted to spend five minutes talking to the person about their break-up (i.e., provide emotional support) or pay \$1 to give the person a cookie and avoid the conversation (i.e., give a gift). Participants were significantly more likely to provide support by giving a gift when the support recipient sounded hard to support (54%) than easy to support (25%, $p = .039$), showing that gifts of consolation are an appealing way to support difficult people.

In conclusion, we show that givers give gifts of consolation and treat them as substitutes for emotional support. Our findings suggest that thinking about gifts as a form of social support may be a fruitful direction for future research.

REFERENCES

- Chen, Rocky Peng, Echo Wen Wan, and Eric Levy (2017), "The Effects of Social Exclusion on Consumer Preference for Anthropomorphized Brands," *Journal of Consumer Psychology*, 27 (1), 23-34.
- Clark, Candace (1987), "Sympathy Biography and Sympathy Margin," *American Journal of Sociology*, 93 (2), 290-321.
- Forest, Amanda, David R. Kille, Joanne V. Wood, and John G. Holmes (2014), "Discount and Disengage: How Chronic Negative Expressivity Undermines Partner Responsiveness to Negative Disclosures," *Journal of Personality and Social Psychology*, 107 (6), 1013-1032.

You are not as Smart as You Think You are: Effects of Self-Perceived Knowledge on Consumer Information Processing and Decision Making

Ruomeng Wu, University of Cincinnati, USA
Brianna Escoe, University of Cincinnati, USA
Frank R. Kardes, University of Cincinnati, USA

EXTENDED ABSTRACT

It is well established that product knowledge affects information processing and decision-making. For this reason, it has received extensive attention from marketers (Bettman and Park 1980; Brucks 1985; Johnson and Russo 1984; Moorman, Diehl, Brinberg, and Kidwell 2004).

There are two distinguishable types of knowledge that affect how consumers process knowledge and make decisions: actual knowledge (i.e. objective knowledge) and consumers' assessments of their knowledge (i.e. subjective knowledge) (Bearden, Hardesty, and Rose 2001; Moorman, Diehl, Brinberg, and Kidwell 2004). The two types of knowledge uniquely influence information search and choice behavior (Radecki and Jaccard 1995).

In this article, we focus on self-perceived knowledge. Specifically, we investigate how self-perceived knowledge affects purchasing behavior and decision-making through omission neglect, ignorance of missing information.

Detecting absent information is surprisingly difficult (Sanbonmatsu, Kardes, Houghton, Ho, and Posavac 2003; Sanbonmatsu, Kardes, Posavac, and Houghton 1997; Sanbonmatsu, Kardes, and Sansone 1991). Consumers often rely heavily on the given information and ignore the possibility of missing information or under weigh its importance even when they are aware it is missing. The failure to detect the absence of relevant information can encourage consumers to form more extreme judgments because the importance of the presented information is overestimated (Sanbonmatsu et al. 2003; Unkelbach, Fiedler, and Freytag 2007). Overlooking important omissions often leads to extreme judgments and poor decisions, which hinder the consumer. These decisions are often biased to the presented information. Because omission neglect is consequential, it is crucial to discover its antecedents. However, limited research has investigated the antecedents of omission neglect.

Prior research has demonstrated that objective knowledge reduces omission neglect (Hernandez, Han, and Kardes 2014). In contrary, we propose that self-perceived knowledge increases attitude extremity and purchase likelihood by enhancing consumers' susceptibility to omission neglect. For instance, when evaluating a bottle of wine, if consumers are confident in their knowledge of wine, they are more likely to focus on given information at the expense of absent information. They believe that the given information is sufficient, form a highly favorable judgment, and decide to purchase the wine based solely off the positive description given in an advertisement.

This research sheds light on the following questions: Does self-perceived knowledge affect omission neglect differently from and more strongly than objective knowledge? How do these differences shape judgments and decisions? Can we manipulate self-perceived knowledge in order to change how consumers process information?

We argue that consumers who perceive themselves as highly knowledgeable form more extreme attitudes and are more likely to purchase the product based on favorable product stimuli. This happens because self-perceived knowledge increases consumers' vulnerability to omission neglect. Whereas consumers high in objective knowledge process information more cautiously and are more apt to identify a lack of information, consumers high in self-perceived knowledge process information less cautiously and are less apt to

identify a lack of information. However, when consumers are high in both actual and self-perceived knowledge, the impact of self-perceived knowledge is greater because of our general tendency to ignore missing information. Finally, self-perceived knowledge is susceptible to change through manipulation.

To test these hypotheses, five studies were conducted. In Study 1, we examined the impact of self-perceived knowledge on choice behavior. 136 participants viewed an advertisement of a bottle of wine. We found that given that the advertisement was favorable, regardless of objective knowledge, as self-perceived knowledge increased, participants chose to purchase the wine more often ($p < .05$; 1 = Yes, 2 = No).

In Study 2, we investigated the mediating role of omission neglect in attitude extremity and purchase intention. 102 participants were invited to evaluate a bottle of wine based on an advertisement. Regression analysis of self-perceived knowledge showed that participants with higher self-perceived knowledge had more extreme attitudes ($p < .01$), had higher purchase intentions ($p < .0001$), and perceived the information as more sufficient ($p = .001$). Mediation analysis (Hayes, 2012; Model 4; Bootstrap: 5000) showed that perceived information sufficiency mediated the path from self-perceived knowledge to attitude extremity (95%; CI: .0275 to .1395) and to purchase intention (95%; CI: .0720 to .3040).

In Studies 3a and 3b, we changed participants' vulnerability to omission neglect by manipulating participants' self-perceived knowledge. Study 3a worked as the preliminary test for Study 3b. In Study 3a, 83 participants viewed information about a camera, and we found that participants who reported that they knew more about cameras perceived the information as more sufficient ($p < .0001$) and held more extreme evaluations ($p < .0001$).

In Study 3b self-perceived knowledge was manipulated rather than measured. 153 participants were randomly divided into either a high or low self-perceived knowledge condition. Participants in the low self-perceived knowledge condition were asked if they were professional photographers. We expected most participants would report that they were not professional photographers. Next, participants reported how much they knew about cameras on a scale biased to induce them to believe that they had a limited amount of knowledge about cameras (1 = *very little*, 5 = *some*).

Participants in the high self-perceived knowledge condition were asked if they had taken pictures using a camera. We expected most participants to have taken pictures using a camera. Participants then reported how much they knew about cameras on a scale biased to induce them to believe that they had high knowledge of cameras (1 = *some*, 5 = *very much*).

Participants in the high (vs. low) self-perceived knowledge condition perceived the information as more sufficient ($p < .05$) and held more extreme evaluations ($p = .05$).

In Study 4, a response latency task testing memory for previously presented (vs. absent) attribute information of a camera was used to show the direct effects of self-perceived knowledge on omission neglect. Out of 35 participants, those with greater self-perceived knowledge were more vulnerable to omission neglect. We see this because they recognized previously present attributes much faster than absent attributes ($p < .05$).

In this research, we offer a new, theoretical account of how self-perceived knowledge affects consumer information processing and decision-making through omission neglect.

REFERENCE

- Bearden, William O., David M. Hardesty, and Randall L. Rose (2001). "Consumer Self-Confidence: Refinements in Conceptualization and Measurement," *Journal of Consumer Research*, 28(June), 121-134.
- Bettman, James R. and Whan C. Park (1980). "Effects of Prior Knowledge and Experience and Phase of the Choice Process on Consumer Decision Processes: A Protocol Analysis," *Journal of Consumer Research*, 7(December), 234-248.
- Brucks, Merrie (1985). "The Effects of Product Class Knowledge on Information Search Behavior," *Journal of Consumer Research*, 12(June), 1-16.
- Hayes, Andrew F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," White Paper, [http:// www.afhayes.com/introduction-to-mediation-moderationand-conditional-process-analysis.html#process](http://www.afhayes.com/introduction-to-mediation-moderationand-conditional-process-analysis.html#process).
- Hernandez, Jose Mauro C., Xiaoqi Han, and Frank R. Kardes (2014). "Effects of the perceived diagnosticity of presented attribute and brand name information on sensitivity to missing information," *Journal of Business Research*, 67(May), 874-881.
- Johnson, Eric J. and Edwards J. Russo (1984). "Product Familiarity and Learning New Information," *Journal of Consumer Research*, 11(June), 542-550.
- Moorman, Christine, Kristen Diehl, David Brinberg, Blair Kidwell (2004). "Subjective Knowledge, Search Locations, and Consumer Choice," *Journal of Consumer Research*, 31(December), 673-680.
- Radecki, Carmen M. and James Jaccard (1995). "Perceptions of knowledge, actual knowledge, and information search behavior," *Journal of Experimental Social Psychology*, 31(March), 107-138.
- Sanbonmatsu, David M., Frank R. Kardes, David C. Houghton, Edward A. Ho, and Steven S. Posavac (2003). "Overestimating the importance of the given information in multiattribute consumer judgment," *Journal of Consumer Psychology*, 13(March), 289-300.
- Sanbonmatsu, David M., Frank R. Kardes, Steven S. Posavac, and David C. Houghton (1997). "Contextual Influences on Judgment Based on Limited Information," *Organizational Behavior and Human Decision Processes*, 69(March), 251-264.
- Sanbonmatsu, David M., Frank R. Kardes, and Carol Sansone (1991). "Remembering less and inferring more: Effects of time of judgment on inferences about unknown attributes," *Journal of Personality and Social Psychology*, 61(October), 546-554.
- Unkelbach, Christian, Klaus Fiedler, and Peter Freytag (2007). "Information repetition in evaluative judgments: Easy to monitor, hard to control," *Organizational Behavior and Human Decision Processes*, 103(May), 37-52.

Feel Closer When Event Comes: Time-moving Metaphor and Temporal Estimation

Xiaobing Xu, Nankai University, China

Rong Chen, Tsinghua University, China

Miaolei (Liam) Jia, National University of Singapore, Singapore

EXTENDED ABSTRACT

In the domain of time, various metaphorical expressions of time are borrowed from space. Two spatiotemporal metaphors attract particular attention: ego-moving metaphor in which we are actively moving towards a fixed target event along the timeline; event-moving metaphor in which the target event is moving towards us who are fixed (Boroditsky 2000; Matlock et al. 2011; Richmond, Wilson, and Zinken 2012).

The current research explores a novel consequence of time-moving metaphors: the perceived temporal distance from now to the event. For example, suppose you are going to the dreamy Maldives next month for vacation. Should you feel psychologically closer or farther away to this event when the departure day is constructed as event-moving (e.g., the departure day is coming) versus ego-moving (e.g., you are going to the departure day)?

Specifically, we propose that the event-moving metaphor will make consumers perceive a higher level of emotional arousal than the ego-moving metaphor. Our reasoning is twofold. First, people exert the motion action in the ego-moving metaphor, whereas the event exerts the action in the event-moving metaphor. Therefore, people have a higher level of agency beliefs in the ego-moving metaphor, which reduces people's emotional arousal. Second, the moving state of the event in the event-moving metaphor may induce a higher level of threat perception. The event is moving toward people in the event-moving metaphor, while it is static in the ego-moving metaphor. From an evolutionary perspective, humans are more alert and stimulated to moving objects than to still ones. Therefore, people in the event-moving metaphor perceive a higher threat, which might increase people's emotional arousal. Furthermore, based on the idea that emotional arousal decreases perceived temporal distance (Van Boven et al. 2010), we propose that people in the event-moving metaphor may perceive the temporal distance from now to the event to be closer than those in the ego-moving metaphor.

The results of three studies provide converging support for our proposition. In study 1, undergraduate student participants (N=57) were randomly assigned to the two conditions. All participants were first asked to read a scenario which described a presentation for an important module next Monday. They were told that they did not like the interview. Time-moving metaphors were primed by asking participants to read two different descriptions of the day (e.g., "As I approach the day of the oral presentation, I hope....." in the ego-moving condition; "As the day of the oral presentation approaches, I hope....." in the event-moving condition). We used two items to measure participants' perceived temporal distance to the presentation: (1) "How far away does the presentation feel to you?" (1 = right away, 10 = far away), and (2) "How temporally distant do you feel the presentation is?" (1 = very close, 10 = very distant). To measure participants' emotional arousal, we adapted the scale used in Anderson et al. (1996). Results revealed that participants perceived the event to be farther away in the ego-moving condition than in the event-moving condition. A mediation analysis revealed that emotional arousal mediated the effect of time-moving metaphor on temporal distance perception.

Study 2 employed a 2 (event time: future vs. past) × 2 (time-moving metaphor: ego-moving vs. event-moving) between-subjects design. MTurk participants (N=134) were first asked to read a sce-

nario which was similar to the one used in Study 1 with two exceptions. First, the module representation was replaced by a presentation for a job interview. Second, no specific attitude towards the interview was indicated. We manipulated event time by setting the job interview either on "next Monday" or "last Monday." The time-moving metaphor manipulation was modified from Boroditsky (2000), and we presented participants with pictures showing a human figure and a box. After that, participants reported their perceived temporal distance as in Study 1. Results showed that for future events, participants perceived the event to be farther away in the ego-moving condition than in the event-moving condition. However, for the past event, there was no significant difference in perceived temporal distance between the ego-moving condition and the event-moving condition.

Study 3 tested the two accounts of time-moving metaphor on emotional arousal. MTurk participants (N=143) were randomly assigned to three conditions (ego-moving, event-moving, and control condition). Similar to study 1, all participants were first asked to read a scenario which was about preparing a birthday party for their best friend. We used the same manipulation of time-moving metaphors as in Study 1. In the control condition, the event was described as stationary (e.g., "With the party being one week away, I hope...", and "The party is in a few days; I think I should..."). Temporal distance and emotional arousal were measured in the same way as in study 1. Results revealed that participants perceived the event to be farther away in the ego-moving condition than both in the event-moving condition and in the control condition. There was no significant difference in temporal distance between the event-moving and the control conditions. These results indicated that the difference in emotional arousal in the two time-moving metaphors was caused by agency beliefs, rather than by perceived threat. Mediation analysis confirmed the mediational role of emotional arousal in the effect of time-moving metaphor on perceived temporal distance.

To the best of our knowledge, this research provides the first evidence that time-moving metaphor can influence consumers' temporal estimation of an event. The current research also complements existing research on time-moving metaphor and emotion. Prior research has demonstrated that the two time-moving metaphors induce emotions with different valences: ego-moving metaphor induces happiness while time-moving metaphor induces anxiety and depression (Richmond et al. 2012). Our research finds that time-moving metaphors also affect the other dimension of emotion, namely arousal.

REFERENCES

- Anderson, Craig A., Kathryn B. Anderson, and William E. Deuser (1996), "Examining an Affective Aggression Framework: Weapon and Temperature Effects on Aggressive Thoughts, Affect, and Attitudes," *Personality and Social Psychology Bulletin*, 22(4), 366–376.
- Boroditsky, Lera (2000), "Metaphoric Structuring: Understanding Time through Spatial Metaphors," *Cognition*, 75(1), 1–28.
- Matlock, Teenie, Kevin J. Holmes, Mahesh Srinivasan, and Michael Ramscar (2011), "Even Abstract Motion Influences the Understanding of Time," *Metaphor and Symbol*, 26(4), 260–271.

Richmond, Jill, J. Clare Wilson, and Jörg Zinken (2012), "A Feeling for the Future: How Does Agency in Time Metaphors Relate to Feelings?" *European Journal of Social Psychology*, 42(7), 813–823.

Van Boven, Leaf, Joanne Kane, A. Peter McGraw, and Jeannette Dale (2010), "Feeling Close: Emotional Intensity Reduces Perceived Psychological Distance," *Journal of Personality and Social Psychology*, 98(6), 872–885.

“That’s bitter!” Culture Specific Effects of Gustatory Experience on Judgments of Fairness and Advancement

Jialiang Xu, University of Manitoba, Canada

Fang Wan, University of Manitoba, Canada

Norbert Schwarz, University of Southern California, USA

Yuhuang Zheng, Tsinghua University, China

EXTENDED ABSTRACT

A rapidly growing body of research shows that incidental sensory experiences can influence consumers’ thoughts, feelings, and behaviors. These influences can reflect a number of different processes, including the use of sensory experiences as a source of information; the influence of sensory processes on mental simulations; and the grounding of abstract concepts in metaphorically related concrete experiences (for reviews, see Barsalou, 2008; Krishna & Schwarz, 2014; Landau, Meier, and Keefer 2010). In this work, we focus on a consumption related sensory experience that has received little attention, namely bitter taste.

An analysis of metaphors and sayings related to bitter taste indicates large cultural differences. Most notably, in the Chinese language and culture, bitterness is associated metaphorically with concepts of adversity. Chi-Ku (“eating bitterness”) means “to endure a hardship”, “to overcome difficulties”, and “to forge ahead” (Loyalka, 2012). In China, young children are taught to embrace the experience of Chi-Ku because it is regarded as a necessary step to progress towards their goals and achieve success, as illustrated by sayings such as, “only via eating bitterness can you surpass your peers.” This metaphorical meaning of bitter tastes is uncommon in the English language and unfamiliar to Canadians. Instead, Canadians associate bitterness with unfair treatment and social injustice. This link is exemplified by a famous quote from Emmeline Pankhurst, an early British feminist leader, who observed, “I have not personally suffered from the deprivations, the bitterness and sorrow which bring so many men and women to a realisation of social injustice.” These observations suggest an association between bitter taste and endurance of hardship in Chinese (but not in Canadian) culture and between bitter taste and injustice in Canadian (but not in Chinese) culture.

Therefore, we conducted three study to test the culture-specific metaphoric effects of bitter taste. We hypothesized that bitter taste (1) influences Chinese (but not Canadian) participants’ judgments of endurance and (2) Canadian (but not Chinese) participants’ judgments of fairness.

Study 1. To assess taste associations within each culture, we asked 57 native Canadian students to rate how strongly sweetness, bitterness, sourness, and saltiness are associated with injustice and 87 native Chinese students to rate how strongly these tastes are associated with hardship and challenges (Chan, Tong, Tan, and Koh, 2013). As expected, Canadians associated injustice more with bitterness ($M=5.05$) than sweetness ($M=1.63$), sourness ($M=4.02$) or saltiness ($M=3.67$; all $p<.001$); Chinese associated hardship more with bitterness ($M=5.77$) than sweetness ($M=3.28$) sourness ($M=4.09$) or saltiness ($M=3.29$; all $p<.001$).

Study 2. To test the expected culture-specific behavioral effects of bitter taste we conducted a 3 (taste: bitter/water/sweet) x 2 (culture: Canadian/Chinese) x 3 (judgment: fairness/effort/motivation) factorial experiment, with the last factor manipulated within participants. Participants ($N = 165$; average age 20, 55.5% female) were students at a major Canadian university; 84 were native speakers of Chinese and 81 were native speakers of English. They were first exposed to one of three randomly assigned taste experiences (bitter, sweet, neutral) and then responded to measures of motivation and

effort in a challenging tasks context and measures of fairness in a job rejection context. As expected, Chinese participants who tasted bitter lotus seeds reported higher motivation and more effort in response to challenging tasks than those who tasted candy or water (simple effect on Chinese for motivation $F [2,159] = 7.201$, $p=.001$; for efforts $F [2,159] = 4.756$, $p=.01$). These effects were not observed among Canadian participants (simple effect on Canadians for motivation $F [2,159] = .641$, $p=.528$; for efforts $F [2,159] = .386$, $p=.680$; interaction effect for motivation $F [2,159] = 5.253$, $p=.006$; for efforts $F [2,159] = 3.722$, $p=.026$). Also as expected, Canadian participants judged the described job situation as more unfair after they tasted something bitter than sweet or neutral (simple effect on Canadians $F [2,159] = 2.927$, $p=.05$). The fairness judgments of Chinese participants were not significantly influenced (simple effect on Chinese $F [2,159] = .354$, $p=.702$) but showed a similar pattern (interaction effect $F [2,159] = .702$, $p=.488$). This may reflect that the Chinese students had acquired some of the cultural associations between injustice and bitterness during their studies in Canada. Study 3 addressed this possibility.

Study 3. 72 native speakers of English from a major Canadian university and 88 native speakers of Chinese from a top Chinese university were exposed to one of three taste experiences (bitter, sweet, neutral) and then responded to the job rejection paragraph used in Study 2. Replicating Study 2, Canadians found the job situation less fair after tasting something bitter than after tasting something sweet or neutral (simple effect on Canadians $F [2, 154] = 4.505$, $p = .013$). Chinese participants were not influenced by the taste manipulation (simple effect on Chinese $F [2, 154] = 1.283$, $p = .283$), resulting in the predicted interaction between culture and taste, $F(2, 154) = 3.249$, $p = .041$.

In combination, these findings highlight that the *same* sensory experience can have divergent culture-specific effects on judgment. Consistent with culture-specific metaphors, incidental bitter tastes influenced Canadian, but not Chinese, assessments of social justice and fairness and Chinese, but not Canadian, assessments of motivation and effort in a difficult situation. A comparison of Chinese students in China and Canada further suggests that culture-specific metaphors can be acquired through prolonged cultural exposure. How culture specific metaphors moderate the influence of identical sensory experiences, and how such metaphors are acquired through cultural exposure, provides a promising avenue for future research in embodiment and sensory marketing.

REFERENCES

- Barsalou, L. W. (2008). Grounded cognition. *Annu. Rev. Psychol.*, 59, 617-645.
- Chan, K. Q., Tong, E. M., Tan, D. H., & Koh, A. H. (2013). What do love and jealousy taste like?. *Emotion*, 13(6), 1142-1149
- Krishna, A., & Schwarz, N. (2014). Sensory marketing, embodiment, and grounded cognition: Implications for consumer behavior. *Journal of Consumer Psychology*, 24, 159-168.

Landau, M. J., Meier, B. P., & Keefer, L. A. (2010). A metaphor-enriched social cognition. *Psychological bulletin*, 136(6), 1045.

Loyalka, M. (2012). *Eating Bitterness: Stories from the Front Lines of China's Great Urban Migration*. Univ of California Press.

Appreciation of Creativity: Unintended Consequences of Thematic versus Taxonomic Product Organization

Alison Jing Xu, University of Minnesota, USA

Joan Meyers-Levy, University of Minnesota, USA

Barbara Loken, University of Minnesota, USA

Ryan Tzushuo Wang, University of Minnesota, USA

EXTENDED ABSTRACT

Retailers can organize their products either taxonomically or thematically. Taxonomic product assortment involves organizing broad classes of products hierarchically into increasingly more specific categories, where members in each product category share many features and frequently serve as substitutes for one another. For example, the category of socks may consist of various low cut, ankle, and knee-high socks. In contrast, products are thematically organized if they perform complementary roles in a consumption situation (Estes et al. 2012). To illustrate, although socks, an MP3 player, and deodorant share few, if any, common features, they are thematically related because they are commonly used together during workouts.

These two types of product assortments are perceived by consumers differently (Diehl, van Herpen, and Lamberton 2015). Taxonomic assortments help consumers efficiently locate and compare substitute products that interest them, potentially enhancing their satisfaction with the purchase process and the goods they buy, whereas thematic assortments increase exposure to complementary products that may otherwise be overlooked by consumers. Studies that have compared the two types of assortment have found that thematic product assortments are perceived as more attractive, but also more effortful to process (Diehl, et al., 2014). Still, to date, little is known about how taxonomic and thematic product assortments influence the processing of consumers who examine them and any downstream effects such processing may have on their responses to goods observed in unrelated contexts.

We reasoned that the related versus compartmentalized nature of products displayed in thematic versus taxonomic product assortments may induce consumers who examine them to adopt a relational versus an item-specific processing mind-set. Moreover, extant research has established that each of these types of mind-sets can persist and carry-over, potentially producing downstream effects on consumers' perceptions and/or behavior when they later encounter products in unrelated contexts (Kim and Meyers-Levy 2008). Pertinent to this, substantial evidence suggests that relational processing, which entails encoding connections among often distally related concepts, boosts not only creativity but appreciation of it (Runco 1991; Yang et al. 2011). Thus, we propose that consumers who examine thematic (versus taxonomic) product assortments will elicit a relational processing mindset that produces downstream enhancement in these consumers' appreciation of innovative, novel, or otherwise creative goods, which typically carry higher profit margins.

Nevertheless, certain individual differences may modify whether such downstream effects occur in later contexts. Research on self-construal has distinguished individuals with an interdependent orientation, who define themselves more holistically in terms of their relationships with others, from individuals possessing an independent orientation, who define themselves more analytically by focusing on their internal attributes such as traits or abilities (Markus and Kitayama 1991). Further and importantly, Zhu and Meyers-Levy (2009) established that these alternative ways of thinking about the self more generally shape cognition, such that interdependents seem to gravitate toward relational processing that emphasizes connections and holism, whereas independents favor item-specific process-

ing, characterized by analytic context-independent thinking whereby individual items are set contrastively against others.

Upon integrating these observations, we propose the following. Because interdependents (but not independents) are chronically inclined and possibly more adept at processing data relationally, the impact of thematic product assortments on a consumer's relational processing mind-set and its downstream effect on appreciation of creative goods may be more likely to occur when individuals possess an interdependent than an independent self-construal.

We conducted three experiments where in each, we manipulated whether individuals examined several thematic or taxonomic product assortments. Subsequently we investigated the downstream effect this exerted on individuals' appreciation of creative ads or products encountered later in an unrelated context. Experiment 1 found that participants who previously examined several thematic versus taxonomic product assortments exhibited both greater appreciation of creative ads and they better understood them.

Experiment 2 extended on this by examining the anticipated moderating effect of self-construal, and instead of examining creative ads, study 2 investigated the downstream effect of the alternative product assortments on individuals' willingness-to-pay (WTP) for both creative and conventional products. Consistent with expectations, treatment effects emerged only on individuals' WTP for creative products, not conventional ones. Further, individuals with an interdependent self-construal reported higher WTP for creative products when they had previously examined the thematic, not the taxonomic product assortments. However, individuals with an independent self-construal reported equivalent WTP sums regardless of the products assortments they had examined earlier.

Finally, experiment 3 investigated whether a mediated-moderation effect of relational processing (mediator) and self-construal (moderator) can explain how product assortment influences consumers' appreciation of creative products. The procedure and treatments used in this study were the same as those of experiment 2 except that only creative products were included, WTP was replaced by product evaluations, and an indicator was added to gauge individuals' use of relational processing by asking them to solve 10 Remote Associates Test (RAT, Mednick 1962) problems. Because successful performance on RAT problems requires engaging iteratively in relational processing (Kray, Galinsky, and Wong 2006) participants' relational processing was gauged by their number of correctly solved RAT problems. As anticipated, results revealed parallel interactive effects of product assortment and self-construal on both individuals' evaluations of the creative products and on the indicator of their relational processing. In addition, bootstrap analysis indicated that among interdependent individuals, the effect of product assortment was mediated by relational processing. However, this was not the case among independent individuals.

In sum, this research contributes to the literature on both mind-sets and product assortments by demonstrating that examination of thematic (but not taxonomic) product assortments can trigger a relational processing mindset, and particularly among individuals possessing an interdependent self-construal, this mindset carries over and boosts appreciation of creative products and ads encountered later in unrelated contexts. The current research also has important

practical implications. It suggests that retailers can use thematic product assortments to increase consumers' appreciation and possible purchase of frequently highly profitable innovative, novel, or otherwise creative products that may be featured elsewhere in the retail venue.

REFERENCES

- Bowden, Edward M, and Mark Jung-Beeman (2003). "Normative Data for 144 Compound Remote Associate Problems." *Behavior Research Methods, Instruments, & Computers* 35 (4): 634–39. doi:10.3758/BF03195543.
- Diehl, Kristin, Erica van Herpen, and Cait Lambertson (2015). "Organizing Products with Complements versus Substitutes: Effects on Store Preferences as a Function of Effort and Assortment Perceptions." *Journal of Retailing* 91 (1). New York University: 1–18. doi:10.1016/j.jretai.2014.10.003.
- Estes, Zachary, Michael Gibbert, Duncan Guest, and David Mazursky (2012). "A Dual-Process Model of Brand Extension: Taxonomic Feature-Based and Thematic Relation-Based Similarity Independently Drive Brand Extension Evaluation." *Journal of Consumer Psychology* 22 (1). Society for Consumer Psychology: 86–101. doi:10.1016/j.jcps.2011.11.002.
- Estes, Zachary, Sabrina Golonka, and Lara L. Jones (2011). *Thematic Thinking. The Apprehension and Consequences of Thematic Relations. Psychology of Learning and Motivation - Advances in Research and Theory*. Vol. 54. doi:10.1016/B978-0-12-385527-5.00008-5.
- Friedman, R S, and J Forster (2001). "The Effects of Promotion and Prevention Cues on Creativity." *Journal of Personality and Social Psychology*. doi:10.1037/0022-3514.81.6.1001.
- Golonka, Sabrina, and Zachary Estes (2009). "Thematic Relations Affect Similarity via Commonalities." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 35 (6): 1454–64. doi:10.1037/a0017397.
- Hunt, R. Reed, and Gilles O. Einstein (1981). "Relational and Item-Specific Information in Memory." *Journal of Verbal Learning and Verbal Behavior* 20 (5): 497–514. doi:10.1016/S0022-5371(81)90138-9.
- Kim, Kyeongheui, and Joan Meyers-Levy (2008). "Context Effects in Diverse-Category Brand Environments: The Influence of Target Product Positioning and Consumers' Processing Mind-Set." *Journal of Consumer Research* 34 (6): 882–96. doi:10.1086/524309.
- Kray, Laura J, Adam D Galinsky, and Elaine M Wong (2006). "Thinking within the Box: The Relational Processing Style Elicited by Counterfactual Mind-Sets." *Journal of Personality and Social Psychology* 91 (1): 33–48. doi:10.1037/0022-3514.91.1.33.
- Markus, Hazel R., and Shinobu Kitayama (1991). "Culture and the Self: Implications for Cognition, Emotion, and Motivation." *Psychological Review* 98 (2): 224–53. doi:10.1037/0033-295X.98.2.224.
- Meyers-Levy, Joan, and Rui (Juliet) Zhu (2007). "The Influence of Ceiling Height: The Effect of Priming on the Type of Processing That People Use." *Journal of Consumer Research* 34 (2): 174–86. doi:10.1086/519146.
- Monga, A B, and Z Gurhan-Canli (2012). "The Influence of Mating Mind-Sets on Brand Extension Evaluation." *Journal of Marketing Research* 49 (4): 581–93. doi:10.1509/jmr.09.0515.
- Runco, M. A (1991). *Divergent thinking*. Ablex Publishing.
- Triandis, Harry C., and Michele J. Gelfand. (1998). "Converging Measurement of Horizontal and Vertical Individualism and Collectivism." *Journal of Personality and Social Psychology* 74 (1): 118–28. doi:10.1037/0022-3514.74.1.118.
- Winterich, Karen Page, and Michael J Barone (2011). "Warm Glow or Cold, Hard Cash? Social Identify Effects on Consumer Choice for Donation Versus Discount Promotions." *Journal of Marketing Research* 48 (5): 855–68. doi:10.1509/jmkr.48.5.855.
- Yang, Xiaojing, Torsten Ringberg, Huifang Mao, and Laura a. Peracchio (2011). "The Construal (In)compatibility Effect: The Moderating Role of a Creative Mind-Set." *Journal of Consumer Research* 38 (4): 681–96. doi:10.1086/660118.
- Zhao, Xinshu, John G. Lynch, and Qimei Chen (2010). "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis." *Journal of Consumer Research* 37 (2): 197–206. doi:10.1086/651257.
- Zhu, Rui, and Joan Meyers-Levy (2009). "The Influence of Self-View on Context Effects: How Display Fixtures Can Affect Product Evaluations." *Journal of Marketing Research* 46 (1): 37–45. doi:10.1509/jmkr.46.1.37.

Effects of Age on Taste Perceptions in a Food Service Context

Amanda Pruski Yamim, Grenoble École de Management, France

JoAndrea Hoegg, University of British Columbia, Canada

Darren Dahl, University of British Columbia, Canada

Adilson Borges, NEOMA Business School, France

EXTENDED ABSTRACT

The population is aging. In 1990 9.2 percent of the population was 60 or older; by 2013 it was 11.7, and by 2050 it is expected to reach 21.1 (United Nations 2013). The aging of population has significant implications for the workforce. The 55+ segment is growing three times the rate of U.S. labor force, and is expected to reach 25% of the labor force by 2024 (Toossi 2015). At first glance it would seem that this predicted workforce expansion could provide an employment opportunity for older workers and vice versa. Alarming, elderly people face important challenges in the workplace (Kaufmann, Krings, and Sczesny 2015). They are perceived to be inefficient, slower to learn, and poorer at remembering than younger counterparts, (DeArmond et al. 2006; Ng and Feldman 2012). In the food service industry, where speed and efficiency are valued, perceptions that older employees are slower or get confused can result in a belief that older workers can decrease customer satisfaction (Bae and Dae-Young 2014). In other words, restaurant managers tend to adhere to the negative stereotype that old equals slow, and assume that slow equals bad (Luoh and Tsaur 2011; Bae and Dae-Young 2014). The premise of this research is that this notion may be incorrect. Although older workers are indeed perceived to be slower, we argue that when it comes to food, slow is good. Similar to the time taken by a craftsman to perfect a project, we argue that consumers have a lay belief that “slow food=better food”. Grounded in the literature about the Slow Food Movement, which advocates a more thoughtful consumption and preparation of food (Dunn et al. 2011), we argue that in food context, slowness can be associated with effort and care. Therefore, because older people are slower this slow pace can lead to positive perceptions from consumers.

More formally,

Hypothesis 1: When food is prepared by an older (younger) person, consumers will evaluate it as more (less) tasty.

Hypothesis 2: The effect of age on taste evaluation is mediated by the perceived preparation time.

With four studies we demonstrate that although consumers indeed think that the older cook takes longer to prepare food, they also believe the food prepared by her will be tastier than that prepared by a younger person.

Study 1 (N=648) was conducted online using MTurk. Each participant evaluated 2 products (from a total of 8 products investigated). For that participants saw a picture containing the photo of the product besides a photo of the producer (which was young or old), and the information about the producer’s age. Congruently to the literature on age stereotype we show that people tend to judge non-food related products (e.g. fashion accessories, electronics, decoration services, nail polisher) more negatively when designed and developed by older people in comparison to their younger counterparts. However, for food or beverage products (e.g. cookies, soup, cake, chicken and tea) we found an inverse and positive impact of older age.

In study 2, 109 undergrad students participated in a cupcake tasting. The product was supposedly made by Tiane, the cook, who had either 25 or 55 years old. We manipulated age with two hired ac-

tresses and by reinforcing their age manipulation by informing consumers that Tiane is 25 (55) years old before the tasting. Study two provided evidence that food prepared by an older (versus younger) person is perceived to taste better and leads to higher purchase intention. Further, the effect of age on taste perception was mediated by participants’ perceived preparation time, whereby a slower preparation time led participants to believe that the food tasted better.

In study 3 (N=217 workers from an European panel) we clarify the direction of the age effect (if it was the fact that the chef was older that increased taste perception or if was the fact that she was younger that decreased taste perceptions) by adding a control group where the age of the cook was not informed. This study results show that the age effect seems to be driven by the perception that food prepared by an older person is better, rather than the perception that food prepared by a younger person is worse. Further, study 3 provided evidence that the effect of age on taste is caused by the assumption that the food took longer to be prepared.

Finally, in study four we identified a boundary condition for the positive influence of age on taste perception, chef’s expertise. The study shows that the age effect is mitigated when people are informed that both chefs have high expertise. We demonstrate that when the expertise on doing the food was framed as low the older chef lead to better taste perceptions and likelihood to visit the restaurant, supporting our argument that consumers perceive the food prepared by an older chef as better. In contrast, when both chefs are framed as having high expertise the age no longer impacts consumers’ perceptions and attitudes.

Through four studies—two involving actual taste experiences and two employing scenarios—we show that employee age can positively impact consumers’ taste perceptions and purchase attitudes. Consequently, this research makes a number of theoretical and managerial contributions. From a theoretical perspective, the positive effect of age on taste contributes to age stereotype literature and shows that there are contexts in which age is an advantage (Marcus et al. 2016). Our mediation of “slow food=better food” also contributes to the literature on lay beliefs and food assessment (Hoegg and Alba 2007; Raghunathan, Naylor, and Hoyer 2006; Werle, Trendel, and Ardito 2013; Mai and Hoffman, 2015). Finally, this research also has important managerial implications and shows that restaurant managers should be more open to hiring older workers and should communicate it to consumers.

REFERENCES

- Bae, Gumkwang, and Dae-Young Kim (2014), “The effects of offering menu information on perceived waiting time.” *Journal of Hospitality Marketing & Management*, 23 (July) 746-767.
- DeArmond, Sarah, Mary Tye, Peter Y. Chen, Autumn Krauss, D. Apryl Rogers, and Emily Sintek. (2006), “Age and Gender Stereotypes: New Challenges in a Changing Workplace and Workforce.” *Journal of Applied Social Psychology*, 36 (August), 2184-2214.
- Haws, K. L., Reczek, R. W., & Sample, K. L. (2016). Healthy Diets Make Empty Wallets: The Healthy= Expensive Intuition. *Journal of Consumer Research*, 43(6), 992-1007.

- Hoegg, JoAndrea and Joseph W. Alba, (2007), "Taste perception: more than meets the tongue," *Journal of Consumer Research*, 33 (March), 490-498.
- Kaufmann, M Michèle C., Franciska Krings, and Sabine Sczesny (2015), "Looking Too Old? How an Older Age Appearance Reduces Chances of Being Hired," *British Journal of Management*, 1-13.
- Luoh, Hsiang-Fei and Sheng-Hshiang Tsaur (2011), "Customers' Perceptions of Service Quality: Do Servers' Age Stereotypes Matter?" *International Journal of Hospitality Management*, 30 (June), 283-89.
- Mai, Robert and Steffan Hoffman (2015), "How to Combat the Unhealthy = Tasty Intuition: The Influencing Role of Health Consciousness," *Journal of Public Policy & Marketing*, 34 (1), 63-83.
- Marcus, Justin, Barbara Ann Fritzsche, Huy Le, and Michael Dennis Reeves (2016), "Validation of the work-related age-based stereotypes (WAS) scale," *Journal of Managerial Psychology*, 31 (May), 989-1004.
- Ng, Thomas W. H. and Daniel C. Feldman (2012), "Evaluating six common stereotypes about older workers with meta-analytical data," *Personnel Psychology*, 65 (December), 821-858.
- Raghunathan, Rajagopal, Rebecca W. Naylor, and Wayne D. Hoyer (2006), "The unhealthy= tasty intuition and its effects on taste inferences, enjoyment, and choice of food products," *Journal of Marketing*, 70 (October), 170-184.
- Toossi, Mitra (2015), "Labor force projections to 2024: the labor force is growing, but slowly," *Monthly Labor Review*, 138 (December).
- United Nations (2013), "World population ageing 2013", available at: www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2013.pdf (accessed June 05, 2016).
- Werle, Carolina O., Olivier Trendel, and Gauthier Ardito (2013), "Unhealthy food is not tastier for everybody: The "healthy= tasty" French intuition," *Food Quality and Preference*, 28 (April), 116-121.

Back to the Golden Age: When Economic Insecurity Promotes Nostalgic Consumption

Chun-Ming Yang, Ming Chuan University, Taiwan

EXTENDED ABSTRACT

Although recent market studies suggest that consumers may prefer nostalgic products and services when facing economic uncertainty, no empirical effort has been made to verify the influence of perceived economic insecurity (PEI) on consumers' nostalgic consumption and to identify which psychological mechanism is activated in response to PEI. Therefore, we attempted to fill this gap in this study. Building on previous research on nostalgia and meaning in life, we suggest that PEI, both chronic and temporary, lowers consumers' meaning in life, which in turn makes consumers feel nostalgic, prefer nostalgic products, and respond favorably to nostalgic ads.

Why does PEI affect nostalgic consumption? Prior studies report that economic uncertainty affects consumers' various responses such as prosocial behaviors, preference polarization, investment in offspring, saving behavior, health care decisions, creativity, and preferences toward scarce goods. Recently, evidence indicates that PEI also lowers consumers' meaning in life (Abeyta et al. 2016), because PEI threatens the continued satisfaction of basic psychological needs and therefore hinders consumers' abilities to pursue personal meaningful goals. A restorative perspective highlights that nostalgia can counteract insecurities and threats to meaning in life by providing a reservoir of meaningful personal experiences that help ease the discomfort (Routledge et al. 2011; Zhou et al. 2008). For example, Loveland et al. (2010) found that social exclusion increases consumers' preference toward nostalgic products, and consumption of nostalgic products reduces the social discomfort. By manipulating death awareness, Routledge et al. (2008) revealed that nostalgia can buffer the effects of existential threat on death-thought accessibility. To summarize, we hypothesize that PEI, both temporary and chronic, increases consumers' preference toward nostalgic consumption. This is because PEI threatens consumers' meaning in life. To counteract the threat, nostalgic consumption can act as an "inner refuge" and provide people with psychological shield and warmth. Four studies tested this hypothesis.

In study 1, 174 adults were recruited to complete an online questionnaire. We measured participant's PEI, nostalgic index (Holbrook, 1994), meaning in life, childhood socioeconomic status, age, and current household income. The results indicated that higher PEI was associated with lower meaning in life and a higher nostalgia index. A 5000 resample bootstrap provided evidence supporting this indirect effect. In all four studies, childhood socioeconomic status had a negative impact on consumer's nostalgic responses, but had no significant interaction effect with PEI.

Study 2 examined whether PEI manipulation increases interest in consuming nostalgic products. Additionally, study 2 tested the mediating role of meaning in life in driving the preference for nostalgic products after PEI manipulation. In total, 119 adults were randomly assigned to either the high- or low-PEI condition. In the first task, we used a news article to manipulate participants' PEI. In the high-PEI condition, the article described the recent economic recession and how the economic problems are likely to persist into the subsequent year. In the low-PEI condition, the participants read an article similar in length to the high-PEI condition, which described a recent air pollution problem caused by a major manufacturer. After reading the article, participants finished relevant measurement. Subsequently, participants completed five choices between nostalgic and nonnostalgic brands in various product categories to form a nostalgic product choice index. Results showed a significant main effect of the PEI

condition on the product choice index. Mean scores of the product choice index were higher for the high-PEI condition compared with the low-PEI condition. The results were reversed for meaning in life. A bootstrap test again confirmed the indirect path from the PEI condition through meaning in life to the product choice index.

Study 3 was conducted to conceptually replicate and extend the findings from study 2. First, we ascertained whether our experimental findings can be replicated in populations facing various levels of chronic PEI. Specifically, rather than manipulating the momentary sense of economic insecurity, we treated PEI as an individual difference factor and tested how this variable influences consumer preference toward nostalgic products. Second, we used popular music as the product context to increase the generalizability of our findings. In total, 149 adults participated in this study. As predicted, PEI had a positive effect on the number of nostalgic songs chosen by participants but had a negative effect on meaning in life. Bootstrapping analysis revealed that meaning in life mediated the relationship between PEI and the number of nostalgic songs selected.

In study 4, we tested the meaning-in-life account by examining a theoretically relevant moderator: social connectedness (SC). Current research suggests that enhanced SC may alleviate the effects of PEI on meaning in life. In total, 184 adults participated in this study. Upon arrival, the participants were informed that the study involved three unrelated parts. The first part was a general "Lifestyle Survey" that measured participants' childhood socioeconomic status and SC. The second part included the same PEI manipulation used in study 2. In the final part, participants received a full-color nostalgic ad promoting consumers to recall "the good times" of their past. After exposure to the ad, participants were asked to report their purchase intention. We found significant interactions between PEI and SC on both meaning in life and purchase intention. Subsequent spotlight analysis revealed that low-SC respondents were affected by the PEI condition. By contrast, high-SC participants were less affected by the PEI condition. We also uncovered a conditional indirect effect of the interaction between PEI and SC on purchase intention through meaning in life. The index of moderated mediation for the indirect effect was significant.

From a theoretical perspective, this research is the first to show that PEI, a threat to meaning in life, can elicit favorable consumer responses toward nostalgic products and ads. This article also contributes to the broader nostalgia field. The literature on nostalgia does not consider the influence of economic factors. The results of our research shed new light on the effects of insecurity on meaning in life and nostalgia. Our findings also have useful implications for marketing practitioners; that is, adding nostalgic elements into marketing activities may substantially improve consumers' reactions.

REFERENCES

- Abeyta, Andrew A., Clay Routledge, Michael Kersten, and Cathy R. Cox (2016), "The Existential Cost of Economic Insecurity: Threatened Financial Security Undercuts Meaning," *Journal of Social Psychology*, DOI: 10.1080/00224545.2016.1270892
- Loveland, Katherine E., Dirk Smeesters, and Naomi Mandel (2010), "Still Preoccupied with 1995: The Need to Belong and Preference for Nostalgic Products," *Journal of Consumer Research*, 37 (October), 393-408.

Routledge, Clay, Jamie Arndt, Constantine Sedikides, and Tim Wildschut (2008), "A Blast from the Past: The Terror Management Function of Nostalgia," *Journal of Experimental Social Psychology*, 44 (January), 132-140.

Routledge, Clay, Jamie Arndt, Tim Wildschut, Constantine Sedikides, Claire M. Hart, Jacob Juhl, Ad J. J. M. Vingerhoets, and Wolff Schlotz (2011), "The Past Makes the Present Meaningful: Nostalgia as an Existential Resource," *Journal of Personality and Social Psychology*, 101(3), 638-652.

Zhou, Xinyue, Constantine Sedikides, Tim Wildschut, and Ding-Guo Gao (2008), "Counteracting Loneliness: On the Restorative Function of Nostalgia," *Psychological Science*, 19 (10), 1023-1029.

How Group Identification and Stereotype Content Determine the Effectiveness of Ads Portraying Positive Stereotypes

Linyun W. Yang, University of North Carolina at Charlotte, USA

Tanya L. Chartrand, Duke University, USA

Gavan J. Fitzsimons, Duke University, USA

EXTENDED ABSTRACT

While prior consumer behavior research on stereotypes has largely focused on negative stereotypes (e.g., Lee, Kim and Vohs 2011), this research examines how positive stereotypes portrayed in advertising influence the effectiveness of these ads for consumers belonging to the stereotyped group. We propose that how consumers respond depends on their identification with the stereotyped group and the content of the positive stereotype (warmth vs. competence). We suggest that for high identifiers, positive stereotypes in advertising elicit a communal orientation and an increased valuation of warmth information, whereas for low identifiers, these stereotypes cue an agentic orientation and an increased valuation of competence information.

We propose that the effectiveness and persuasiveness of an ad portraying positive stereotypes lies in how much consumers value the ad's arguments, which are often closely tied to the portrayed stereotype (i.e., warmth vs. competence). When a positive stereotype is portrayed in advertising, the brand and promoted product becomes linked to characteristics tied to the stereotype. Consequently, we predict that high identifiers will respond more favorably than low identifiers to ads that stereotype their group as warm because high identifiers are more likely to have a communal orientation and therefore be more persuaded by warmth-related arguments. In contrast, low identifiers will respond more favorably than high identifiers to ads stereotyping their group as competent because low identifiers are more likely to adopt an agentic orientation and find competence-related arguments more useful and informative.

In Study 1, we first focus on American Southerners to test the hypothesis that ads portraying positive stereotypes related to warmth will be more effective for those who identify highly with the stereotyped group. We also tested whether an increased communal orientation for high relative to low identifiers drives more favorable evaluations of the promoted restaurant.

Undergraduate students self-identified as Southerners completed Leach et al.'s (2008) measure of group identification one week in advance. In the main study, participants viewed either a stereotypical ad featuring Southerners promoting a restaurant that provided warm and welcoming service or a control ad which was identical except with no information regarding the spokespeople's origins. Participants then rated the restaurant (good, favorable; $r=.72, p<.0001$) and the importance of communal values (e.g., altruism, harmony, Trapnell and Paulhus 2012).

Regression analysis revealed a two-way interaction between ad type and group identification ($t(99)=-2.42, p<.05$). For the Southern stereotype ad, high relative to low identifiers indicated more favorable evaluations, but this was not the case for the control ad. The same analysis on communal values endorsement also yielded a two-way interaction ($t(99)=-2.04, p<.05$) and same pattern of effects. Moderated mediation analysis confirmed that communal values endorsement mediated the positive effect of group identification on evaluations when participants viewed the Southern stereotype ad ($B=.11, 95\% \text{ CI: } .01, .32$), but not when participants viewed the control ad ($B=-.01, 95\% \text{ CI: } -.11, .04$).

In Study 2, we examine ads that positively stereotype Asian Americans as being intelligent and quantitatively skilled (Lin et al., 2005) to test the prediction that *low* relative to *high* identifiers will

respond more favorably to ads portraying competence-related stereotypes.

An online panel of Asian Americans completed two ostensibly unrelated questionnaires. In the first questionnaire, we manipulated group identification by having participants respond to three open-ended questions regarding their feelings about being Asian adapted from Leach et al. (2008). Then participants rated an ad for "Sherwood Test Prep," a company that specialized in helping students improve their quantitative skills. While the stereotypical ad featured an Asian American spokesperson, the control ad featured a non-Asian American spokesperson. In addition to the same evaluation items used in the Study 1, participants provided product ratings (usefulness, value, effectiveness, purchase interest; $\alpha=.96$).

An ANOVA on product evaluations revealed a two-way ad type by group identification prime interaction ($F(3, 68)=3.72, p=.05$), showing that those primed with high relative to low identification provided less favorable product evaluations, but only after viewing the Asian stereotype and not the control ad.

In Study 3, we examine the responses of Asian American women who are unique in that they can be positively stereotyped as women along the warmth dimension or as Asian along the competence dimension (Shih, et al., 1999). We test the prediction that high (vs. low) identifying Asian American women will respond more favorably to an ad that positively stereotypes women as empathetic and cooperative but less favorably to an ad that positively stereotypes Asians as intelligent and quantitatively skilled.

An online panel of Asian American women completed both gender and ethnicity versions of Leach et al.'s (2008) scale in random order one week prior. For the main study, participants viewed an ad featuring an Asian American woman promoting a company called "The Negotiation Institute" that positively stereotyped either women or Asian Americans and rated the company (good, favorable; $r=.65, p<.0001$).

To test our predictions, we used two regression models to examine product evaluations. For the ad type x female group identification model, analysis revealed a significant two-way interaction ($t(71)=-2.20, p<.05$). Those high relative to low in *female* group identification indicated more favorable evaluations after viewing the female stereotype ad but not after viewing the Asian stereotype ad. For the ad type x Asian American identification model, we also found a significant two-way interaction ($t(71)=-3.14, p<.01$). For the Asian stereotype ad, those *low* relative to high in *Asian American* identification provided more favorable evaluations. For the female stereotype ad, those low versus high in Asian American identification actually evaluated the company less favorably.

In conclusion, as the marketplace becomes more diverse, it is increasingly important to understand how consumers respond to portrayals of their social group. Given their complimentary nature, positive stereotypes are frequently and oftentimes inadvertently portrayed in the media, highlighting the need for more research on topics in this area. We hope the current research is useful for several different audiences, including marketers appealing to diverse markets, stereotyped consumers sorting through their own responses, and researchers exploring the psychological processes elicited by positive stereotypes in the marketplace.

REFERENCES

- Leach, Colin W., Martijn van Zomeren, Siven Zebel, Michael L. W. Vliek, Sjoerd F. Pennekamp, Bertjan Doosje, Jaap W. Ouwerkerk, and Russell Spears (2008), "Group-Level Self-Definition and Self-Investment: A Hierarchical (Multicomponent) Model of in-Group Identification," *Journal of Personality and Social Psychology*, 95 (1), 144-65.
- Lee, Kyoungmi, Hakkyun Kim, and Kathleen D. Vohs (2011), "Stereotype Threat in the Marketplace: Consumer Anxiety and Purchase Intentions," *Journal of Consumer Research*, 38 (2), 343-57.
- Lin, Monica H., Virginia S. Y. Kwan, Anna Cheung, and Susan T. Fiske (2005), "Stereotype Content Model Explains Prejudice for an Envied Outgroup: Scale of Anti-Asian American Stereotypes," *Personality and Social Psychology Bulletin*, 31 (1), 34 – 47.
- Shih, Margaret, Todd L. Pittinsky, and Nalini Ambady (1999), "Stereotype Susceptibility: Identity Salience and Shifts in Quantitative Performance," *Psychological Science*, 10 (1), 80-3.
- Trapnell, Paul D. and Delroy L. Paulhus (2012), "Agentic and Communal Values: Their Scope and Measurement," *Journal of Personality Assessment*, 94(1), 39-52.

Effects of Matched and Mismatched Comparative Advertising Messages: The Moderating Role of Consumers' Processing Focus

Xiaojing Yang, University of Wisconsin - Milwaukee, USA

Shailendra Jain, University of Washington, USA

Charles Lindsey, State University of New York, Buffalo, USA

Frank Kardes, University of Cincinnati, USA

EXTENDED ABSTRACT

A frequently employed framework to account for findings in persuasion research focuses on whether persuasive messages match or mismatch consumers' self-schemata (e.g., extroversion; Wheeler, Petty, and Bizer 2005), goals (e.g., regulatory focus; Lee, Keller, and Sternthal 2010), emotions (Agrawal and Duhachek 2010), or contextual factors during message processing (e.g., temporal distance; Zhao and Xie 2011). Most of this research has documented a "matching" effect of advertising messages, suggesting that matched messages are more persuasive than mismatched messages, though on some (but rare) occasions, mismatched messages have been found to be more effective (Millar and Millar 1990; Aaker and Williams 1998).

Researchers have recently set out to account for these seemingly opposing findings of matched and mismatched messages. For example, Malaviya and Brendl (2014) show that hedonic motives moderate the effects of matched vs. mismatched messages. They find that favorable persuasion outcomes from a match (vs. mismatch) between regulatory focus and message framing occur only when the hedonic motive of the perceiver is consistent with (vs. opposes) that of the message. Extending this stream of research, we examine the moderating role of consumers' processing focus (cognitive vs. affective) and posit that consumers with a cognitive (vs. an affective) focus find mismatched (vs. matched) messages more persuasive.

We conduct our inquiry by focusing on two types of indirect comparative messages: "leading brand" comparisons ("brand X analgesic relieves pain better than the leading brand") and comparisons featuring "other brands" ("brand X trucks are better than other brands in their class"). We choose comparative advertising and, more specifically, indirect comparative messages, as our context because: (1) more than 70% of all advertising in the US may feature some type of comparison (Pechmann and Stewart 1990), and (2) though indirect comparative advertising is significantly more prevalent in practice than direct comparative advertising (Pechmann and Stewart 1990), most comparative investigations have focused on direct comparisons (e.g., Jain, Agrawal, and Maheswaran 2006; Zhang, Kardes, and Cronley 2000).

Drawing on categorization research, we posit that different comparative claims and ad contexts may induce alternative categorization approaches and distinct types of elaborations. First, consistent with Snyder (1992), we posit that "leading brand" claims invite consumers to compare the advertised brand to a specific (albeit unnamed) brand, leading to exemplar-based processing. Further, "other brands" claims invite consumers to compare the advertised brand to a group of brands, eliciting prototype-based processing. In addition, we propose that when a category consists of relatively few brands, consumers may be more predisposed to exemplar-based processing

whereas when it comprises a relatively large set of brands, consumers may be more likely to hold prototypical representation of the category (e.g., Yeung and Soman 2007). Given that both comparative messages of different types ("leading brand" and "other brands") and categories of differing sizes may influence the reliance on prototype- vs. exemplar-based processing, conceptually, and from a research design viewpoint, a match exists when the perceived category size is large (vs. small) and consumers are exposed to an "other brands" (vs. a "leading brand") message. This is so because both such conditions promote a prototype-(vs. exemplar-) based representation.

On the basis of metacognition research (Alter et al. 2007) and the finding that matched messages are easier to process than mismatched messages, we contend that when processing matched comparative advertising messages ("leading brand" claims in a small category or "other brands" claims in a large category), consumers should experience less processing difficulty, which in turn will engender a feeling-based processing strategy that is affective, intuitive, and holistic; however, exposure to mismatched comparative messages ("leading brand" claims in a large category or "other brands" claims in a small category) will lead consumers to resort to a more analytical processing strategy that is cognitive, rational, and deliberative. We further propose that the extent to which matched or mismatched comparative advertising messages elicit more favorable consumer responses hinges on consumers' processing focus, whether activated prior to ad exposure or chronically preferred by consumers. That is, consumers should develop more favorable reactions toward mismatched comparative advertising messages if their processing focus is also more cognitive. If their processing focus is affective, they should develop more positive responses toward matched comparative advertising messages.

We report two experiments which provide support to our theorizing. In the first experiment, respondents were first exposed to a cognitive (or an affective) processing focus manipulation task where they were asked to search words related to cognition or affect. Next, they received information about the car market where category size was manipulated (emphasizing there are many or few choices in the car market). Then they viewed a car ad which featured the "leading brand" claim or the "other brands" claim. Finally, they reported their brand evaluations. Our results find that when a cognitive (vs. an affective) focus was induced, respondents reported more favorable brand evaluations where there was mismatch (vs. match) between category size and type of claim. In the second experiment, the cognitive/affective focus was operationalized using chronic construal-level, which was measured using the *behavioral identification form*. Findings from experiment 1 were replicated.

Regulatory Focus and Donation to Proactive and Reactive Causes

Zhiyong Yang, University of Texas at Arlington, USA

Sijie Sun, University of Texas at Arlington, USA

Narayan Janakiraman, University of Texas at Arlington, USA

Ritesh Saini, University of Texas at Arlington, USA

EXTENDED ABSTRACT

Charitable organizations often adopt divergent approaches to tackle the same problem. The American Heart Association (AHA), for example, has two distinct types of programs to deal with diabetes: (1) one aiming at fun research to develop new treatments and prevention strategies, and (2) the other focusing on assisting current diabetes patients pay for their treatment. How do potential donors react to these two types of causes? Why? This is the question that this research intends to address.

In this paper we propose a duality in altruistic motivations. While one pro-social motivation drives support for *proactive* causes where the focus is on preventing negative future outcomes, the other motivation impels support for *reactive* actions where the focus is on mitigating existing negative situations. While AHA's initiatives for research and prevention are proactive, its help to existing patients is reactive. A *proactive cause* refers to the fund-raising programs that aim to prevent something bad from happening *before* it occurs, whereas *reactive cause* is characterized by the remedies that aim to resolve the problem *after* it arises. Notably, this classification is in line with the service marketing literature, which shows that there are two possible strategies to deal with service failure, *proactive* and *reactive*. Proactive strategies are implemented before service failure, whilst reactive strategies operate after a service problem appears (Worsfold et al. 2007). From a conceptual perspective, the two types of donation causes differ in who the beneficiaries of the donation are likely to be. While a proactive cause may potentially benefit themselves (including one's offspring, and future generations), a reactive cause narrowly focuses on the victims who are currently suffering from the problem.

In this research, we predict that individuals' regulatory focus has differential effects on their preference for these two types of causes. According to Higgins (1998), individuals possess two types of regulatory goals, namely promotion-focused and prevention-focused. The goals of promotion-focused individuals are characterized by the orientation toward seeking benefits, gains, and self-enhancements, whereas prevention-focused people are oriented toward avoiding uncertainty, mistakes, and losses (Aaker and Lee 2001). Because of this, individuals with a promotion focus tend to eagerly pursue their own interest and desires without much consideration for possible social consequences (Brebels et al. 2008). In contrast, those with a prevention focus are directed toward goals like duties, responsibilities, and obligations, and are more considerate to possible social consequences that represent a threat to things one ought to do (Brebels et al. 2008; Oyserman et al. 2007). Consistent with this qualitative difference across promotion- and prevention-focus, cross-cultural literature shows that the goal of individualistic countries (e.g., the U.S. and Canada, where people are usually promotion-focused) is to develop an individual sense of identity and self-sufficiency away from others (Triandis 1995). In contrast, from an early age, individuals in collectivistic cultures (e.g., China and India, where people are usually prevention-focused) are trained to become an integral part of the larger group and make contributions to the achievement and welfare of the collective (Triandis 1995).

Based on such differences, we expect that individuals with a promotion focus are more likely to donate to proactive causes than

to reactive ones, because of a latent expectation that they or their offspring may potentially benefit from the former, but not so much from the latter. However, individuals with a prevention focus are equally likely to donate to both, as their tendency to donate is mainly driven by obligations and responsibilities, which makes cause type less relevant. These propositions find resonance in recent research examining the impact of regulatory focus on green consumption (Ku et al. 2012). Although not in the donation context, these findings show that prevention-focused consumers are more strongly persuaded by environment-benefit appeals, whereas promotion-focused consumers are more responsive to self-benefit appeals. This suggests that individuals with a promotion focus are more likely to focus on ways and means to self-benefit and be self-sufficient, while individuals with a prevention focus should be other-focused given their drive to fulfill their obligations and responsibilities to others. The forgoing discussion suggests that perceived self-benefit is the key mechanism through which regulatory focus affects individuals' preference to proactive versus reactive causes.

If our theorization is correct, when other-benefit of the cause is made salient, social desirability of helping gets activated and self-serving motivations are subdued (Fisher et al. 2008). This will lead promotion-focused individuals to behave similarly to prevention-focused individuals.

The proposed effects are tested in three studies. Study 1 uses chronic measures to test the core thesis of this research, i.e., promotion focus leads to more preference for proactive (vs. reactive) causes but prevention focus does not differentiate between these two types of causes. Study 2 replicates study 1's findings using situationally activated regulatory focus, and provides direct evidence on the perceived self-benefit of the cause as the key mechanism. Study 3 manipulates the salience of self-benefit and other-benefit for the same cause, and shows that when self-benefit of the cause is made salient, the findings of studies 1 and 2 are replicated; however, when other-benefit of the cause is made salient, individuals with a promotion-focus do not differentiate the causes.

Study 1 (N=304) was conducted online using MTurk. Participants first read the description of AHA then were asked to indicate their preference for these two types of causes (1 = *definitely prefer the causes that help the patients deal with their current financial needs*; 7 = *definitely prefer the causes that aim at preventing diseases from happening in the future*). Afterwards, participants provided ratings on their level of regulator foci, using Haws et al.'s (2010) scale. Participants' age, gender, and family history of heart disease was measured as covariates. A regression analysis with preference of donation cause as the criterion and prevention focus and promotion focus as independent variables revealed a significant positive effect of promotion focus on preference ($\beta = .14, t(301) = 2.36, p < .05$). The effect of prevention focus on preference was not significant ($\beta = -.08, t(301) = -1.45, p = .15$). None of the control variables reached statistical significance (all p 's $> .50$). These results support our hypothesis that individuals with a promotion focus prefer the proactive cause over reactive cause, whereas individuals with a prevention focus have no difference toward the two causes.

The purpose of study 2 (N=172) is threefold: (1) to replicate study 1's finding through manipulating regulatory foci, (2) to for-

mally test perceived self-benefit of the cause as the key mediator underlying our results, and (3) to rule out long-term orientation as an alternative explanation. It featured a 2 (regulatory foci: prevention vs. promotion) \times 2 (cause type: proactive vs. reactive) between-subjects design. Regulatory foci were manipulated the same way as other researchers (Mourali et al. 2007). After the regulatory foci manipulation, participants were provided with an appeal from a charitable organization, framed as either proactive or reactive. Participants were asked how much they would like to donate to this project. The mediator, perceived self-benefit associated with the cause, was measured by two scales from White and Peloza (2009). A 2 (regulatory foci) \times 2 (cause type) ANOVA on the donation amount found only a significant regulatory focus \times cause type 2-way interaction ($F(1, 167) = 5.80, p < .05$). Neither of the main effects was significant (p 's $> .50$). When primed with promotion focus, individuals donated more ($M = 12.44$) to the proactive cause than to the reactive cause ($M = 4.82, t(83) = -2.00, p < .05$). In contrast, when primed with prevention focus, the donation amount did not vary across the two causes ($M_{\text{proactive}} = 6.82, M_{\text{reactive}} = 11.70; t(82) = 1.09, p = .28$). These results replicated study 1's findings. Mediation was assessed with the bootstrapping method, using Hayes's (2012) PROCESS macro. Consistent with our predictions, the model indicates that the indirect effect of moderated mediation is significant (95% CI = .15 to 7.66).

A follow-up study (N=86) was conducted using a 2 (regulatory foci: prevention vs. promotion) \times 2 (donation cause: proactive vs. reactive) mixed design, with regulatory foci being a between-subjects factor and donation cause as a within-subjects factor. Regulatory focus manipulation and the donation causes were the same as in study 2, except that participants viewed two causes and choose only one of them to donate. A binary logistic regression on the choice of proactive (vs. reactive) cause showed a significant effect of regulatory foci on decision outcome ($\beta = .89, p < .05$). For individuals primed with promotion focus, a greater portion selected the proactive cause (63.9%) compared to the reactive cause (42.0%, $z = 2.00, p < .05$). In contrast, for individuals primed with prevention focus, a smaller portion selected the proactive cause (36.1%) compared to the reactive cause (58.0%, $z = -2.00, p < .05$).

The purpose of study 3 (N=158) is to test the moderation effect of the salience of benefit associated with the cause (self vs. other). Since prevention focus leads to non-differentiation between the two types of donation causes, we only focus on promotion focus in this study. We expect that in self-benefit conditions, individuals with a promotion focus intend to donate more to proactive causes than to reactive causes; however, in other-benefit conditions, they do not differentiate between these two causes. All participants were first manipulated by promotion focus, using the same stimuli as used in study 2. They were then randomly assigned to the conditions in a 2 (cause type: proactive vs. reactive) \times 2 (salience of benefit: self-benefit vs. other-benefit) between-subjects design. Donation cause was manipulated in the same way as in study 2, except that an additional sentence was added before the donation intention measure to manipulate self-benefit [other-benefit] salience. We performed a 2 (cause type) \times 2 (salience of benefit) ANOVA with the donation amount as the dependent variable. Neither main effects was significant (p 's $> .15$). More important and pertinent to our hypothesis, there was a significant perceived benefit \times cause type 2-way interaction ($F(1, 152) = 6.85, p = .01$). When self-benefit was made salient, individuals with a promotion focus donated more ($M = 17.95$) to the proactive cause than to the reactive cause ($M = 11.44, t(82) = -2.07, p < .05$). In contrast, when other-benefit was made salient, the donation amount did not vary across two causes ($M_{\text{proactive}} = 9.74, M_{\text{reactive}} = 13.53; t(72) = 1.46, p = .15$).

This research contributes to the literature in three important ways. First, most studies in this domain focus on donation in general, without differentiating the cause type. Recently, non-profit organizations have started to offer more than one project for the same issue. In this research, we provide theoretical explanation about the difference between two types of causes, namely proactive and reactive. We suggest that these two causes may induce different levels of perceived self-interest and therefore affect individuals' donation behavior. Such conceptual distinctions among donation causes open a new avenue for future research. Second, our research also extends the literature on regulatory focus. Previous studies on regulatory foci have mainly focus on the distinctions across risk perception. Extending this stream of research, the present study shows that regulatory foci also drive individuals to be sensitive to self-benefit embedded into the decision object. Specifically, individuals with a promotion focus are more responsive to self-benefit compared to individuals with a prevention focus. These findings also add to our understanding of self-benefit/other benefit appeals. For example, prior research indicates that other-benefit fund-raising appeals are more effective compared to self-benefit appeals (Fisher et al. 2008). Our results qualify these findings by demonstrating that this is not true for promotion-focused individuals. When other-benefit is salient, promotion-focused individuals perceive the two donation causes equally. When self-benefit is salient, promotion-focused individuals will donate more to proactive causes.

REFERENCE

- Aaker, Jennifer L. and Angela Y. Lee (2001), "I seek pleasures and 'we' avoid pains: The role of self-regulatory goals in information processing and persuasion," *Journal of Consumer Research*, 28(1), 33-49.
- Bearden, William O., R. Bruce Money, and Jennifer L. Nevins (2006), "A measure of long-term orientation: Development and validation," *Journal of the Academy of Marketing Science*, 34(3), 456-467.
- Brebels, L., De Cremer, D., and Sedikides, C (2008), "Retaliation as a response to procedural unfairness: A self-regulatory approach," *Journal of Personality and Social Psychology*, 95(6), 1511-1525.
- Fisher, Robert J., Mark Vandenbosch, and Kersi D. Antia (2008), "An empathy-helping perspective on consumers' responses to fund-raising appeals," *Journal of Consumer Research*, 35(3), 519-531.
- Hamstra, Melvyn RW, Nico W. Van Yperen, Barbara Wisse, and Kai Sassenberg (2011), "Transformational-transactional leadership styles and followers' regulatory focus," *Journal of Personnel Psychology*, 10(4), 182-186.
- Haws, Kelly L., Utpal M. Dholakia, and William O. Bearden (2010), "An assessment of chronic regulatory focus measures," *Journal of Marketing Research*, 47(5), 967-982.
- Hayes, Andrew F (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," Columbus: Ohio State University. <http://www.afhayes.com/public/process2012.pdf>.
- Higgins, E. Tory (1998), "Promotion and prevention: Regulatory focus as a motivational principle," *Advances in Experimental Social Psychology*, 30, 1-46.
- Ku, Hsuan-Hsuan, Chien-Chih Kuo, Ching-Luen Wu, and Chih-Ying Wu (2012), "Communicating green marketing appeals effectively: The role of consumers' motivational orientation to promotion versus prevention," *Journal of Advertising*, 41(4), 41-50.

Mourali, Mehdi, Ulf Böckenholt, and Michel Laroche (2007), "Compromise and attraction effects under prevention and promotion motivations," *Journal of Consumer Research*, 34(2), 234-247.

Oyserman, Daphna, Ayse K. Uskul, Nicholas Yoder, Randy M. Nesse, and David R. Williams (2007). "Unfair treatment and self-regulatory focus," *Journal of Experimental Social Psychology*, 43(3), 505-512.

Triandis, Harry Charalambos (1995), *Individualism & Collectivism*, Westview press.

White, Katherine, and John Peloza (2009), "Self-benefit versus other-benefit marketing appeals: Their effectiveness in generating charitable support," *Journal of Marketing*, 73(4), 109-124.

Worsfold, Kate, Jennifer Worsfold, and Graham Bradley (2007), "Interactive effects of proactive and reactive service recovery strategies: The case of rapport and compensation," *Journal of Applied Social Psychology*, 37(11), 2496-2517.

The Paradoxical Impact of Positive Mood on Goal Favorability

Haiyang Yang, Johns Hopkins University, USA
Antonios Stamatogiannakis, IE University, Spain

EXTENDED ABSTRACT

This research examines the interplay of consumers' positive mood and the type of goals they pursue. We propose and demonstrate that although consumers believe that attainment goals are better for fostering a positive mood, they actually favor maintenance goals more than attainment goals when they are in a positive mood.

Attainment and maintenance goals are two common types of goals (Yang, Stamatogiannakis, and Chattopadhyay 2015). For attainment goals, the current state of consumers is different from their desired state (e.g., save, at least, \$10 more this month). For maintenance goals, the current state already matches the desired state; consumers pursuing this type of goal seek to maintain a current state that is the same as or exceeds the desired state (e.g., keep saving, at least, the same amount this month).

Because attainment goals have better outcomes than the corresponding maintenance goals (e.g., save \$10 more vs. the same), the outcomes of the former would be considered more affectively positive (cf. Plemmons and Weiss 2013). As such, consumers who seek to foster and elevate their positive mood may favor attainment goals over maintenance ones (Wegener et al. 1995). This reasoning is consistent with consumers' lay beliefs shown in a pilot study: When given a choice between the two goal types, participants strongly preferred attainment over maintenance goals in order to maintain a positive mood. That is, according to extant mood maintenance theories as well as consumers' lay beliefs shown in the pilot study, consumers may be more favorable towards attainment (vs. maintenance) goals when they are in a positive mood.

However, in this research, we argue and show that the opposite pattern can occur. We build on the prior research finding that positive affect can be generated by pursuing other goals involving activities that are congruent with a target goal (cf. Kruglanski 2006). For example, when team members' private goals involve activities that are perceived as congruent with the target goal they pursue for their team, they tend to experience more positive affect (Kristof-Brown and Stevens 2001). In our research context, positive mood maintenance can be considered a target goal consumers hold (Wegener et al. 1995); attainment vs. maintenance goals (e.g., save \$10 more vs. the same) are the other goals that consumers pursue while they are after positive mood maintenance. Because consumers tend to construe maintenance (but not attainment) goals as involving activities related to fostering and keeping one's current state (Yang et al. 2015), maintenance (vs. attainment) goals are more congruent with the target goal of maintaining positive mood. Thus, to the extent that this congruence can generate positive affect (Kruglanski 2006), consumers in a positive (but not negative or neutral) mood would favor maintenance goals more than attainment goals.

Further, because both congruence effects (Kruglanski 2006) and mood maintenance (Handley et al., 2004) tend to operate nonconsciously, our proposed interaction effect is also likely nonconscious in nature. Thus, the effect would persist when conscious cognitive resources are constrained, but be attenuated among individuals more aware of factors influencing their mood. Four field and lab studies involving different goal pursuit domains and different operationalizations of positive mood, support these propositions.

Study 1 examined real-life, bodyweight-management goal-setting behavior of over 1,300 consumers on a goal-management

website for one year. Random-effect logistic regression models showed that, consistent with our proposition, consumers in a chronically more (vs. less) positive affective state were more likely to set a weight-maintenance than weight-reduction goal.

Study 2 had a 2 (positive vs. negative mood prime) \times 2 (maintenance vs. attainment goals) between-participant design, and utilized goal domains that participants self-identified as important (e.g., work, health). A significant interaction effect revealed that, under positive mood, participants favored maintenance goals more than attainment goals. However, under negative mood, no difference was found.

Study 3 had a 3 (neutral mood vs. positive mood vs. positive mood and cognitive load) \times 2 (health goal: attainment vs. maintenance) between-participant design. A significant interaction effect revealed that maintenance goals were favored more than attainment goals in both positive mood conditions (showing qualitatively identical results). However, in the neutral mood condition, no difference was found. Thus, consistent with our proposed nonconscious process, the effect persisted when conscious cognitive resources were constrained.

Study 4 had a 2 (positive vs. neutral mood prime) \times 2 (health goal: maintenance vs. attainment) between-participant design and measured participants' chronic awareness of factors influencing their mood. The mood \times goal type interaction effect was replicated. More importantly, the results showed a significant 3-way interaction: The less participants were aware of factors influencing their mood, the more they favored maintenance (vs. attainment) goals under positive mood, suggesting that the effect is nonconscious.

Overall, our research contributes to understanding the interplay between mood and goal pursuit. Although extant mood maintenance theories and consumers' lay beliefs predict that attainment goals would be better for fostering a positive mood, we propose and show in the field and lab that consumers in a positive (as opposed to negative or neutral) mood tend to favor maintenance (vs. attainment) goals more. Our findings thus add to the current understanding of the mood-goal relationship, complementing the existing theories on mood maintenance (Handley et al. 2004; Wegener et al. 1995). Our results also complement the prior research finding that goal achievement generates positive affect (Plemmons and Weiss 2013) by showing that different affective states can have unique effects on perceived favorability of different types of goals. Further, we also add to the literature by showing that this effect, resulting from the congruence between maintenance goals and the goal of positive mood maintenance, is largely nonconscious. The effect persists when consumers' conscious cognitive resources are constrained, and is attenuated among consumers who are more aware of factors influencing their mood.

REFERENCES

- Handley, Ian M., G. Daniel Lassiter, Elizabeth F. Nickell, and Lisa M. Herchenroeder (2004), "Affect and Automatic Mood Maintenance," *Journal of Experimental Social Psychology*, 40 (1), 106-12.
- Kristof-Brown, Amy L., and Cynthia Kay Stevens (2001), "Goal Congruence in Project Teams: Does the Fit between Members' Personal Mastery and Performance Goals Matter?," *Journal of Applied Psychology*, 86(6), 1083-95.

- Kruglanski, Arie W. (2006), "The Nature of Fit and the Origins of "Feeling Right": A Goal-Systemic Perspective," *Journal of Marketing Research*, 43(1), 11-14.
- Plemmons, Stefanie A., and Howard M. Weiss (2013), "Goals and Affect" in A. A. Locke and G. P. Latham (Eds.), *New Developments in Goal Setting and Task Performance*, New York: Routledge.
- Wegener, Duane T., Richard E. Petty, and Stephen M. Smith (1996), "Positive Mood can Increase or Decrease Message Scrutiny: The Hedonic Contingency View of Mood and Message Processing," *Journal of Personality and Social Psychology*, 69 (1), 5-15.
- Yang, Haiyang, Antonios Stamatogiannakis, and Amitava Chattopadhyay (2015), "Pursuing Attainment versus Maintenance Goals: The Interplay of Self-Construal and Goal Type on Consumer Motivation," *Journal of Consumer Research*, 42, 93-108.

The “Smile-Seeking” Giver: How Immediate Affective Reactions Motivate and Reward Gift-giving

Adelle Yang, National University of Singapore, Singapore
Oleg Urminsky, University of Chicago, USA

EXTENDED ABSTRACT

Why do gift-givers often seem to fail at giving what their receivers want? In the present paper, we identify a distinct cause for the disparity between givers’ choices and receivers’ satisfaction, which we term the smile-seeking account: givers primarily aim to induce desirable spontaneous affective display, such as positive facial expression and bodily reactions, as opposed to inducing the greatest receiver satisfaction.

The smile-seeking motive differs from the satisfaction-seeking motive commonly assumed in the prior literature, which characterizes givers’ primary motive as maximizing receivers’ satisfaction, and treats affective reactions as mere signals of satisfaction, consistent with the appraisal theory of emotion (Lazarus 1982). By contrast, the smile-seeking account builds on a growing literature which suggests that affective responses can occur without extensive perceptual and cognitive encoding (Forgas 2002, Zajonc 2000). In gift-giving, the misalignment between affective reaction and overall satisfaction gives rise to a discrepancy of motives between givers and receivers: givers’ choices may be primarily motivated and gratified by the affective consequences of gift-giving, whereas receivers’ satisfaction may be determined primarily by the more deliberative and holistic cognitive appraisal of the gift, albeit also informed by the initial spontaneous affective reactions to the gift.

We present six studies that test the impact of the smile-seeking account on gift choices and on post-giving enjoyment. We present Study 1 with full details on data screening, pretesting, additional measures, and mediation analyses. We then describe with less details Studies 2 and 3A in which same procedures and analyses were used. Last, we present the main results in Studies 3B, 4A and 4B in which data analyses were based on rating and coding of actual gifts.

Study 1: The Giver-Receiver Discrepancy

In Study 1, we test whether givers and receivers differ in their relative preference for a more affectively appealing gift in the context of a gift-registry, to hold constant receiver interest in the gifts and isolate the effect of anticipated affective reactions.

We aimed for approximately 100 participants per cell, based on an expected medium effect size ($d = .05$) and the use of 30-100 per cell in prior gift-giving research (e.g. Gino and Flynn 2011, Zhang and Epley 2012). We recruited 240 adult participants from Amazon MTurk, paid \$1 each, yielding 213 completes ($M_{age} = 33$, 52% Male) after excluding invalid participants (duplicate IP addresses or having failed an instructional attention check in the end (Oppenheimer, Meyvis and Davidenko 2009)). The exclusion criterion was used in all studies.

Participants read a scenario about a couple planning their wedding, who had sent a wedding registry to a group of friends, each of whom would choose one of the gifts to give. In the scenario, the couple would receive all the gifts listed on the registry, so the net outcome to the receivers was held constant, regardless of the giver’s choice. The receivers would open the gifts at a wedding shower where all the friends would be present. Participants were randomly assigned to either imagine they were the gift-giver or the gift-receiver in the scenario.

Participants saw pictures and descriptions of two similarly priced pairs of mugs, personalized mugs intended to be seen as in-

cluding affective reactions and ergonomic mugs intended to be satisfaction-inducing. Participants, either as a giver or as a receiver depending on condition, first rated how much they liked each option, from “just a little (1)” to “very much (7)”. Participants then indicated their preference between the pairs of mugs, on a bipolar scale from strongly preferring the first option (1) to strongly preferring the second option (9).

Participants then rated the mugs on several measures. We expected that participants would rate the personalized mugs as inducing stronger positive affective reactions than the ergonomic mugs (“How much of an affective reaction (e.g., happy facial expressions) would the receivers show in response to these gifts when receiving them?” on a 7-point Likert scale). Conversely, we expected that the more comfortable ergonomic mugs would be rated as yielding higher satisfaction than the personalized mugs (“How much would the receivers be satisfied with these gifts when using them?”) on the same 7-point scale.

Results

First, the results confirmed that participants expected the personalized mugs to induce greater affective reactions than the ergonomic mugs ($M_{reaction} = 5.79$ vs. 4.59, $t(212) = 5.08$, $p < .001$), while the mugs were expected to yield similar levels of receiver satisfaction ($M_{satisfaction} = 5.31$ vs. 5.34, $t(212) = -7.70$, $p < .001$). The anticipated reaction benefit, relative to the satisfaction benefit, was significantly greater for the option intended to be reaction-inducing (personalized mugs) than for the option intended to be satisfaction-inducing (ergonomic mugs); $b_{personalized} = +.48$, $b_{ergonomic} = -.76$, $t(212) = 8.88$, $p < .001$).

Next, we tested our main hypothesis, comparing givers’ interest in giving the mugs to receivers’ interest in getting the mugs. The personalized mugs were more preferred by the givers than the receivers (5.37 vs. 4.81, $t(211) = 2.10$, $p = .037$, $d = .29$), while the ergonomic mugs were more preferred by the receivers than the givers (4.15 vs. 4.87, $t(211) = -2.99$, $p = .003$; ANOVA interaction, $F(1,211) = 8.86$, $p = .003$). Likewise, givers’ strong relative preference for the personalized mugs significantly differed from receivers’ between the two mugs on the bipolar scale (3.66 vs. 4.90, $t(211) = -2.95$, $p = .004$).

This giver-receiver preference discrepancy was not explained by differences in beliefs about the receivers’ satisfaction with the gift. Givers did miscalculate receivers’ higher expected satisfaction with the ergonomic mugs (Givers’ predictions of receivers’ satisfaction: $M_{personalized} = 5.42$ vs. $M_{ergonomic} = 5.17$; Receivers’ expected satisfaction: $M_{personalized} = 5.21$ vs. $M_{ergonomic} = 5.51$; interaction $F(1,211) = 8.16$, $p = .048$). However, this miscalculation did not explain the preference discrepancy between givers and receivers, which persisted controlling for expectations of receivers’ satisfaction ($\beta_{role} = .682$, $p = .030$).

Instead, the discrepancy was largely explained by anticipated affective reactions. Givers reported a bigger difference in receivers’ anticipated affective reactions between the two mugs than did receivers (Givers: 5.89 vs. 4.10; Receivers: 5.70 vs. 5.07; interaction $F(1,211) = 23.09$, $p < .001$). Controlling for the difference in anticipated affective reactions, which predicts preferences between the two mugs, we no longer observe a significant giver-receiver discrepancy ($\beta_{role} = .219$, $p > .250$; $\beta_{reaction} = .919$, $p < .001$). The effect of role (giver vs. receiver) on the relative preference between mug options was fully mediated by differences in expectations of receivers’

affective reactions ($\beta = .545$, $CI = [.277, .813]$, $p < .001$), controlling for expected satisfaction. We find similar results using the bipolar preference scale.

The preference discrepancy also persists when controlling for other factors identified in prior literature as influencing gift-giving, including hedonic or practical perceptions of the gift, how much a gift was associated with indulgence or guilt, givers' and receivers' construal level (desirable vs. feasible) and regulatory focus (approach-avoidance), as well as social closeness between giver and receiver ($ps < .025$). Response time, gender and age did not affect gift preferences or moderate the effect of role.

In sum, givers preferred to give the mug set that receivers liked less. This discrepancy was not explained by givers having mistaken beliefs about what receivers would be more satisfied with, the predominant account of such discrepancies in the prior literature (e.g., Cavanaugh, Gino and Fitzsimons 2015; Waldfogel 1993, Zhang and Epley 2009). Instead, the results suggest that the givers' preferences diverged from what receivers liked better due to the givers' "smile-seeking" motive: givers chose the option that they believed would result in a more desirable affective reaction.

Study 2: Focus on Reaction vs. Satisfaction in Valentine's Day Gifts

We recruited 295 relationship partners ($M_{age} = 35$, 51% Male) online to make gift choices for the next day - Valentine's Day. After participants indicated their gender and their partner's first name, male participants were asked to make choices for three pairs of options, one more reaction-inducing (e.g., blooming roses) and the other inducing more overall satisfaction (e.g., rose buds) as givers and female participants evaluated the same gifts as receivers. Participants then predicted the receivers' affective reactions and satisfaction for each item. Last, we measured personality traits, current relationship status, length of relationship, closeness with partner, and age.

We replicated the giver-receiver preference discrepancy for all three pairs of gifts (average choices 52.3% vs. 40.3%, repeated-measures $p = .001$). As in Study 1, the preference discrepancy between givers and receivers persisted when controlling for predicted satisfaction ($\beta_{role} = .092$, $p = .007$). Moreover, we find the same mediation via differences in anticipated reaction on preference discrepancy ($\beta = .057$, bootstrapped $p = .028$), even controlling for the indirect effect via anticipated satisfaction.

Study 3A & 3B : Discrepancy Eliminated When Receiver Reactions Are Unobserved

Next, we further test whether anticipating being present to observe the receivers' reaction affects givers' choices, as predicted by the "smile-seeking" motive. In Study 3A, we randomly assigned 490 mturkers ($M_{age} = 35$, 44% Male) to 2(role: giver vs. receiver) x 2(observable vs. unobservable) between-subjects conditions to imagine buying a blue-tooth speaker as a birthday-gift for a close friend (listed by participants themselves). In addition, participants either imagined that the gift-giver would be present on the receiver's birthday and give the gift in person or that the gift-giver would be out of town and have the gift mailed. The giver was faced with two same-price upgrade options: gift-wrap (pretested as inducing initial affective reaction) and a LED-light (pretested as inducing satisfaction during use). The anticipated reaction benefit was greater relative to the satisfaction benefit for the option intended to be reaction-inducing (gift wrap) than for the option intended to be satisfaction-inducing ($t(448) = 18.4$, $p < .001$).

Givers prefer the gift-wrap upgrade (relative to receivers) when they would be present during gift-reception (44.8% vs. 19.8%, χ^2

$= 16.1$, $p < .001$), but not when they would be absent during gift-reception (27.7% vs. 26.4%, $\chi^2 = .05$, $p > .250$; interaction ($F(1,445) = 7.78$, $p = .006$). The effect of role on choices in the observable-reaction condition held ($\beta_{role} = .17$, $t(224) = 3.91$, $p < .001$) when controlling for predicted recipient satisfaction. The giver-receiver preference discrepancy was again mediated by differences in anticipated reactions in the observable-reaction conditions ($\beta = -.058$, $CI = [-.101, -.015]$, $p = .008$), controlling for anticipated satisfaction, but no indirect effect was found in the unobservable-reaction conditions ($\beta = -.034$, $CI = [-.088, .020]$, $p = .219$). Givers only sought smiles when they would be there to see the receivers' smile.

In Study 3B, we recruited 198 actual gift-givers ($M_{age} = 33$, 55% Male) online three days before Christmas. Participants each specified three gifts they had prepared to give, listed the receivers, rated both the anticipated affective reaction and expected receiver satisfaction for each gift, and indicated whether they would be present when each gift would be received.

The gifts participants chose did not differ in the anticipated level of satisfaction based on whether the givers expected to be present or not (self-reported $M_{satisfaction} = 5.47$ vs. 5.39, $b_{present} = -.079$, $p > .250$). In contrast, participants rated their gifts as inducing marginally stronger affective reactions when they would be giving it in person ($M_{reaction} = 6.01$ vs. 5.71, $d = .27$; $b_{present} = .271$, $p = .069$, observed power = 90.7%). These findings held when we use independent coders' ratings instead of participants' self-report. The effect of presence on how reaction-inducing the gifts were (per coder ratings) also persists controlling for social closeness to the recipient and cost of the gift ($b_{present} = .184$, $t = 3.15$, $p = .002$).

Study 4A & 4B: Post-Giving Outcomes and Enjoyment

In Study 4A, we asked 80 participants ($M_{Age} = 34$, 43% Male) to recall recent favorite and least favorite gifts as either givers or receivers, and rated each gift on reaction and satisfaction scales. Overall, whether a giver liked or disliked a gift was primarily predicted by how reaction-inducing the gift was ($\beta_{reaction} = .199$, $p < .001$, $\beta_{satisfaction} = -.076$, $p = .133$). By contrast, receivers' liking of gifts related to both how reaction-inducing and even more so to how satisfaction-inducing the gift was ($\beta_{reaction} = .085$, $p = .033$, $\beta_{satisfaction} = .215$, $p < .001$). In sum, the discrepancy between givers' and receiver's preferences persists even after the gift reception, which may further reinforce the givers' "smile-seeking" motive in future gift choices.

In Study 4B, we used a longitudinal design to track givers' preference and enjoyment after actual gift-giving. We recruited 87 Christmas gift-givers before and after Christmas ($M_{age} = 37$, 58% Male). Participants indicated whether they had been present for the gift reception, rated their perception of the receiver's immediate reaction to the gift, their perception of the receiver's longer-term satisfaction with the gift, and their own enjoyment from having given each gift.

Reaction-inducing gifts resulted in greater giver enjoyment, via greater receiver reaction that givers reported (indirect effect $\beta = 2.93$, $CI = [.98, 6.58]$, $p < .001$), whereas satisfaction-inducing gifts did not significantly contribute to givers' enjoyment, even though givers reported perceiving greater receiver satisfaction for such gifts (indirect effect $\beta = .55$, $CI = [-.66, 2.34]$, $p = .45$). Moreover, givers enjoyed the gift-giving experience substantially more if they had been present to see the receivers' reactions (87.1 vs. 46.3, $\beta = 40.9$, $p < .001$), even controlling for interpersonal closeness ($\beta = 38.7$, $p < .001$). Consistent with Study 3, observing the receiver's reaction was critical to the giver's enjoyment of gift-giving.

General Discussion

The forgoing studies offer evidence for a "smile-seeking" motive underlying gift-giving behaviors, challenging previous assumptions that giver-receiver discrepancies are due to givers miscalculating receiver satisfaction. This is an important distinction because the receiver's display of affective reactions to a gift may often differ from the receiver's satisfaction with the same gift. Facing a tradeoff between gifts that induce greater reaction and gifts that yield greater satisfaction, givers' preference for reaction-maximizing gifts will deviate from what their friends, relationship partners and family members would prefer to receive. Furthermore, the givers' smile-seeking preference was contingent on anticipating an opportunity to observe receivers' affective reactions during gift reception. When givers believe that they would not observe the receiver's reaction, the giver-recipient discrepancy was eliminated. The smile-seeking preference also persisted after giving, as givers derived more enjoyment from the receivers' display of affective reactions.

Nonetheless, we do not wish to attribute all underappreciated gift choices to the smile-seeking motive. Bad gifts can occur due to obvious carelessness (e.g., candies for a diabetic patient), outright selfishness (e.g., a vacuum cleaner for a romantic partner), or mere lack of information. Also different from the smile-seeking motive, some gift choices may be instead guided by motives to form character or endow assets instead (e.g., parents giving educational materials or funds to children as birthday gifts).

Our findings have implications for research on gift-giving and interpersonal decision-making. In particular, our findings call into question prior assumptions that people making interpersonal choices primarily intend to maximize receiver satisfaction, and that others' affective reactions are mere behavioral consequences of their appraisal outcome.

REFERENCES

- Cavanaugh, L. A., Gino, F., & Fitzsimons, G. J. (2015). When doing good is bad in gift giving: Mis-predicting appreciation of socially responsible gifts. *Organizational Behavior and Human Decision Processes*, *131*, 178-189.
- Forgas, J. P. (2002). Feeling and doing: Affective influences on interpersonal behavior. *Psychological inquiry*, *13*(1), 1-28.
- Gino, F., & Flynn, F. J. (2011). Give them what they want: The benefits of explicitness in gift exchange. *Journal of Experimental Social Psychology*, *47*(5), 915-922.
- Lazarus, R. S. (1982). Thoughts on the relations between emotion and cognition. *American psychologist*, *37*(9), 1019.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satiating to increase statistical power. *Journal of Experimental Social Psychology*, *45*(4), 867-872.
- Waldfoegel, J. (1993). The deadweight loss of Christmas. *The American Economic Review*, *83*(5), 1328-1336.
- Zajonc, R. B. (2000). Feeling and thinking: Closing the debate over the independence of affect.
- Zhang, Y., & Epley, N. (2009). Self-centered social exchange: differential use of costs versus benefits in prosocial reciprocity. *Journal of personality and social psychology*, *97*(5), 796.
- Zhang, Y., & Epley, N. (2012). Exaggerated, miscalculated, and misplaced: When "it's the thought that counts" in gift exchanges. *Journal of Experimental Psychology: General*, *141*(4), 667.

The Effect of Pre-giving Incentives on Relationship Norms and Donation Behavior

Bingqing (Miranda) Yin, University of Kansas, USA

Yexin Jessica Li, University of Kansas, USA

Surendra Singh, University of Kansas, USA

EXTENDED ABSTRACT

A pre-giving incentive (hereafter, PGI) is the provision of a benefit/favor before requesting compliance (e.g., Regan 1971). In the past three years, PGIs such as coins and greeting cards, were included in approximately half of the total non-profit mail volume (Parady-sz + PM Digital Research 2016). Including PGIs to potential donors requires resources that are already scarce for many nonprofits. Do the benefits of PGIs justify the costs? Additionally, it is unclear how different types of PGIs (e.g., coins, mailing labels) influence donor psychology and behavior. Although abundance of research demonstrates the persuasive power of reciprocity (Cialdini, 1993), we show that in certain pre-giving situations, providing gifts or favors before requesting compliance might have no effect or even backfire.

Due to charities' focus on communal obligations (McGraw et al. 2012), we propose that people use communal norms when interacting with charities, giving benefits (usually time or money) without expecting comparable (or any) benefits in return. However, the perception of charities as communally oriented can be influenced by the type of PGI (monetary vs. non-monetary) enclosed in charity request letters. Empirical research suggests that reminders of money diminish communal motivations (Vohs, Mead, and Goode 2006) and lead people to perceive themselves to be in a businesslike or exchange relationship with others (Jiang, Chen, and Wyer, 2014). This line of research suggests that enclosing low value monetary PGIs evokes exchange norms and leads the charity to be perceived as relatively less communally oriented. In addition, donors who follow exchange (vs. communal) norms may reciprocate by giving the charity an amount roughly equivalent to what they received. Consequently, we predict that the inclusion of low value monetary PGIs will lead to lower donations than when no incentives are provided. Low value non-monetary PGIs, on the other hand, should not evoke exchange norms. Thus, donors receiving a non-monetary PGI should use communal norms as they do when they receive no incentive. However, because communal norms dictate non-contingent, need-based giving and do not necessitate immediate return of benefits (Aggarwal 2004; Clark and Mills 1993), a low value non-monetary PGI is unlikely to increase donations.

We tested our predictions in a pilot study, 3 lab experiments, and a field experiment. A pilot study (N=113) found that people perceived charities as more communally than exchange oriented ($M_{\text{communal}} = 5.45$, $M_{\text{exchange}} = 3.38$, $F(1, 93) = 57.19$, $p < .001$), and businesses as more exchange than communally oriented ($M_{\text{communal}} = 3.48$, $M_{\text{exchange}} = 4.92$, $F(1, 93) = 29.18$, $p < .001$).

Experiment 1A (N=175) and 1B (N=132) randomly assigned participants to view charity letters with a monetary PGI (\$.25 in 1A, \$.50 in 1B), a non-monetary PGI (a greeting card in both studies), or no PGI. Participants reported how much they would like to donate to the charity hypothetically in experiment 1A and from their study payment (\$5 in \$1 bills) in experiment 1B. In both studies, people who received monetary incentives donated less than those who received non-monetary PGI or no PGI ($ps < .05$). No differences emerged between the non-monetary PGI and no PGI conditions ($ps > .30$).

In experiment 2 (N=129), we examine the mediating role of communal and exchange orientation on donation behavior. Results showed that monetary PGIs elicited significantly less donations compared with no PGIs ($p = .02$) and marginally less donations compared

with non-monetary PGIs ($p = .08$). Monetary PGIs also led participants to perceive the charity as less communally oriented than no PGIs ($p < .001$) and non-monetary PGIs ($p < .01$). Monetary PGIs increased the perceived exchange orientation of the charity compared with no incentives ($p = .02$). No difference was found in all other conditions (all $ps > .17$). Using PROCESS (model 4; Hayes 2013) with 10,000 bootstrap samples, we showed that the relative indirect effect of monetary versus no incentives on donation amount was mediated by perceived communal orientation of the charity (bootstrap CI: 1.6144, 7.5409) but not by the perceived exchange orientation of the charity (bootstrap CI: -.0415, 3.8874).

Similarly, results demonstrated an indirect effect of monetary versus non-monetary PGIs on donation amount, also mediated by perceived communal orientation (bootstrap CI: .9003, 5.9651) but not exchange orientation (bootstrap CI: -.2086, 2.6474). Overall, the results support our hypothesis that lower communal orientation (but not exchange orientation) leads people to donate less.

In experiment 3 (N=9,000), we partnered with a local charity to examine the effects of monetary (\$.25), non-monetary (a greeting card), and no PGIs on donations in the field. Our response rate (0.52%) was comparable to that of other donor acquisition campaigns (Smart Annual Giving 2013). For average donation amount per new donor acquired, monetary PGIs generated less money than no PGIs ($M_{\text{monetary}} = \$17.48$, $M_{\text{non-monetary}} = \30.45 , $M_{\text{control}} = \$47.50$; $F(1, 45) = 10.36$, $p < .01$). No donation difference was observed between non-monetary PGIs and no PGIs or between monetary PGIs and non-monetary PGIs ($ps > .1$). We also found that, on average, each mailing with a monetary PGI cost the charity \$.59, which is significantly more than loss per mailing with non-monetary incentives (\$.49), $F(1, 8998) = 11.20$, $p < .001$ or loss per mailing with no PGIs (\$.25), $F(1, 8998) = 21.65$, $p < .001$. Extrapolated, for our campaign with 9,000 individuals, including monetary PGIs (versus no incentives) resulted in an additional \$.34 net loss per mailing (\$1,020 in total) while including non-monetary PGIs resulted in an additional \$.24 net loss per mailing (\$720 in total).

The present work provides important theoretical and practical implications. We integrate research on reciprocity, relationship norms, and prosocial behavior and suggest situations where gifts may not prompt reciprocal behaviors. Specifically, we show that reciprocity after receiving a low value monetary PGI results in lower donations than comparable value non-monetary or no PGIs under exchange norms. This is because external cues such as PGIs affect perceptions of the charity and thus the use of communal versus exchange norms. Practically, our results imply that charitable organizations should not be encouraged to use PGIs in soliciting donations.

REFERENCES

- Aggarwal, Pankaj (2004), "The effects of brand relationship norms on consumer attitudes and behavior," *Journal of Consumer Research*, 31 (June), 87-101.
- Cialdini, Robert. B. (1993). *Influence: Science and practice*, New York: HarperCollins.
- Clark, Margaret S. and Judson Mills (1993), "The Difference between Communal and Exchange Relationships: What It Is and Is Not," *Personality and Social Psychology Bulletin*, 19 (December), 684-91.

- Hayes, Andrew F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Jiang, Y., Chen, Z., and Robert S. Wyer Jr. (2014), "Impact of money on emotion expression," *Journal of Experimental Social Psychology*, 55 (November), 228–33.
- McGraw, Peter A., Janet A. Schwartz, and Philip E. Tetlock (2012), "From the Commercial to the Communal: Reframing Taboo Trade-Offs in Religious and Pharmaceutical Marketing," *Journal of Consumer Research*, 39 (June), 157–73.
- Paradysz + PM Digital Research (2016), "Market Trends 2015 Non-profit Sector: Direct Mail promotion and Universe Trending," Research report, Paradysz.
- Regan, Dennis T. (1971), "Effects of favor and liking on compliance," *Journal of Experimental Social Psychology*, 7 (November), 627-39.
- Vohs, Kathleen D., Nicole L. Mead, and Miranda R. Goode (2006), "The Psychological Consequences of Money," *Science*, 314, 1154–56.

Choosing versus Rejecting: The Effect of Decision Modes on Subsequent Preferences

Sangsuk Yoon, Temple University, USA

Vinod Venkatraman, Temple University, USA

EXTENDED ABSTRACT

We are faced with the same decisions multiple times in many circumstances, and often do not employ a single strategy in making these decisions (Venkatraman, Payne, and Huettel 2014; Yoon, Vo, and Venkatraman 2017). For instance, one might sometimes purchase a product by actively choosing what they like, and other times by passively rejecting unattractive alternatives (Meloy and Russo 2004; Shafir 1993). While previous studies have shown that people focus on compatible attributes (i.e., positive attributes when choosing vs. negative attributes when rejecting), little is known about the underlying mechanisms and the impact of these decisions on subsequent preferences. Across three studies, we sought to understand how these two decision modes (choosing vs. rejecting) influence subsequent preferences for the chosen or non-rejected items.

Study 1

Seventy-two participants ($M_{\text{age}} = 19.46$, $SD = 1.52$, 36% female) were randomly assigned either to *choosing* or *rejecting* conditions. The experiment consisted of two phases, and participants made binary choice decisions between pairs of items chosen from a set of 48 triplets in each trial. In Phase 1, two items were randomly selected from each triplet and presented. In the *choosing* condition, participants chose the item they liked, while in the *rejecting* condition, they rejected the item they disliked. In Phase 2, the chosen/non-rejected (target) item from Phase 1 was paired with the remaining item (new) from the triplet, and participants chose the item they liked from the pair. We hypothesized that the preference for “target” items will be greater for the chosen item from Phase 1 relative to the non-rejected item.

Consistent with previous studies (Chen and Proctor 2017; Sokolova and Krishna 2016), participants in the *rejecting* condition spent longer time than those in the *choosing* condition in Phase 1 (choosing: $M = 4.14$ seconds, $SD = 1.24$ vs. rejecting: $M = 4.61$ seconds, $SD = 1.86$; $F = 8.06$, $p = .006$). We found that the two decision modes asymmetrically influenced subsequent choices. As hypothesized, the target items were selected more when they were *chosen* than *non-rejected* from Phase 1 ($t(70) = 2.37$, $p = .021$). Further analysis revealed that choice of the target items in the *choosing* condition was significantly higher than chance level (chance level = .66; $t(35) = 3.13$, $p = .004$), while that in the *rejecting* condition was at chance level ($t(35) = -0.82$, $p > .250$). Therefore, *choosing* increased the attractiveness of chosen item in a subsequent choice, while *rejecting* did not decrease the attractiveness of the non-rejected item.

Study 2

In Study 2 ($N = 90$, $M_{\text{age}} = 20.47$, $SD = 1.86$, 56.67% female), we used eye-tracking to elucidate the processes underlying these asymmetric preferences using a similar paradigm. We were primarily interested in mechanisms underlying the two decision modes in Phase 1. We found that participants in the *rejecting* condition switched their fixations more between the two items ($M = 4.09$, $SD = 1.25$) than those in the *choosing* condition ($M = 3.48$, $SD = 1.25$; $t(87) = -2.37$, $p = .020$). Additionally, participants in the *choosing* condition spent longer durations on preferred item than non-preferred item, while those in the *rejecting* condition spent longer duration on non-preferred item than preferred item. We contend that the increased attention to chosen alternative, and the focused search pattern in *choosing*

condition may have biased subsequent choice, relative to the *rejecting* condition.

Study 3

In Study 3 ($N = 106$, $M_{\text{age}} = 21.38$, $SD = 3.97$, 66.98% female), we used a free-choice paradigm to elucidate how the *choosing* and *rejecting* decision modes affected post-choice preferences. In Phase 1, participants rated attractiveness of a series of 40 items. In Phase 2, items were paired based on the similarity of attractiveness ratings from Phase 1, and participants in the *choosing* condition chose one item they liked, while those in the *rejecting* condition rejected one item they disliked. In Phase 3, participants rated the attractiveness ratings of the 40 items again. We were primarily interested in how the two decision modes affected perceived attractiveness in Phase 3 relative to Phase 1. Consistent with Study 1, participants spent longer in *rejecting* than in *choosing* ($M_{\text{choosing}} = 3.13$ seconds vs. $M_{\text{rejecting}} = 3.70$ seconds; $t(104) = -2.79$, $p = .006$) in Phase 2. We found that the gap between preferred items and non-preferred items were greater in the *choosing* condition (chosen: $M = 0.49$, $SD = 0.33$ vs. non-chosen: $M = -0.49$, $SD = 0.33$) than in the *rejecting* condition (non-rejected: $M = 0.41$, $SD = 0.32$ vs. rejected: $M = -0.41$, $SD = 0.32$) in Phase 3. The results imply that post-choice preference changes were greater in *choosing* than in *rejecting* and the greater post-choice preference changes in the *choosing* condition may have affected subsequent choice more relative to the *rejecting* condition.

Conclusion and General Discussion

Our results show that *choosing* increases preference for the chosen item in a subsequent choice, while *rejecting* does not. We conjecture from eye-tracking data that participants focus on both relative attractiveness and unattractiveness in the *rejecting* condition providing no advantage to the non-rejected item and no disadvantage to the rejected item. However, they form positive overall impression for the chosen item in the *choosing* condition, which subsequently biases preference for the same item in future decisions. This was supported by the holistic search pattern from eye-tracking data and greater post-choice preference changes in the *choosing* condition than in the *rejecting* condition. We hope to extend these to multi-attribute decisions in future studies to specifically understand if these decision modes lead to increased emphasis on compatible attributes.

REFERENCES

- Chen, Jing and Robert W Proctor (2017), “Role of Accentuation in the Selection/Rejection Task Framing Effect,” *Journal of Experimental Psychology: General*, 146 (4), 543-68.
- Meloy, Margaret G and J Edward Russo (2004), “Binary Choice under Instructions to Select Versus Reject,” *Organizational Behavior and Human Decision Processes*, 93 (2), 114-28.
- Shafir, Eldar (1993), “Choosing Versus Rejecting: Why Some Options Are Both Better and Worse Than Others,” *Memory & cognition*, 21 (4), 546-56.
- Sokolova, Tatiana and Aradhna Krishna (2016), “Take It or Leave It: How Choosing Versus Rejecting Alternatives Affects Information Processing,” *Journal of Consumer Research*, 43 (4), 614-35.

Venkatraman, Vinod, John W Payne, and Scott A Huettel (2014),
“An Overall Probability of Winning Heuristic for Complex
Risky Decisions: Choice and Eye Fixation Evidence,”
Organizational Behavior and Human Decision Processes, 125
(2), 73-87.

Yoon, Sangsuk, Khoi Vo, and Vinod Venkatraman (2017),
“Variability in Decision Strategies across Description-
Based and Experience-Based Decision Making,” *Journal of
Behavioral Decision Making*.

Don't Kill the Suspense: The Duality of Suspense in Entertainment Consumption

Mujde Yuksel, Suffolk University, USA

Elizabeth G Miller, University of Massachusetts Amherst, USA

Easwar Iyer, University of Massachusetts Amherst, USA

EXTENDED ABSTRACT

Numerous research studies and anecdotal evidence reveal that sports programs are much more likely to be watched live than other types of programs (e.g., Bernoff 2004; Nielsen 2010). Why do consumers prefer to watch sports events live vs. taped? To answer this question, we examine the nature of suspense more generally and when outcome knowledge (or spoilers) reduces suspense and consequent consumption enjoyment. While we focus on this question largely within the context of sports viewership, we note that our findings have implications for any experience that is engaged in due to suspense or excitement and which is repeated over time, such as effectiveness of television advertisements (Elliott 2013), use of runs, and gift-giving.

Drawing on suspense literature (e.g., Duckworth 2012), we argue that lack of knowledge about an outcome is primarily limited to the cognitive processing of information related to estimating the probabilities of various outcomes, including the preferred one. However, a reader/viewer can continue to experience suspense and the resultant tension via an emotional pathway. That is, one is able to now focus more on the unfolding of the event and follow it in great detail since one need not invest any resources in predicting the outcome. We refer to these two types of suspense as “outcome suspense” and “process suspense” respectively. Specifically, outcome suspense refers to anxiety caused by *what* an outcome is, while process suspense refers to anxiety about *how* that outcome came to be. We propose that spoilers (outcome knowledge) spoil (reduce enjoyment) only in situations in which outcome suspense and process suspense are highly correlated (high outcome-process dependency). Further, we propose that the relationship between outcome suspense and process suspense varies by program type, and show how process suspense impacts consumer preferences for time-shifting TV entertainment consumption.

Study 1 shows that outcome-process dependency varies with program type, and program type influences preferences for real-time vs. tape-delayed viewing. Eighty participants were asked how likely they would be to watch their favorite sport or their favorite (non-sport) television program at different times (live or after 1 day, 2 days, 3 days, 1 week). Consistent with our hypotheses and real-world data (cf., Bernoff 2004), participants were significantly more likely to watch sports events broadcast live ($M_{\text{sport}} = 5.6$, $M_{\text{tv}} = 4.5$, $p < .003$). They were also willing to pay (WTP) more to watch sports events broadcast live ($WTP_{\text{sport}} = \$11.09$, $WTP_{\text{tv}} = \$6.81$), and this WTP drops sharply for sports, but not for TV programs after one day ($WTP_{\text{sport}} = \$1.39$, $WTP_{\text{tv}} = \$4.76$). Overall, 79% of participants show decreasing WTP patterns for sports compared to 38% for TV ($p < .0001$). In addition, when asked to explain how watching sports live differed from watching it after its original airing ($N=32$), 72% of participants mentioned the likelihood of learning the outcome if watching the game late and that this knowledge would ruin the experience.

Having confirmed differences in real-time viewing by program type, studies 2-3 explicitly test our argument that the underlying level of suspense explains consumers' likelihood of watching taped events. Study 2 ($n=55$) used a 2 (program type: sports event, TV series) \times 2 (outcome knowledge: present, absent) between-subjects experiment. Participants imagined knowing or not knowing the outcome of a sporting event or television program. They then indicated how likely they were to watch the show, as well as how much suspense and uncertainty

they expected to feel during the flow of events and about how the episode/game would end. Consistent with our hypotheses, participants were more likely to watch a program when they did not know the outcome ($M_{\text{no knowledge}} = 6.00$, $M_{\text{knowledge}} = 4.91$ $p < .05$). This relationship was mediated by process suspense, but not by outcome suspense (indirect effect for process suspense: 95% CI [-3.20, -.33]; and indirect effect for outcome suspense: 95% CI [-.95, 1.38]). In other words, outcome knowledge negatively influenced the likelihood of watching the program only when it diminished the process suspense. Furthermore, we found that the relationship between outcome knowledge and process suspense was moderated by program type such that outcome knowledge diminished the process suspense only for programs with high correlation between outcome and process suspense (taped sport event), and not for programs with low correlation (taped TV show; indirect effect for interaction: 95% CI [.03, .57]).

Study 3 ($n=56$) provides additional evidence that the differences observed in viewership preferences relates to the relationship between outcome and process suspense, and not just differences in genre. Participants viewed one of four sports scenarios according to a 2 (outcome-process dependency: low [snowboarding], high [ice hockey]) \times 2 (outcome knowledge: yes, no) between-subjects design. Similar to Study 2, we again find that process suspense (and not outcome suspense) mediates the relationship between outcome knowledge and likelihood to watch (indirect effect for process suspense: 95% CI [-2.10, -.19]; and indirect effect for outcome suspense: 95% CI [-.19, 1.41]). In addition, the type of program moderated the effect of outcome knowledge on process suspense such that outcome knowledge had a bigger impact on process suspense for sport events with high outcome-process dependency (ice hockey) compared to sport events with low outcome-process dependency (snowboarding; indirect effect for interaction: 95% CI [-2.65, -.42]).

Thus, across three studies, we find that outcome knowledge reduces enjoyment only in situations in which outcome suspense and process suspense are highly correlated, a situation which characterizes many sporting events. Further, we show that the impact of spoilers on felt suspense helps explain consumer decisions not to time-shift viewing.

This research contributes to an increased understanding of the nature of suspense and offers an explanation for the “paradox of suspense” in entertainment consumption. Suspense acts as an important driver of consumer decisions to watch or re-watch shows as well as whether to watch those shows live or time-shifted (i.e., via DVR, online, etc.). By better understanding the factors that create suspense, marketers can choose more effective marketing messages and can better target their entertainment offerings to consumers.

REFERENCES

- Bernoff, Josh (2004), “The Mind of the DVR User: Media and Advertising,” *Forrester Research Inc.*, September 8th.
- Duckworth, AR (2012), “The Paradox of Suspense: I-XII,” *The Motley View*, <http://ardfilmjournal.wordpress.com/2012/01/06/the-paradox-of-suspense-i-introduction/> [accessed 5-29-12].
- Elliott, Stuart (2013), “Spoiler alert: Super Bowl ad previews draw online attention, with criticism,” *New York Times*, January 30, B1.
- Nielsen (2010), “DVR Use in the US,” online report, <http://www.nielsen.com/content/dam/corporate/us/en/newswire/uploads/2010/12/DVR-State-of-the-Media-Report.pdf>, [accessed 8-8-14].

Hiding Gifts behind the Veil of Vouchers: The Effect of Gift Vouchers in Conditional Promotions

Yan Zhang, National University of Singapore, Singapore
Yu Ding, Columbia University, USA

EXTENDED ABSTRACT

Marketers commonly offer gifts to induce purchases. In the marketing literature, such offers are often called *conditional promotions*, in which consumers receive a supplementary product for free or at a discounted price conditional on the purchase of a focal product (Neslin 2002; Palmeira and Srivastava 2013).

Marketers face the question of whether to introduce a voucher when running conditional promotions. For example, a telecommunication service provider can offer its users a free pair of headphones upon signing up for a package, or hand them a voucher that consumers can exchange for the same pair of headphones. As of now, the effect of using vouchers as compared to using gifts directly in conditional promotions is a largely under-studied topic. Past research has been mostly devoted to comparing the effect of offering gifts with that of not doing a promotion at all (Kamins et al. 2009; Palmeira and Srivastava 2013; Raghubir 2004a; Raghubir 2004b), with that of offering price discounts (Chandran and Morwitz 2006; Krishna et al. 2002; Liu 2013; Mishra and Mishra 2011; Nunes and Park 2003), or with that of offering gifts that are incommensurate with the required purchases (Kivetz 2005). The current research, instead, compares the effect of directly giving gifts with the effect of using vouchers.

Consumers' evaluation of a promotion is driven by the perceived promotion value, defined as the comparative value of the gift in relation to the price of the focal product (Value of the gift / Price of the focal product) (Krishna et al. 2002). For example, people are more likely to try a promotion if it offers a \$5 discount for a \$15 calculator than if it offers a \$5 discount for a \$125 calculator (Kahneman and Tversky 1984). The comparative nature of the attractiveness judgment implies that the evaluation is largely based on the comparison between the price of the focal product and the value of the gift.

In this research, we argue that using vouchers reduces price comparison for two major reasons. First, past research has shown that the acquisition of points and miles can make people focus more on the immediate relationship between invested resources and the points and miles, and less on the comparative value of the input of resources in relation to the output of reward that really matters (Hsee et al. 2003). Second, research on transaction decoupling finds that consumers spend more in otherwise identical purchasing situations when paid by credit card than by cash or checks (Feinberg 1986; Hirschman 1979). By adding an intermediate step of swiping one's credit card, the pain of paying is greatly reduced because credit card usage effectively dissociates the purchase action (happening on the spot) from the payment action (typically happening once a month) (Prelec and Loewenstein 1998).

These findings collectively suggest that adding something in between the input and the output impairs people's ability to see the direct relation between the input and the output. We suggest that the introduction of a voucher will produce similar effects. It breaks the direct association between the focal product and the gift (buying the focal product→receiving a gift) and makes the association indirect (buying the focal product→receiving a voucher→exchanging for a gift). Thus, we anticipate that adding a voucher in between the focal product and the gift decouples the product from the gift, lowering people's tendency to assess the comparative ratio between the focal product's price and the gift's value.

Importantly, this reduced tendency to compare can produce more than just a simple main effect on purchase intention. We suggest that the effect of using a voucher depends on whether the promotion is of high or low value. For high-value promotions, using a voucher deemphasizes the high value of the promotion and thus decreases consumers' intention to purchase the focal product; whereas for low-value promotions, using a voucher shifts consumers' attention away from the low value of the promotion, increasing their intention to purchase the focal product.

Our explanation of the effect of vouchers highlights the theoretical importance of the activation of the comparison process. Our theory is distinct from a possible alternative that consumers are still making the comparisons after a voucher is introduced, but they simply do not apply the comparison outputs to their purchase decisions. This distinction represents the importance of identifying whether an effect is driven by the activation of a psychological process or by the application of the outputs of a psychological process (Gilbert and Hixon 1991; Higgins 1996). As of now, no experiments have been conducted to tease apart these two possibilities in the literature on intermediaries.

In this research, we report experiments that could provide a theoretical test of the two possibilities. If people make comparisons but do not apply the comparison outputs into their decisions, then the effect of vouchers should not be influenced by whether a mental comparison process is activated. If, however, vouchers reduce the tendency to compare, then activating a comparison process should reduce the effect of vouchers.

The comparison tendency explanation also makes two predictions that have not been tested previously. First, the extent to which using a voucher results in a reduction of comparison tendency can be strongly affected by the saliency of the voucher versus the saliency of the gift value. We anticipate that if the gift value information is made salient even when a voucher is used, the voucher's effect will diminish.

Second, the extent to which the promotion value influences purchase intention also depends on consumers' familiarity with the focal product. Research has demonstrated that consumers who are familiar with the products are more sensitive to the size of price discounts in bundling promotions (Harlam et al. 1995). Thus, we predict that the effect of vouchers should be more prominent among novices than among experienced consumers.

Experiment 1

Participants were randomly assigned to one of four conditions in a 2 (promotion value: high vs. low) × 2 (voucher: presence vs. absence) between-participants design. Participants were told to imagine buying a digital camera and were presented with a print advertisement of a camera (including the price information of the camera). Participants were then informed that if they were to make the purchase, they would receive a gift. The gift was a 1-TB Toshiba external hard drive in high-value promotion conditions, and a 4-GB Toshiba flash drive in the low-value promotion conditions. Participants in the voucher-absent conditions were shown pictures of the gift directly. Those in the voucher-present conditions were shown a picture of a voucher stating that participants could use it in exchange

for the specified gift. Then participants indicated their likelihood to purchase the digital camera.

We found a marginally significant main effect of promotion value, $F(1, 157) = 2.76, p = .099, \eta^2 = .017$. Participants reported a greater intention to purchase the digital camera when presented with a high-value promotion ($M = 4.09, SD = 1.39$) than low-value promotion ($M = 3.77, SD = 1.33$). Importantly, there was a significant interaction between promotion value and voucher, $F(1, 157) = 9.09, p = .003, \eta^2 = .055$. For high-value promotions (external hard drive as gift), using a voucher lowered participants' purchase intention ($M = 3.81, SD = 1.33$) as compared to presenting the gift directly ($M = 4.41, SD = 1.40; F(1, 157) = 3.95, p = .049, \eta^2 = .025$). In contrast, for low-value promotions (flash drive as gift), using a voucher increased participants' purchase intention ($M = 4.10, SD = 1.28$) as compared to presenting the gift directly ($M = 3.42, SD = 1.30, F(1, 157) = 5.19, p = .024, \eta^2 = .032$).

Experiment 2

Experiment 2 replicated the findings of experiment 1 using a design that involved decisions with real consequences. Participants decided whether to buy a toy (the product). With the purchase of the toy, they could also receive two packs of sticky notes for free (the gift). The promotion value was manipulated by changing the price of the toy. A low toy price makes a high-value promotion and a high toy price makes a low-value promotion. Participants were either shown the sticky notes directly (voucher-absence) or a printed voucher that could be exchanged for the notes (voucher-presence). Results showed that using a voucher in high-value promotions lowered the percentage of participants making the purchase from 63% to 39%, $F(1, 157) = 3.74, p = .053$. In contrast, using a voucher in low-value promotions significantly increased the percentage of participants making the purchase from 25% to 59%, $F(1, 157) = 8.87, p = .003$. The Logistic Regression returned a significant interaction between promotion value and voucher, $F(1, 157) = 11.67, p = .001$.

Experiment 3

Experiment 3 adopted a theoretical method to test the importance of comparison tendency in causing the effect. It used a 2 (promotion value: high vs. low) \times 2 (voucher: presence vs. absence) \times 2 (priming: control vs. comparison) between-participants design. We primed half participants a comparison mind-set by asking participants to make a series of irrelevant comparisons before presenting them the main product and the gift. Participants in the control priming conditions were asked to make a series of judgments that did not involve comparisons. Then participants then decided whether to buy a toy that coupled with free bookmarks (5 bookmarks in the high-value condition and 1 bookmark in the low-value condition).

We expect to replicate the results of previous experiments in the control condition. When people are primed to compare, however, the comparison tendency is enhanced by the priming and the effect of vouchers is predicted to be mitigated. Consistent with this prediction, we replicated the results in the control conditions with vouchers either increased or decreased purchase intention depending on the promotion value (interaction = 8.57, $p = .003$), but we didn't observe similar effects in the conditions where people were primed with a comparison mindset ($F(1, 157) = 1.36, p = .244$).

Experiment 4

Experiment 4 adopted a more practically meaningful method to test the mediating role of comparison tendency. It used a 2 (promotion value: high vs. low) \times 2 (voucher: presence vs. absence) \times 2 (sequence: purchase intention first vs. gift price estimate first) between-

participants design. We used the same materials from Experiment 1. Besides promotion value and voucher, we also manipulated whether consumers considered the price of the free gift before or after they indicated their purchase intention. We anticipated that making people consider the gift value before indicating their purchase intention would enhance the comparison tendency and this would consequently act against the effect of a voucher. We also measured comparison tendency at the end.

When participants indicated purchase intention before estimating gift price, the effect of voucher was replicated, $F(1, 315) = 34.66, p < .0001, \eta^2 = .099$. The bootstrap analysis revealed that the effect of a voucher on purchase intention was mediated by the measured comparison tendency ($ab = -0.11, Boot SE = 0.08, 95\% \text{ confidence interval } [-0.33 \text{ to } -0.01]$). However, when participants estimated gift price first, the effect of voucher was eliminated, $F(1, 314) = 0.04, p = .84$. The three-way interaction between promotion value, voucher, and evaluation sequence was significant, $F(1, 629) = 16.80, p < .0001, \eta^2 = .026$.

Experiment 5

In real marketing practice, marketers often state the gift price on vouchers. Experiment 5 tested how indicating the gift price on voucher affects the effect of using vouchers. It used a 2 (promotion value: high vs. low) \times 2 (voucher: presence vs. absence) \times 2 (gift price information: presence vs. absence) between-participants design. Participants were asked to imagine that they were considering buying a board game (the focal product) for an upcoming party, and that a store was running a promotion that buyers of the game would receive either four pieces of Godiva Signature Truffles (high-value promotion) or one piece of Ferrero Rocher chocolate (low-value promotion). Participants either received a picture of the gift or were presented with a picture of a voucher. In addition, half participants received no price information about the gift, the other half were informed about the market value of the gift (\$10 for Godiva and \$0.5 for Ferrero Rocher). We predict that explicitly mentioning the price of the gift will enhance comparison tendency and thus reduce the effect of using vouchers.

The effect of vouchers was replicated when participants were not informed of the gift price, with the interaction between promotion value and voucher being significant, $F(1, 395) = 8.82, p = .003, \eta^2 = .022$. However, stating gift price mitigated this effect, $F(1, 367) = 0.94, p = .334$, with three-way interaction between promotion value, voucher, and gift price information trending to significant, $F(1, 762) = 1.96, p = .162, \eta^2 = .003$.

Experiment 6

Experiment 6 used a 2 (promotion value: high vs. low) \times 2 (voucher: presence vs. absence) between-participants design to test whether the effect of vouchers is moderated by participants' previous experience of purchasing the focal product. Participants imagined to buy an electronic toothbrush with a gift. The gift was either four tubes (high-value promotion) or one tube (low-value promotion) of toothpaste. Half participants were presented with a picture of the gift, and the other half were shown a voucher which could be exchanged for the gifts. Participants also indicated their previous experience of buying electronic toothbrushes. We split the data by whether one had purchased any electronic toothbrushes before. We predict that those with past purchase experience were better equipped with price info to judge the promotion value, and thus they would be less likely to be influenced by vouchers.

As expected, the voucher effect was replicated among novices ($F(1, 634) = 45.77, p < .0001, \eta^2 = .067$) but not for experienced cus-

tomers ($F(1, 425) = 0.04, p = .85$), with three-way interaction between promotion value, voucher, and past purchase experience being significant, $F(1, 630) = 5.63, p = .018, \eta^2 = .009$.

General Discussion

Our findings further our understanding about how people process information when they are evaluating sales promotions. Although consumers usually evaluate a sales promotion by simply assessing its promotion value, our results show that when it is difficult to compare the gift value with the focal product price, such as when a voucher is introduced, consumers' purchase intention is less influenced by the promotion value.

Our findings also advance research on the effect of intermediaries. Besides inducing medium maximization (Hsee et al. 2003) and reducing the pain of paying (Prelec and Loewenstein 1998), our research suggests that the decoupling effect created by intermediaries could cause changes in how conditional promotions are evaluated. Although the most effective way of assessing a promotion is to directly compare the gift value with the focal product price, people seem unlikely to skip the intermediary (in our context, the voucher) unless they are nudged to do so.

Our findings suggest that marketers should avoid using vouchers for high-value promotions. In comparison, using a voucher that can be exchanged for a relatively inexpensive gift in conditional promotions could boost sales while minimizing promotion costs.

REFERENCES

- Chandran, Sucharita and Vicki G Morwitz (2006), "The Price of "Free"-Dom: Consumer Sensitivity to Promotions with Negative Contextual Influences," *Journal of Consumer Research*, 33 (3), 384-92.
- Feinberg, Richard A (1986), "Credit Cards as Spending Facilitating Stimuli: A Conditioning Interpretation," *Journal of consumer research*, 13 (3), 348-56.
- Gilbert, Daniel T and J Gregory Hixon (1991), "The Trouble of Thinking: Activation and Application of Stereotypic Beliefs," *Journal of Personality and Social Psychology*, 60 (4), 509.
- Harlam, Bari A, Aradhna Krishna, Donald R Lehmann, and Carl Mela (1995), "Impact of Bundle Type, Price Framing and Familiarity on Purchase Intention for the Bundle," *Journal of Business Research*, 33 (1), 57-66.
- Higgins, Edward Tory (1996), "Knowledge Activation: Accessibility, Applicability, and Salience," in *Social Psychology: Handbook of Basic Principles*, E. T. Higgins and A. W. Kruglanski, eds. New York, NY: Guilford Press.
- Hirschman, Elizabeth C (1979), "Differences in Consumer Purchase Behavior by Credit Card Payment System," *Journal of Consumer Research*, 6 (1), 58-66.
- Hsee, Christopher K., Fang Yu, Jiao Zhang, and Yan Zhang (2003), "Medium Maximization," *Journal of Consumer Research*, 30 (1), 1-14.
- Kahneman, Daniel and Amos Tversky (1984), "Choices, Values, and Frames," *American Psychologist*, 39 (4), 341.
- Kamins, Michael A, Valerie S Folkes, and Alexander Fedorikhin (2009), "Promotional Bundles and Consumers' Price Judgments: When the Best Things in Life Are Not Free," *Journal of Consumer Research*, 36 (4), 660-70.
- Kivetz, Ran (2005), "Promotion Reactance: The Role of Effort-Reward Congruity," *Journal of consumer research*, 31 (4), 725-36.
- Krishna, Aradhna, Richard Briesch, Donald R Lehmann, and Hong Yuan (2002), "A Meta-Analysis of the Impact of Price Presentation on Perceived Savings," *Journal of Retailing*, 78 (2), 101-18.
- Liu, Hsin-Hsien (2013), "How Promotional Frames Affect Upgrade Intentions," *Journal of Economic Psychology*, 39, 237-48.
- Mishra, Arul and Himanshu Mishra (2011), "The Influence of Price Discount Versus Bonus Pack on the Preference for Virtue and Vice Foods," *Journal of Marketing Research*, 48 (1), 196-206.
- Neslin, Scott A. (2002), *Sales Promotion*. Cambridge, MA: Marketing Science Institute.
- Nunes, Joseph C and C Whan Park (2003), "Incommensurate Resources: Not Just More of the Same," *Journal of Marketing Research*, 40 (1), 26-38.
- Palmeira, Mauricio M and Joydeep Srivastava (2013), "Free Offer ≠ Cheap Product: A Selective Accessibility Account on the Valuation of Free Offers," *Journal of Consumer Research*, 40 (4), 644-56.
- Prelec, Drazen and George Loewenstein (1998), "The Red and the Black: Mental Accounting of Savings and Debt," *Marketing Science*, 17 (1), 4-28.
- Raghubir, Priya (2004a), "Coupons in Context: Discounting Prices or Decreasing Profits?," *Journal of retailing*, 80 (1), 1-12.
- (2004b), "Free Gift with Purchase: Promoting or Discounting the Brand?," *Journal of Consumer Psychology*, 14 (1), 181-86.

Counterhedonic Food Consumption: How Eating “Yucky but Healthy” Food Promotes Marketplace Morality

Zhe Zhang, University of Houston, USA
Vanessa M. Patrick, University of Houston, USA

EXTENDED ABSTRACT

With rising awareness of widespread obesity and food-related health concerns, there has been an increase in the consumption of “yucky, but healthy” foods. This category of food includes items like cod liver oil, wheatgrass, kale, and, Marmite, but also foods like edible worms, ants, crickets and grasshoppers. Since the consumption of these “yucky, but healthy” foods cannot be adequately explained by the fundamental homeostatic (to maintain one’s energy balance) or hedonic (reward-based) eating pathways (Lutter & Nestler, 2009), we herein posit that this category of food consumption is driven by a counterhedonic pathway that complements the homeostatic and hedonic pathways already established in food consumption theory. To be categorized as “counterhedonic”, a food has to be “yucky, but healthy”; i.e. the food has to be unpleasant in taste/texture/flavor and generate an offensive oral experience that leads to feelings of disgust *during* the consumption process, while delivering significant health benefits (for example, edible worms, wheatgrass juice, etc.).

We further theorize that since counterhedonic food consumption entails one’s ability to withstand disgusting food in order to gain its health benefits, the retrospective evaluation of this consumption leads consumers to experience heightened moral self-regard post-consumption that translates into marketplace morality. Moral self-regard is considered as a reflective view of oneself or a moment-to-moment self-concept that answer to the question “How moral am I” (Monin & Jordan, 2009). Drawing on opponent process theory (Solomon, 1980) and the retrospective rosy view theories (Ross & Wilson, 2002; Wilson & Ross, 2001), we theorize that the primary *a* process for counterhedonic food consumption is aroused at the time of consumption by the sensory properties of unappetizing foods, which elicits feelings of disgust or oral offensiveness. Such an affective state, however, is short-lived and terminates when the stimulus is removed (when food consumption is completed). Shortly after, the opponent loop *b* process is activated by self-reflection or self-evaluation wherein overcoming the bad taste and eating something good for one’s own health is considered positive, virtuous and morally good.

Since the desire for a positive moral self-regard motivates people to engage in prosocial actions (Schaumburg & Wiltermutch, 2014), and moral affective experiences serve as the energy that drive people to do good and avoid doing bad (Kroll & Egan, 2004), we further argue that the positive moral self-regard post-consumption would orient consumers to a greater good (Keltner, 2016) and can translate to enhanced marketplace morality (Kirmani, 2015; Loureiro et al., 2016).

This research aims to make three theoretical contributions. First, we propose a novel food consumption pathway – the counterhedonic pathway – to complement and expand upon the already established homeostatic and hedonic food consumption pathways. Second, we identify a novel downstream consequence of counterhedonic food consumption – the feeling of positive moral self-regard which in turn orients consumers to a greater good and promotes prosocial behavior and marketplace morality. Third, this work lends further support to the notion that food consumption can serve as an antecedent to marketplace morality - when we eat well (physical consumption), we can also feel virtuous and do good (impact on our psychological states).

We present a set of four studies to support our theorizing (Figure 1). In study 1, we provide evidence to support our main hypothesis that counterhedonic consumption leads to greater marketplace morality. As predicted, participants perceive counterhedonic food (wheatgrass juice, $M_{\text{counterhedonic}} = 4.12$) as to be significantly more disgusting (disgusting, unpleasant, revolting, tasty (reverse coded), 1 = not at all, 7 = very much; $\alpha = .89$) than baseline homeostatic food (purified water; $M_{\text{homeostatic}} = 1.99$; $F(1, 115) = 73.14, p < .05$). However, participants in the counterhedonic condition showed heightened post-consumption morality: they were willing to donate more money to charity ($M = \$13.28$) compared to participants in the homeostatic condition ($M = \$8.63$; $F(1, 115) = 4.85, p < .05$).

Study 2 compares the counterhedonic food pathway with the higher order hedonic food pathway and provides initial support for the underlying mechanism. Results show that even counterhedonic food (Marmite spread; $M_{\text{counterhedonic}} = 4.70$) was considered significantly more disgusting than hedonic food (chocolate spread; $M_{\text{hedonic}} = 1.97$; $F(1, 84) = 62.70, p < .05$), participants in the counterhedonic condition felt significantly heightened moral self-regard compared to participants in the hedonic condition ($M_{\text{counterhedonic}} = 3.50, M_{\text{hedonic}} = 2.82$; $F(1, 84) = 5.00, p < .05$). In terms of marketplace morality (helping experimenter pick up pencils), participants in the counterhedonic condition were more likely to help the experimenter than those in the hedonic condition (63% vs. 41%, $\chi^2(1) = 4.05, p < .05$), and they also picked up more pencils ($M_{\text{counterhedonic}} = 6.39, M_{\text{hedonic}} = 3.38$; $F(1, 84) = 7.28, p < .05$). Mediation analysis indicates significant mediation by post-consumption moral self-regard on consumption type and marketplace morality (95% CI = [.0168, .5441]).

Studies 3 and 4 examine the parameters of counterhedonic consumption as well as identify boundary conditions for the effect. Specifically, study 3 shows that changing the costliness of the initial behavior by modifying a counterhedonic food (original edible worms) to look and sound tastier (chocolate covered worms) diminishes both the post-consumption moral self-regard ($M_{\text{original}} = 4.01, M_{\text{chocolate}} = 3.13$; $F(1, 153) = 10.53, p < .05$) and marketplace morality (time to volunteer for a charitable event; $M_{\text{original}} = 10.53$ hours, $M_{\text{chocolate}} = 7.28$ hours; $F(1, 153) = 7.38, p < .05$). Study 4 replicates and builds upon the findings of study 3 by illustrating that modifying the counterhedonic food to make it more hedonic or by concealing the health benefits of the food similarly diminish moral self-regard and decrease marketplace morality.

Taken together, these studies demonstrate that counterhedonic food consumption is uniquely characterized by the sensory feeling of core disgust during the consumption of a food that delivers significant health benefits. Post-consumption, these feelings of disgust are replaced by positive moral self-regard, which orients consumers to a greater good and can translate to enhanced marketplace morality.

REFERENCES

- Kirmani, A. (2015). Marketplace morality. In Diehl, Kristin and Carolyn Yoon, eds, *Advances in Consumer Research*, vol. 43. ACR Presidential Address
- Kroll, J., & Egan, E. (2004). Psychiatry, moral worry, and the moral emotions. *Journal of Psychiatric Practice*, 10(6), 352.

- Loureiro, Y. K., Bayuk, J., Tignor, S. M., Nenkov, G. Y., Baskentli, S., & Webb, D. (2016). The case for moral consumption: Examining and expanding the domain of moral behavior to promote individual and collective well-being. *Journal of Public Policy & Marketing, 35*(2), 305–322.
- Lutter, M., & Nestler, E. J. (2009). Homeostatic and hedonic signals interact in the regulation of food intake. *The Journal of Nutrition, 139*(3), 629–632.
- Monin, B., & Jordan A. H. (2009). Dynamic moral identity: A social psychological perspective. In *Personality, Identity, and Character: Exploration in Moral Psychology*, University Press, Cambridge, UK.
- Oatley, K., Keltner, D., & Jenkins, J. M. (2006). *Understanding emotions* (2nd ed.). Oxford: Blackwell Publishing.
- Ross, M., & Wilson, A. E. (2002). It feels like yesterday: Self-esteem, valence of personal past experiences, and judgments of subjective distance. *Journal of Personality and Social Psychology, 82*(5), 792–803.
- Schaumberg, R. L., & Wiltermuth S. S. (2014). Desire for a positive moral self-regard exacerbates escalation of commitment to initiatives with prosocial aims. *Organizational Behavior and Human Decision Processes, 123*(2), 110-123.
- Solomon, R. L. (1980). The opponent-process theory of acquired motivation: The costs of pleasure and the benefits of pain. *American Psychologist, 35*(8), 691–712.
- Wilson, A. E., & Ross, M. (2001). From chump to champ: People’s appraisals of their earlier and present selves. *Journal of Personality and Social Psychology, 80*(4), 572–584.

Going It Alone or Together: The Role of Product Space on Consumer Perceptions of Price Promotions

Yuli Zhang, Drexel University, USA
Hyokjin Kwak, Drexel University, USA
Marina Puzakova, Lehigh University, USA

EXTENDED ABSTRACT

Research has recently begun to illuminate the impact of an important retail atmospheric variable, namely, the allocation of shelf space to products. For instance, additional space allocated to a product in a retail setting increases product sales (Dreze et al. 1994) and facilitates greater product preferences (Sevilla and Townsend 2016). However, what is still missing from this literature is the mere effect of the existence (vs. nonexistence) of space between products on a retail shelf. Space between products is a crucial retail factor to consider because the perceptual representations of space influence people's attitudes, thoughts, and judgments (Williams and Bargh 2008). In this research, we put forward a novel idea that space between products can impact the effectiveness of a multiple (e.g., two for \$2) versus single (e.g., one for \$1) unit price promotion strategy.

We build our conceptual framework based on grounded cognition and sociocultural messages that suggest that people are likely to learn to associate spatial distance concepts with relational distance (Meier et al. 2012). Furthermore, previous research posits that the activation of the concept of relational closeness is likely to trigger thoughts involving these close others (Aron et al. 1992), whereas activating relational distance is likely to facilitate people's desires to be different from others (Mashek et al. 2011). Hence, we propose that the nonexistence of a space between products is likely to activate the concept of relational closeness which in turn leads to thinking about close others, whereas the existence of a space between products is likely to develop a sense of relational distance that in turn triggers consumers' distinctiveness motivations.

Prior research also suggests that the quantity anchor in a multiple (vs. single) price promotion motivates thoughts about large product consumption with others (Manning and Sprott 2007). As such, we propose that the nonexistence of a space between products, which enhances consumers' thinking about others, is likely to facilitate this type of thoughts and, thus, enhance the effectiveness of multiple versus single unit price promotions. In contrast, research also indicates that the quantity anchor in a multiple (vs. single) unit price promotion motivates consumers to buy multiple homogenous items (Manning and Sprott 2007). It is logical to assume that consumers with distinctiveness motivations will be less attracted to the idea of consuming multiple homogeneous products. Overall, we propose that when there is a space between products on a retail shelf, multiple (vs. single) unit price promotions would be less effective and would lead to lower purchase intentions.

Furthermore, we theorize that as product variety is more likely to satisfy consumers' desires to be different (Kim and Drolet 2003), anchoring on multiple consumption (induced by multiple unit price promotions) of a variety of products should attenuate the negative effect of multiple (vs. single) unit price promotion on purchase intentions in the space context. We also theorize that because information regarding lower product popularity is likely to reduce consumers' thoughts about consuming these less popular products with others (Zhu and Zhang 2010), anchoring on multiple consumption (induced by multiple unit price promotions) of less popular products should attenuate the positive effect of multiple (vs. single) unit price promotion on purchase intentions in the no space context.

In Studies 1 and 2, participants were presented with a shelf that displayed products either with a space or no space between them. A price promotion was manipulated by a price tag (e.g., "Now on sale, \$2.50" (single unit) vs. "Now on sale, 2/\$5.00" (multiple unit)). As predicted, participants in the space condition were less likely to purchase a product when they viewed a multiple vs. single unit price promotion (MUPP vs. SUPP) tag (Study 1: $M_{\text{multiple}} = 3.24$ vs. $M_{\text{single}} = 4.35$; $F(1, 97) = 11.51, p < .01$; Study 2: $M_{\text{multiple}} = 4.52$ vs. $M_{\text{single}} = 5.47$; $F(1, 99) = 4.22, p < .05$). In contrast, the MUPP vs. SUPP led to greater purchase intentions in the no space condition (Study 1: $M_{\text{multiple}} = 4.28$ vs. $M_{\text{single}} = 3.49$; $F(1, 97) = 5.63, p < .05$; Study 2: $M_{\text{multiple}} = 5.47$ vs. $M_{\text{single}} = 4.05$; $F(1, 99) = 9.29, p < .01$). Studies 1 and 2 find support for the positive (negative) effect of MUPP vs. SUPP on purchase intentions in the no space (space) condition. Study 2 further sheds light on the mediating effect of consumers' distinctiveness motivations (consumers' thoughts about others) on the relationship between the type of price promotions and purchase intentions in the space (no space) condition.

Study 3 examines the moderating effect of product variety in the space context. As predicted, participants presented with no product variety indicated lower purchase intentions when they were exposed to MUPP vs. SUPP ($M_{\text{multiple}} = 3.89$ vs. $M_{\text{single}} = 5.30$; $F(1, 102) = 10.33, p < .01$). In contrast, we found no significant differences in purchase intentions between MUPP and SUPP ($p > .70$) in the product variety condition. Further regression analysis results revealed a significant indirect path from product variety to purchase intentions through CNFU in the MUPP condition (a point estimate for the effect = $-.20$; 95% CI = $[-.48, -.04]$).

Study 4 investigates the moderating effect of product popularity in the no space context. Participants in the popular product condition had greater purchase intentions when they were exposed to MUPP vs. SUPP ($M_{\text{multiple}} = 5.25$ vs. $M_{\text{single}} = 3.83$; $F(1, 112) = 8.22, p < .01$). In contrast, we found no significant differences between MUPP and SUPP ($p > .90$) for participants in the less popular condition. Further regression analysis results revealed a significant indirect path from product popularity to purchase intentions through the thoughts about others index in the MUPP condition (a point estimate for the effect = $.35$; 95% CI = $[.03, .88]$).

Overall, our research is the first to establish the novel relationships between space and multiple versus single unit price promotions. This work also contributes to prior research on spatial cues by shedding new light on processes underlying the impact of space on price promotions, as well as on important boundary conditions.

REFERENCES

- Aron, Arthur, Elaine N. Aron, and Danny Smollan (1992), "Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness," *Journal of Personality and Social Psychology*, 63 (4), 596-612.
- Dreze, Xavier, Stephen J. Hoch, and Mary E. Purk (1994), "Shelf Management and Space Elasticity," *Journal of Retailing*, 70 (4), 301-26.
- Kim, Heejung S. and Aimee Drolet (2003), "Choice and self-expression: a cultural analysis of variety-seeking," *J Pers Soc Psychol*, 85 (2), 373-82.

- Manning, Kenneth C. and David E. Sprott (2007), "Multiple unit price promotions and their effects on quantity purchase intentions," *Journal of Retailing*, 83 (4), 411-21.
- Mashek, Debra, Benjamin Le, Ken Israel, and Arthur Aron (2011), "Wanting less closeness in romantic relationships," *Basic and Applied Social Psychology*, 33 (4), 333-45.
- Meier, Brian P., Simone Schnall, Norbert Schwarz, and John A. Bargh (2012), "Embodiment in Social Psychology," *Topics in Cognitive Science*, 4 (4), 705-16.
- Sevilla, Julio and Claudia Townsend (2016), "The Space-to Product Ratio Effect: How Interstitial Space Influences Product Aesthetic Appeal, Store Perceptions and Product Preference," *Journal of Marketing Research*.
- Williams, Lawrence E. and John A. Bargh (2008), "Keeping one's distance - The influence of spatial distance cues on affect and evaluation," *Psychological Science*, 19 (3), 302-08.
- Zhu, Feng and Xiaoquan Zhang (2010), "Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics," *Journal of Marketing*, 74 (2), 133-48.

Unpacking Mixed Emotions at Experiential Endings: Total Emotionality, and Differential Roles of Enjoyableness, Meaningfulness and Sociality of Experience

Xiaohua Zhao, Tsinghua University, China
Wendy Liu, University of California, San Diego, USA

EXTENDED ABSTRACT

When you realize that a positive event is coming to an end, how does the salience of its ending make you feel? This research provides a deeper understanding of this emotional state and its antecedents, and some implications for maximizing consumer experiential and emotional well-being.

Emotions research shows that people can sometimes experience complex emotional states where positive and negative emotions concur simultaneously (Williams and Aaker, 2002) and awareness of limited time will increase occurrence of mixed emotions (Carstensen, 2006). However, although previous literature focused on mixed emotions produced by endings of meaningful experiences (Routledge et al., 2011; Baumeister et al., 2013), the role of meaningfulness of the experience in this relationship remains unclear. Specially, it is unclear whether the complex emotion of happiness mixed with sadness is unique to the ending of meaningful experiences, or if complex emotions can generalize to the ending of any positive, enjoyable experiences, even when they are relatively low in meaning. Further, previous research tended to examine meaningful experiences intertwined with sociality (Hershfield et al., 2008), while in many situations meaningful experiences may not be shared with others (i.e., experiences done alone, Ratner and Hamilton, 2015). Consequently, another question that arises is whether mixed emotions at endings are also determined by the sociality of the experience. Thus one main objective of this research is to understand the emotional state of impending endings, and in particular, whether enjoyableness, meaningfulness, and sociality, are critical drivers of the mixed emotion when the experience approaches an end. We proposed that mixed emotions will occur when an enjoyable experience is approaching an end (H1), higher (vs. lower) level of enjoyableness increases mixed emotions when the experience is coming to an end, independent of meaningfulness (H2), higher (vs. lower) level of meaningfulness increases mixed emotions when the experience is coming to an end, independent of enjoyableness (H3), and sociality per se is not a driver of mixed emotions when facing an end of the experience (H4).

Another question that has not been explicitly explored in previous research is the total amount of emotionality when an experience is coming to an end. It may be heightened because of the intensified positive and negative emotions induced by endings (Loewenstein, 1987), and may also be dampened because of the decreased positive emotions and increased sadness resulted from endings. These two possibilities paint very different pictures for the emotional quality of an experiential ending, one intense (H5), and one subdued (H5a), and this research seeks to uncover which state is the more accurate description of the affective state during endings. To test our hypotheses, we conducted 3 studies and the results provide a deeper and more thorough understanding of the emotional state at experiential endings.

In study 1, we randomly assigned 456 participants, recruited through MTurk, into five conditions, which is a 2 (high vs. low enjoyableness) \times 2 (ending vs. continuing) + Control between-subjects design. For the enjoyableness manipulation, we asked participants to recall an experience which is highly enjoyable versus mildly enjoyable. For the ending manipulation, they will read a paragraph informed them there is an approaching ending of that experience versus no information about ending and they continue to enjoy that. In

the control condition, there is neither recalling task nor reading task. As the measure of the mixed emotion, we use the 19-item PANAS (Watson et al., 1988) and get the mixed emotion by MIN (happiness, sadness) (following Hershfield et al., 2008). We found that when highly enjoyable experience was recalled, people generate higher mixed emotion in the ending condition than in the no-end condition ($M_{\text{ending}} = 1.76$ vs. $M_{\text{continuing}} = 1.25$, $p=0.000$). But when the mildly enjoyable experience was recalled, people just generate marginally higher mixed emotion in the ending condition than in the no-end condition ($M_{\text{ending}} = 1.64$ vs. $M_{\text{continuing}} = 1.39$, $p=0.071$). And both in highly and mildly enjoyable experience, mixed emotion between the continuing condition and control condition has no significant difference. These results support H1 that the more intensely enjoyable the experience, the greater the increase in mixed emotions towards its ending. Besides, planned contrast analysis showed that emotionality is significantly lower in the ending condition than in the continuing condition ($M_{\text{ending}} = 3.96$ vs. $M_{\text{continuing}} = 4.48$, $p=0.000$), supporting H5a that experiential endings subdue rather than heighten one's overall emotional state (in addition to making it more mixed) than when the event is continuing.

Next, we tested the role of meaningfulness in study 2 and role of sociality in study 3. The manipulation of the meaningfulness and sociality is similar to study 1, which used the experience recalling task. The ending manipulation and dependent measures were the same as in study 1. We separated the different roles of enjoyableness and meaningfulness in study 2 and employed a 2 (high vs. low enjoyableness) \times 2 (meaningful vs. meaningless) \times 2 (ending vs. continuing) between-subjects design. A three-way ANOVA showed a main effect of ending ($p=0.000$) and a two-way interaction effect of enjoyableness and ending ($p=0.006$), but no two-way interaction effect of meaningfulness and ending ($p=0.076$) nor three-way interaction effect of enjoyableness, meaningfulness and ending ($p=0.702$). And the planned contrast results also supported H1, H2, but not H3, which means that the level of enjoyableness, but not the level of meaningfulness of an event critically determines whether one will feel mixed emotions when the event is coming to an end. Then we tested H4 in study 3, with a 2 (meaningful vs. meaningless) \times 2 (social vs. non-social) \times 2 (ending vs. continuing) between-subjects design, and as predicted, we found sociality did not impact how much mixed emotions were engendered by an approaching ending. Besides, the emotionality analysis all supported H5a.

Generally, if marketers wish to maximize total emotionality, they may not wish to make salient the ending of a positive event; on the other hand, if marketers wish to maximize mixed emotions, making the end salient is an effective way. In future research, we wish to examine negative experiences, to see whether it mirrors or reverses, and examine the downstream consequences.

REFERENCES

- Baumeister, R. F. (1991), *Meanings of life*, New York, NY: Guilford Press.
- Baumeister, R. F., Vohs, K. D., Aaker, J. L., and Garbinsky, E. N. (2013), "Some key differences between a happy life and a meaningful life," *The Journal of Positive Psychology*, 8(6), 505-516.
- Becker, E. (1973), *The denial of death*, New York, NY: Free Press.

- Bhattacharjee, A., and Mogilner, C. (2014), "Happiness from ordinary and extraordinary experiences," *Journal of Consumer Research*, 41(1), 1-17.
- Carstensen, L. L. (2006), "The influence of a sense of time on human development," *Science*, 312(5782), 1913-1915.
- Ersner-Hershfield, H., Mikels, J. A., Sullivan, S. J., and Carstensen, L. L. (2008), "Poignancy: mixed emotional experience in the face of meaningful endings," *Journal of personality and social psychology*, 94(1), 158.
- Ersner-Hershfield, H., Carvel, D. S., and Isaacowitz, D. M. (2009), "Feeling happy and sad, but only seeing the positive: Poignancy and the positivity effect in attention," *Motivation and Emotion*, 33(4), 333-342.
- Fong, C. T., and Tiedens, L. Z. (2002), "Dueling experiences and dual ambivalences: Emotional and motivational ambivalence of women in high status positions," *Motivation and Emotion*, 26(1), 105-121.
- Huta, V., and Ryan, R. M. (2010), "Pursuing pleasure or virtue? The differential and overlapping well-being benefits of hedonic and eudaimonic motives," *Journal of Happiness Studies*, 11, 735-762.
- Larsen, J. T., McGraw, A. P., Mellers, B. A., and Cacioppo, J. T. (2004), "The agony of victory and thrill of defeat: Mixed emotional reactions to disappointing wins and relieving losses," *Psychological Science*, 15(5), 325-330.
- Larsen, J. T., McGraw, A. P., and Cacioppo, J. T. (2001), "Can people feel happy and sad at the same time?" *Journal of personality and social psychology*, 81(4), 684.
- Larsen, J. T., and McGraw, A. P. (2011), "Further evidence for mixed emotions," *Journal of personality and social psychology*, 100(6), 1095.
- Loewenstein, G. (1987), "Anticipation and the valuation of delayed consumption," *The Economic Journal*, 97(387), 666-684.
- Schimmack, U. (2001), "Pleasure, displeasure, and mixed feelings? Are semantic opposites mutually exclusive?" *Cognition and Emotion*, 15, 81-97.
- Tiedens, L. Z., and Linton, S. (2001), "Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing," *Journal of personality and social psychology*, 81(6), 973.
- Ratner, R. K., and Hamilton, R. W. (2015), "Inhibited from bowling alone," *Journal of Consumer Research*, 42(2), 266-283.
- Routledge, C., Arndt, J., Wildschut, T., Sedikides, C., Hart, C. M., Juhl, J., and Schlotz, W. (2011), "The past makes the present meaningful: nostalgia as an existential resource," *Journal of personality and social psychology*, 101(3), 638.
- Vallacher, R. R., and Wegner, D. M. (1985), *A theory of action identification*, Hillsdale, NJ: Erlbaum.
- Vallacher, R. R., and Wegner, D. M. (1987), "What do people think they're doing: Action identification and human behavior," *Psychological Review*, 94, 3-15.
- Williams, P., and Aaker, J. L. (2002), "Can mixed emotions peacefully coexist?" *Journal of Consumer Research*, 28(4), 636-649.

Exercise Your Mind – Physical Activity Alters Attribute Weighing in Consumer Choice

Laura Zimmermann, London School of Economics and Political Science, UK
Amitav Chakravarti, London School of Economics and Political Science, UK

EXTENDED ABSTRACT

Across five studies we find that physical activity (PA) leads to improved decision-making in unrelated decision domains. Specifically, we find that PA (both measured and manipulated) leads consumers to weigh different pieces of information more appropriately and improves reliance on relevant product information. The results were robust to the inclusion of several control variables in the analysis.

PA has tremendous health benefits as decades of medical and epidemiological research show (e.g., Moore, et al., 2016; Morris, Heady, Raffle, Roberts, & Parks, 1953). In addition, researchers have started to investigate the complex relationship between PA, physical wellbeing and brain health. In particular, beneficial effects of PA have been found for emotional health, memory and executive functions (Hopkins, Davis, Vantieghem, Whalen, & Bucci, 2012). Overall, studies point to the direction that PA enhances cognitive functions and protects against the development of neurodegenerative diseases (Kramer & Erickson, 2007). Despite the abundant evidence of PA benefits for cognition, little research has investigated the effect of PA on judgment and decision-making. We hypothesized that both regular and single bouts of PA would lead to spillover effects on unrelated judgments and decision-making due to improved information integration. In particular, we predict that decision makers will be better able to ignore unimportant features and not neglect important features of their decision environment.

Our conjecture is based on very recent neuroscience research. Raichlen, et al. (2016) that argues that PA, such as running, represents a complex activity for the brain. It involves sophisticated, simultaneous processing and monitoring of internal and external information. According to them, areas of the brain related to cognitive functions such as planning, inhibition, monitoring, attentional switching, and multi-tasking are activated when engaging in PA. Nevertheless it remains unclear whether PA also influences how people make decisions in real-life domains that are unrelated to exercising, and how they integrate different pieces of information to make such unrelated decisions.

In particular, we investigated spillover effects of PA on two well-researched consumer decision paradigms – the desirability / feasibility choice conflict (Liberman & Trope, 1998) and the dilution effect (Meyvis & Janiszewski, 2002; Nisbett, Zukier, & Lemley, 1981). If PA improves the integration of different pieces of information, we would expect people who engage in PA to apply more appropriate weights to different decision attributes. In the feasibility-desirability choice conflict it is commonly observed that decision-makers overly focus on the desirability features and neglect feasibility features; we expect PA would lead to less or no neglect of feasibility attributes in product choices, which require trade-offs between desirability and feasibility attributes. Conversely, in the dilution paradigm (wherein people are unable to ignore irrelevant information and end up “diluting” their judgments) this would lead to smaller or no dilution effects in product judgments when consumers are faced with irrelevant information.

In studies 1-3 we find that PA affects how decision-makers make desirability-feasibility trade-offs in consumer decisions. Usually, decision-makers tend to overly contrite on the desirability considerations, often at the expense of feasibility considerations. Our

findings indicate that PA leads consumers to focus less overly on desirability and consider feasibility criteria more in choices that require trade-offs.

In Study 1 we tested exercisers before vs. after visiting a gym (N=90) in a consumer choice task that required making trade-offs between feasibility and desirability attributes (adapted from Liu, 2008). Participants were asked to imagine they wanted to go on a hiking trip and were presented two options. One of them was characterised by high desirability (*scenery with creeks and waterfalls*) and low feasibility (*limited parking, 70 miles away*). The other option was characterised by low desirability (*scenery with boulders and bushes*) and high feasibility (*plenty of parking, 40 miles away*). Participants were asked to choose between both options and to rate how much they focused on the desirability attribute and the feasibility attribute. Results showed that participants considered desirability and feasibility attributes more equally *after* exercising compared to before ($F(1, 88) = 4.64, p = .034$). The results were robust to the inclusion of several control variables in the analysis.

Study 2 (N=257, online) compared participants who engage in regular PA to non-active individuals. Non-active individuals rated their likelihood to purchase a high desirability/low feasibility option significantly higher than their likelihood to purchase a low desirability/high feasibility option ($M_{\text{HDLF}} = 61.00$ vs. $M_{\text{LDHF}} = 44.79$). Regular PA individuals on the other hand showed no difference in their likelihood to purchase ($M_{\text{HDLF}} = 53.11$ vs. $M_{\text{LDHF}} = 52.89, F(1, 253) = 4.24, p = .041$).

Study 3 (N=59, parkrun UK) shows that regular runners with significantly better average 5 kilometre running performances tended to choose a low desirability/high feasibility option rather than a high desirability/low feasibility option ($\chi^2(1) = 4.87, p = .027, \beta = -.134, p = .042$). Overall, these findings indicate that PA leads decision-makers to focus less overly on desirability and consider feasibility criteria more when making choices that require trade-offs.

In studies 4 and 5 (total N=527, online), we find that regular PA seems to improve a decision-maker’s ability to rely on relevant vs. irrelevant information. When faced with irrelevant product information, consumers find it difficult to ignore irrelevant information, and typically “dilute” their judgments (i.e., their product judgments are lower). Two studies reveal that PA aids people’s ability to focus on relevant information and ignore irrelevant information in product judgments. When faced with irrelevant information in addition to relevant information, sedentary subjects significantly diluted (i.e., lowered) their product judgments. However, there was no significant dilution effect for PA individuals ($F(1, 283) = 4.56, p = .033$).

Across these sets of studies, it appears that PA leads decision-makers to weigh different pieces of information more appropriately. The results remain unchanged after controlling for various confounding variables including demographics (e.g., education and income), affect and personality traits (e.g., conscientiousness). Our findings have important implications since they extend the benefits of PA to a novel and important domain - attribute weighing in consumer decision-making. Finally, our findings shed light on potential remedies against bias in situations when people tend to underweight the importance of feasibility attributes and overweight irrelevant information.

REFERENCES

- Hopkins, Michael E., Caroline F. Davis, Michelle R. VanTieghem, Paul J. Whalen and David J. Bucci (2012), "Differential Effects of Acute and Regular Physical Exercise on Cognition and Affect," *Neuroscience*, 215, 59-68.
- Kramer, Arthur F. and Kirk I. Erickson (2007), "Capitalizing on cortical plasticity: influence of physical activity on cognition and brain function," *Trends in Cognitive Sciences*, 11, 342-348.
- Liberman, Nira and Yaacov Trope (1998), "The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory," *Journal of Personality and Social Psychology*, 75, 5-18.
- Liu, Wendy (2008), "Focusing on Desirability: The Effect of Decision Interruption and Suspension on Preferences," *Journal of Consumer Research*, 35, 640-652.
- Meyvis, Tom and Chris Janiszewski (2002), "Consumers' beliefs about product benefits: the effect of obviously irrelevant product information," *Journal of Consumer Research*, 28, 618-635.
- Moore, Steven C., I-Min Lee, Elisabete Weiderpass, Peter T. Campbell, Joshua N. Sampson, Cari M. Kitahara, et al. (2016), "Association of Leisure-Time Physical Activity With Risk of 26 Types of Cancer in 1.44 Million Adults," *Jama Internal Medicine*, 176, 816-825.
- Morris, Jeremiah N., Heady, J. A., Raffle, P. A. B., Roberts, C. G. and Parks, J. W. (1953), "Coronary Heart-Disease and Physical Activity of Work," *Lancet*, 265, 1111-1120.
- Nisbett, Richard E., Henry Zukier and Ronald E. Lemley (1981), "The dilution effect: Nondiagnostic information weakens the implications of diagnostic information," *Cognitive Psychology*, 13, 248-277.
- Raichlen, David A., Pradyumna K. Bharadwaj, Megan C. Fitzhugh, Karl A. Haws, Gabrielle-Ann Torre, Theodore P. Trouard et al. (2016), "Differences in Resting State Functional Connectivity between Young Adult Endurance Athletes and Healthy Controls," *Front Hum Neurosci*, 10, 1-14.

Videography 2017

Luxurious Emirati Weddings: The Expenses, Pressures and Consequences

Damien Arthur, Zayed University, UAE
Sara Mohamed Al Marzooqi, Zayed University, UAE
Nuha Nasser Salem Al Amri, Zayed University, UAE

Intended Contribution to Knowledge: This videography explores a ritual and site that due to religious and cultural norms is typically not for public broadcast. It is the first study to date to systematically analyze the expenses pressures and consequences associated with luxurious Emirati Weddings. It provides a unique insight into a closed culture where traditional rituals and values exist but have been warped by wealth and commercialization. **Literature Foundations:** This videography builds on the work of Russell Belk Rana Sobh and their colleagues (2011 2012 2013 2014) who explored how the concepts of hospitality privacy mimetic excess and gendered spaces are enacted by the people of the Arabian Gulf. **Research Method:** In-depth interviews and focus groups were undertaken with Emirati brides grooms mothers of grooms wedding attendees wedding planners and venue managers. As society's norms encourage women to protect their image a major obstacle we overcame was depicting the female-only wedding reception without filming the occasion (as it is prohibited) and finding Emirati women willing to be interviewed on camera about the sensitive topic of marriage. To itemize the costs and quantify the pressures associated with hosting an Emirati wedding an online self-completion survey of 44 Emirati brides and 50 mothers of Emirati grooms was also conducted. **Findings and implications:** The omnipresent forces of culture religion and wealth have combined to normalize the commercialized and luxurious weddings of the indigenous people of the UAE. The average cost of hosting an Emirati wedding is now over US \$185000. It is being driven largely by normative pressure to conform and avoid criticism that may impact family honor. Cultural values of hospitality and generosity also promote excess and are at odds with the Islamic value of modesty. Concerns about the cultural and societal impact exist however the population exhibit little will to change.

Envisioning How New Technologies Can Fulfill Customers' Unmet Needs

Yaliang Chuang, Eindhoven University of Technology, The Netherlands
Yu-Shan Athena Chen, Eindhoven University of Technology, The Netherlands
Lin-Lin Chen, National Taiwan University of Science and Technology, Taiwan
Yung-Hsun Chen, National Taiwan University of Science and Technology, Taiwan

Intended Contribution to Knowledge: Undeniably home is the most important environment for human beings. This study investigates customers' unmet needs develops design concepts with new IoT technologies envisions the values for family members and reveals its impact on human life and interpersonal relationships. **Literature Foundations:** The videography contributes to the literature regarding human-centered design and the acceptance and diffusion of innovation. We demonstrate the contextual approach in finding customers' unspoken needs from their living contexts. **Research Method:** Our focus is to reveal how future technology impacts interaction among household members. There are five folds of studies. First ten families (with 2-6 household members and living in 712-1300 m2 living space) were longitudinal followed and interviewed. Second employing the thematic analysis six critical needs in home environment were consolidated. Third through multidisciplinary workshops three value propositions were identified for generating a hundred ideas. Fourth the video prototyping was used to sketch the user experiences. Finally a focus group was conducted to gather target consumers' feedbacks purchasing attitudes and marketing potentials. **Findings and implications:** Our first contribution is the five unmet needs for household markets: a house with emotional intelligence having an adaptive atmosphere singing songs everywhere as you wish collecting living memories and the assistance of parenting. These scenarios could assist marketers and designers to scheme the future home environment. Then we consolidate two value propositions which enhance consumers' well-being and life satisfaction. First the home environment should provide emotional fulfillments. Second it could bridge the parent-children communications and educate the young children to build their routines that are compatible to the parents. Those concepts were envisioned in the videography and validated by eight target customers participated in the focus group discussion. The smart home is expected to ease tensions and bring happiness to family members.

Excessive Online Gaming: Inside the Routine of an E-Sports Fanatic

Thiago Rafael Ferreira Marques, SENAC, Brazil
Tania Veludo-de-Oliveira, Escola de Administração de Empresas de São Paulo da Fundação Getulio Vargas – FGV EAESP, Brazil

Although playing digital games online is an enjoyable experience literature reveals that playing online excessively in extreme cases may lead to symptoms commonly related to addiction such as alienation from the real world degradation of academic performance loss of sense of Time mood swings and so on (Chiu Lee & Huang 2004). Therefore there is a need to study the motivations that lead to excessive behavior with the aim to outline new strategies to prevent the abusive consumption of online games (Kuss & Griffiths 2012). The objective of this videography is to identify these motivations and analyze how they interact in the context of competitive online games (e-sports). A series of in-depth interviews (20) was conducted with players of Dota 2 and Counter strike who closely follow the competitive scene of these games. It was observed that much of the players' experience is anchored in the social relations and friendship created within the game circle and by the competitive mindset of the players. The informants reported a high perception of flow state during the online gaming experience which corroborates the findings of previous studies (e.g.: Lee 2009). Flow's perception was found to be a highly influential factor of the behavior in question. The informants also reported a strong identification with the professional players who serve as role models to them. The mimicry

of their role models' gaming behavior as seen in the consumer doppelganger effect (Ruvio Gavish & Shoham 2013) further explains the excessive gaming. The videography contributes with rich insights to deal with abusive e-sports online gaming. It offers important subsidies for the creation of marketing cues which could drive consumers away from both the near-addictive or addictive stages of behavior (Martin et al. 2013) and closer to a healthy consumption habit.

Searching for RNGesus: A Study on the Use of Randomization in Video Games

Jacob Hiler, Ohio University, USA
William Northington, Idaho State University, USA
Laurel Cook, West Virginia University, USA

The discussion of randomization in marketing up until this point has focused primarily on its use as an experimental methodological tool. This study however focuses on studying intentional randomization in consumer experiences notably in the video game industry. The focus of this study is to explore both how randomization is employed by developers in video games as well as how it is experienced and perceived on the part of their consumers. As Kozinets (2015) suggests in *Netnography Redefined* more netnographic attention needs to be placed on video websites such as YouTube and Twitch rather than textual data in online forums and communities especially since many online communities and much of the discourse are moving to more video based discussions. Thus using this netnographic videography approach the filmmakers immersed themselves in over 25 hours of user-generated video content shared publicly on YouTube and Twitch and various user-generated text commenting on the nature of the random across various forums comment sections and reddit.

Tomorrowland Festival: A Journey in Devirotopia

Julie Masset, University of Namur, Belgium
Alain Decrop, University of Namur, Belgium

Intended contribution: Each year the music festival 'Tomorrowland' gathers in Belgium about 180000 people who come from all over the world. A large number of festival-goers walk around with national flags accessories or fancy dresses which makes the festival unique. This research investigates consumers' identity construction and expression through such material objects. Few studies have explored identity issues related to a music festival and the paraphernalia consumed during a festival. Literature: This videography relies on consumer research literature related to the meanings of objects (i.e. the role of material objects in consumers' identity construction) and the consumption experiences (e.g. experiential marketing). Methodology: Through a naturalistic interpretive approach we interviewed 29 informants of both genders and of different ages nationalities educational levels and professional statuses. We also observed the festival and camping sites and the behaviors of festival-goers. Findings and implications: Emerging from data analysis and interpretation this videography documents various profiles of festival-goers from their material possessions (i.e. the patriot the devotee the child the bohemian girl and the provocateur) as well as the functions fulfilled by these possessions in their identity construction (i.e. national pride egological exhibitionism universal brotherhood and normalized deviation). We also propose two more original interpretations that enhance our contribution to the literature. First the consumption of paraphernalia used at Tomorrowland is typical of a cathartic release of inner tensions and emotions. The festival creates an "absorbing experience" that allows a "controlled decontrolling of emotions" in an increasingly disenchanted and ruled contemporary world. Second referring to Foucault's concept of heterotopia the festival can be considered as a heterotopia of deviation because many festival-goers take benefit from Tomorrowland to regress and/or transgress societal rules and norms. The film illustrates a series of ritualized and commoditized deviant behaviors taking place in the fantasy and idle context of the festival.

Becoming the Character: The Cosplayer Experience in a Con

Stefânia Ordovás de Almeida, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil
João Pedro Fleck, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil
Rafael Mello, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil

Intended Contribution to Knowledge: This study aims at contributing to the knowledge on the role played by the consumer when he produces elements of his consumption experience (WEIJO 2016) and to understand how this process might be used to contribute to their personal development (RYFF & SINGER 2008). Literature Foundations We know that many products can generate unique experiences that wouldn't happen without their usage (e.g. surfboard GUEVARRA & HOWELL 2015) however with few exceptions (such as SEREGINA & WEIJO 2016) we know little about how the consumer can play an active role in taking this products to consumption environments and how this can create positive experiences that contribute to them as persons. - Research Method: The study involved a participant observation on 12 days of geek culture events and cons and also 14 interviews were videorecorded. Field notes and interviews were transcribed and read many times leading to the interpretation of results according to ideas of Spiggle (1994); McCracken (1988); and Arnould and Wallendorf (1994). -Findings and implications: As the cosplayers bring a product with them to the conventions they dedicate themselves to change their consumption experience generating a new set of behaviors and meanings. Many consume these events as a form of enjoyment however there are some the consume the events aiming at living a significant experience that can be also a personal challenge for them such as overcoming shyness or the lack of skills therefore the consumption ends up being a form of personal growth.

Re-Assembling: Social Entrepreneurship, Motorcycles and Cast-Away Youth

Joonas Rokka, EMLYON Business School, France

Joel Hietanen, Aalto University, Finland

Klaus Kangaspunta, Finland

John Schouten, St. John University, Canada

“Re-assembling” is a videography that explores the notion of social entrepreneurship in the context of how ‘cast-away’ youth with little or no marketable professional skills can be brought back to working-life and re-connected with meaningful lives and sustainable ways of being. The film unfolds as a story about and around our social entrepreneur. Working at his “workshop” where bikes and motorbikes are re-assembled from abandoned lost or used parts often discovered from trash or parts re-circulated in second-hand bike market. The parts are carefully re-worked re-connected and put together as unique beautiful manually crafted bikes that are then sold or traded forward. But he not only re-assembles and sells bikes. He has a broader mission and calling that links his workshop with a social cause. For three years he has started to bring along youngsters often from difficult backgrounds to his workshop to learn what he calls ‘basic life skills’. It is this ongoing re-assembling – of both material objects but also humans – that the film examines and its implications for conceiving potential new forms of social entrepreneurship. We thus seek to illuminate how the new form entrepreneurship performed in one field – such as the practice of motorcycle construction – via accumulation of resources (material social networks and skills) may engender potential for the possibility for translating those resources to simultaneously addressing a social cause – here by supporting the cast-away youngsters. In this way we hope to increase understandings about the work and challenges of such social entrepreneurship.

Stealing from the Rich

Stefan H. Szugalski, Stockholm School of Economics, Sweden

Jonas Colliander, Stockholm School of Economics, Sweden

Magnus Söderlund, Stockholm School of Economics, Sweden

Sofie Sagfossen, Stockholm School of Economics, Sweden

Intended Contribution to Knowledge: We explore the effects bad behavior might have and look at this from a marketplace morality perspective. Researchers have mainly focused on good and bad behavior as two different acts. With this videography we expect to widen the knowledge on morality in the marketplace and specifically add perspectives on self-interest. We extend knowledge by revealing how economical and other self-interests contradict each other. We discuss personal desires and the effects the experience of winning may have on a group of people to the extent that it might impact a whole town. **Literature Foundations:** The theoretical foundation of the study is the assumption that a marketplace of morality is a market of morality inputs and outputs (Dunfee 1988). Here we study a case in which a person donated money (good behavior) to a sports organization which were obtained illegally (bad behavior) and investigate the possible positive effects of it. What really makes this case interesting from a research perspective is that the person that carried out the dishonest behavior was also the one who lost money as the funds were embezzled from his family business. **Research Method:** The empirical base is an interview with the person that carried out the illegal act (the input). We also conducted interviews with people living in the town where it all took place. Together with secondary data (articles from 2003-2010) this gave us a ground to explore the impact a “winning culture” might have on collective well-being (the output). **Findings and implications:** We extend the knowledge on the possible positive effects immoral behavior may have on the marketplace and about value-transfer in the marketplace. This story sheds light on the impact of winning and demonstrates how experiences can increase well-being in a way that products do not.

Roundtable Summaries

ROUNDTABLE **The Evolution of Signals**

Participants:

Russ Belk, York University, Canada
Silvia Bellezza, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA
James R. Bettman, Duke University, USA
David Gal, University of Illinois at Chicago, USA
Anat Keinan, Harvard University, USA
Amna Kirmani, University of Maryland, USA
Ayalla Ruvio, Michigan State University, USA
Yajin Wang, University of Maryland, USA
Morgan K. Ward, Emory University, USA
Caleb Warren, University of Arizona, USA

Consumers leverage the symbolic nature of products to signal unobservable characteristics such as identity or status. Due to their symbolic nature the meaning and hence use of signals is constantly evolving. This roundtable discussion explores open questions regarding the antecedents and consequences of signal evolution.

ROUNDTABLE **Expanding the Horizons of Videographic Consumer Research**

Participants:

Russell Belk, York University, Canada
Robert Kozinets, University of Southern California, USA
Brownlie Douglas, University of Dundee, UK
Paul Henry, University of Sydney, Australia
Joel Hietanen, Aalto University, Finland
Eric Li, University of British Columbia, USA
Jacob Ostberg, Stockholm Business School, Sweden
John Schouten, University of St. John, Canada
Baptiste Cléret, University of Rouen, France
Anastasia Seregina, Aalto University, Finland

The purpose of this roundtable is to map out and explore the future directions for videography in consumer research. While only limited ontological epistemological and methodological accounts readily exist to assist videographers this session intends to explore potential new pathways for video-based theorizing and the production of consumer research knowledge.

ROUNDTABLE

Friends with Money: The Interplay of Social and Financial Well-Being

Participants:

Jonathan Z. Berman, London Business School, UK
James R. Bettman, Duke University, USA
Cynthia E. Cryder, Washington University, USA
Elizabeth W. Dunn, University of British Columbia, Canada
Gavan J. Fitzsimons, Duke University, USA
Cassie Mogilner Holmes, University of California Los Angeles, USA
Michael I. Norton, Harvard University, USA
Jenny G. Olson, Indiana University, USA
Colbey Emerson Reid, North Carolina State University, USA
Scott Rick, University of Michigan, USA
Avni M. Shah, University of Toronto, Canada
Stephen A. Spiller, University of California Los Angeles, USA
Abigail B. Sussman, University of Chicago, USA
Kathleen D. Vohs, University of Minnesota, USA
Lisa A. Cavanaugh, University of British Columbia, Canada

As in everyday life discussions of consequential financial decisions and social processes have been largely separate in consumer behavior and psychology. This roundtable will consider how work on decision-making financial behavior social dynamics and interpersonal relationships can inform one another to better understand how these domains interact in consumer's lives.

ROUNDTABLE

Everyday Consumer Aesthetics

Participants:

Lauren Block, Baruch College, USA
Laura Peracchio, University of Wisconsin - Milwaukee, USA
Claudia Townsend, University of Miami, USA
Mario Pandelaere, Virginia Tech, USA
Ravi Mehta, University of Illinois at Urbana-Champaign, USA
JoAndrea (Joey) Hoegg, University of British Columbia, Canada
Maureen Morrin, Temple University, USA
Aradhna Krishna, University of Michigan, USA
Maura Scott, Florida State University, USA
Luca Cian, University of Virginia, USA
Henrik Hagvtedt, Boston College, USA
Adriana Madzharov, Stevens Institute of Technology, USA
Kelly Herd, Indiana University, USA
Maura Scott, Florida State University, USA
Martin Reimann, University of Arizona, USA
Theodore Noseworthy, York University, USA
Xiaojing Yang, University of Wisconsin – Milwaukee, USA
Xiaoyan Deng, Ohio State University, USA
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Lei Jia, Ohio State University, USA
Rita To, University of Houston, USA
Zhe Zhang, University of Houston, USA
Tim Doering, University of Michigan, USA
Julio Sevilla, University of Georgia, USA

Everyday consumer aesthetics is defined as “non-art non-nature aesthetic experiences that are diverse and dynamic and result in specific consumer actions (e.g. purchasing) and consumption behaviors” (Patrick 2016). The roundtable will discuss the current state of the literature related research areas and future directions for this sub-field of consumer behavior.

ROUNDTABLE

Theoretical Advances in Consumer Neuroscience: How Affective, Cognitive, and Social Neuroscience Informs Consumer Behavior (and Vice Versa)

Participants:

Clark Cao, University of Arizona, USA
Adam Craig, University of Kentucky, USA
Raquel Castaño, Tecnológico de Monterrey, Mexico
Moran Cerf, Northwestern University, USA
Angelika Dimoka, Temple University, USA
Bill Hedgcock, University of Iowa, USA
Hilke Plassmann, INSEAD, France
Martin Reimann, University of Arizona, USA
Ale Smidts, Erasmus University Rotterdam, The Netherlands
Carolyn Yoon, University of Michigan, USA

During the roundtable participants will debate theoretical advances in consumer neuroscience especially how concepts from affective cognitive and social neuroscience can inform consumer research and vice versa. The roundtable aims to develop directions for theory development and testing in the field of the neurophysiology of consumption.

ROUNDTABLE

Conspicuous Consumption Revisited in the Digital Era

Participants:

David Dubois, INSEAD, France
Paurav Shukla, Essex University, UK
Valentina Clergue, HEC Lausanne, Switzerland
Bruno Kocher, HEC Lausanne, Switzerland
Leif Brandes, Warwick University, UK
Martin Liu, Nottingham University, Ningbo Campus, China
Teck Y. Eng, University of Southampton, UK
Julia Wolny, University of Southampton, UK
Chunyan Xie, Western Norway University of Applied Sciences, Norway
Lily Wang, Zhejiang University, China
Elodie Caucigh, University of Vienna, Austria
Jeff Lee, NYU Shanghai, China
Nailya Ordabayeva, Boston College, USA

Digital technology including social media challenge fundamental premises of luxury brands including exclusivity status authenticity and sensory experiences. Digital luxury experiences differ from their offline counterparts and brought forward terms like “webmosphere” or “luxemosphere” indicating new approaches. Little is known about the underlying mechanisms manifested in these new phenomena.

ROUNDTABLE

What is a Consumption Experience?

Participants:

Richard Lutz, University of Florida, USA
Hope Jensen Schau, University of Arizona, USA
David Mick, University of Virginia, USA
Deborah Macinnis, University of Southern California, USA
Cassie Mogilner Holmes, University of California Los Angeles, USA
Rebecca Hamilton, Georgetown University, USA
Markus Giesler, York University, Canada
Robin Coulter, University of Connecticut, USA
Eileen Fischer, York University, Canada
Linda Price, University of Oregon, USA

Consumption experience is the heart of consumer behavior and value creation. This roundtable will explore several questions related to consumption experiences. What is a consumption experience and its most important dimensions? How do we study each dimension? How can we develop a more comprehensive view of consumption experience? This session integrates diverse perspectives and methodologies to guide research investigating how consumption experience drives value creation.

ROUNDTABLE
Charting the Future of the Transformative Consumer Research Movement

Participants:

David Mick, University of Virginia, USA
Cornelia Pechmann, University of California Irvine, USA
Maura Scott, Florida State University, USA
Martin Mende, Florida State University, USA
Janet McColl-Kennedy, University of Queensland, Australia
Lucie Ozanne, University of Canterbury, New Zealand
Chris Blocker, Colorado State University, USA
Andres Barrios, Universidad de los Andes, Colombia
Laurel Anderson, Arizona State University, USA
Jeff Murray, University of Arkansas, USA
Lauren Block, Baruch College, USA
Linda Price, University of Oregon, USA
Madhu Viswanathan, University of Illinois, Urbana-Champaign, USA
Leonard Lee, National University of Singapore, Singapore
Beth Vallen, Villanova University, USA
Karen Winterich, Penn State, USA
Laura Peracchio, University of Wisconsin Milwaukee, USA
Rodrigo Castilhos, Universidade Federal do Rio Grande do Sul, Portugal
Samuelson Appau, University of Melbourne, Australia
L. Lin Ong, Cal Poly Pomona, USA
Marcus Phipps, University of Melbourne, Australia
Shikha Upadhyaya, California State University Los Angeles, USA
Emily C. Tanner, West Virginia University, USA
Elizabeth Crosby, University of Wisconsin, USA
Christopher Berry, Colorado State University, USA
Sterling Bone, Utah State University, USA
Daniele Mathras, Northeastern University, USA
Kelly Haws, Vanderbilt University, USA
Zafeirenia Brokalaki, Kings' College London, UK

Transformative Consumer Research leaders from the advisory committee or past conference track chairs organize five task force discussions around key challenges and opportunities facing the movement. Each task force will present initial recommendations and then seek questions and input from ACR roundtable attendees for a strategic planning report.

ROUNDTABLE
Toward an Integrated Understanding of Resource Scarcity

Participants:

Andrea Morales, Arizona State University, USA
Angela Lee, Northwestern University, USA
Anthony Salerno, University of Cincinnati, USA
Anuj Shah, University of Chicago, USA
Brent McFerran, Simon Fraser University, Canada
Chiraag Mittal, Texas A&M University, USA
Danit Ein-Gar, Tel Aviv University, Israel
Darren Dhal, University of British Columbia, Canada
Debora Thompson, Georgetown University, USA
Deborah Roedder John, University of Minnesota, USA
Eesha Sharma, Dartmouth College, USA
Juliano Laran, University of Miami, USA
Julio Sevilla, University of Georgia, USA
Kirk Kristofferson, Arizona State University, USA
Lan Nguyen Chaplin, University of Illinois at Chicago, USA
Liat Levontin, Israel institute of Technology, Israel
Meryl Gardner, University of Delaware, USA
Rebecca Hamilton, Georgetown University, USA
Rebecca Ratner, University of Maryland, USA
Sarah Hill, Texas Christian University, USA
Kristina Durante, Rutgers University, USA

This roundtable aims to encourage constructive discussion and create a space for researchers interested in resource scarcity to start integrating the different definitions operationalizations and findings from extant scarcity research into a coherent framework in order to identify gaps requiring further attention and share ideas that will stimulate future collaborations.

Working Papers

17-D: Friends with Benefits: Social Support and Pain of Payment

Deborah Abrams, Georgia Tech, USA
Samuel Bond, Georgia Tech, USA
Michael Lowe, Georgia Tech, USA

This research demonstrates how social presence through its effect on social support can attenuate pain of payment. Studies 1 and 2 show a direct negative effect of social presence on pain of payment as well as a mediating effect of social support.

13-J: The Effect of Stress on Consumers' Private Information Disclosure

Sinem Acar-Burkay, University College of Southeast Norway, Norway
Bob M. Fennis, University of Groningen, The Netherlands

Consumer privacy in the age of big data is an important research topic for consumer researchers. In two studies we examine how stress affects private information disclosure. Results show that stress increases consumers' likelihood of answering highly-sensitive and even incriminating questions affirmatively while potentially making them susceptible to privacy risks.

20-U: Who are the Influentials? Social Media, Opinion Leadership and New Product Adoption

Duygu Akdevelioglu, University of California Irvine, USA
Selcan Kara, University of Massachusetts, Dartmouth, USA

This research examines how innovativeness and extraversion influence self-reported and sociometric opinion leadership in social media which affect new product adoption. Findings contribute to extant work on new product adoption by showing that self-reported leadership and sociometric leadership are distinct characteristics because they act differently in their nomological networks.

8-E: Jeitinho Brasileiro: Understanding Financial Vulnerability from a Cultural Perspective

Rafaela Almeida Cordeiro, Escola Superior de Propaganda e Marketing, Brazil
Nancy Wong, University of Wisconsin - Madison, USA
Mateus Ponchio, Escola Superior de Propaganda e Marketing, Brazil

The current research provides a unique context in showing how financial vulnerability is jointly shaped by weak policies and consumer values. It contributes to market system dynamics in explaining how culture and social capital shape consumer resistance and coping strategies in the Brazilian marketplace.

9-FF: Emotional Labor and Emotional Intelligence in Healthcare Delivery Organizations: The Case of Medicaid Recipients

Eklou Amendah, Southern New Hampshire University, USA
Adrienne Hall-Phillips, Worcester Polytechnic Institute, USA

For healthcare providers serving Medicaid recipients emotions play an important role when managing beneficiaries and recipients. The study aims to demonstrate that service recipient characteristics and work environment challenges moderate the relationship between emotional intelligence and emotional labor when Medicaid beneficiaries are being served by healthcare organization employees.

2-U: The Effect of Healthcare Product Type and Anthropomorphized Brand Role on Consumer Judgments

Jiyoon An, University of Rhode Island, USA
Daniel Sheinin, University of Rhode Island, USA

Drugs and dietary supplements are now often available in the same distribution channels. Drugs are heavily-regulated medical products while dietary supplements are lightly-regulated food products. This paper explores whether anthropomorphized brand role (servant versus partner) changes perceptions about these products and intentions to engage in healthy behaviors.

1-F: Grotesque Imagery Enhancing Persuasiveness of Luxury Brand Advertising

Donghwy An, Hongik University, South Korea
Chulsung Lee, Hongik University, South Korea
Janghyun Kim, Korea Christian University, South Korea
Nara Youn, Hongik University, South Korea

The current research examines consumers' perceived fit between grotesque imagery and luxury branding. We showed that the fit between grotesque imagery and luxury brand advertising facilitates transportation which in turn enriches brand experience and increases purchase intention of the featured product.

1-A: Art Appreciation Opens Affirmed Minds to Cultural Diversity

Donghwy An, Hongik University, South Korea
Boram Lee, Hongik University, South Korea
Nara Youn, Hongik University, South Korea

Appreciating artworks enhanced endorsement of cultural diversity for individuals with high self-affirmation (Study 1) and for those with authentic pride but not for those with hubristic pride (Study 2). The effect of art appreciation was significant for narcissistic individuals only when their openness to cultural diversity was publicized (Study 2).

13-G: New with Tags: Consumer and Brand Relationships in Consumer-to-Consumer Buy/Sell/Trade Groups on Social Media

Catherine Armstrong Soule, Western Washington University, USA
Sara Hanson, University of Richmond, USA

This paper introduces and explores the emerging and impactful phenomenon of branded consumer-to-consumer buy/sell/trade groups on social media. These groups are independently organized marketplaces where consumers buy and sell one focal brand exclusively. Through in-depth interviews field data scraped from Facebook and survey data we identify brand and retailing implications.

14-I: Signaling Nothing: Conspicuous Anti-Consumption in Demarketing Contexts

Catherine Armstrong Soule, Western Washington University, USA
Tejvir Sekhon, Western Washington University, USA

This paper explores the link between status-signaling and demarketing. The anti-consumption resulting from demarketing strategies does not have a public display of virtuous behavior. We test whether an observable signal can motivate anti-consumption by providing status-signaling opportunity and whether this signal benefits the anti-consumer as well as the demarketing brand.

19-A: The Interactive Effect of Type and Framing of Discounts on Consumers' Preference

Amin Attari, University of Kansas, USA
Promothes Chatterjee, University of Kansas, USA
Surendra Singh, University of Kansas, USA

This article investigates consumers' preference for probabilistic versus sure discounts across two frames the amount of discount frame and the reduced price frame. We show that consumers' preference between the sure and probabilistic discounts can reverse depending on the type of frame used to present the discount.

13-K: The Fit Between Depth of Self-Disclosure and Self-Construal on Consumer Evaluations in Peer-to-Peer Markets

Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand
Ashesh Mukherjee, McGill University, Canada
Dan King, University of Texas Rio Grande Valley, USA

Peer-to-Peer markets (P-to-P) are platforms where individual sellers exchange products with individual buyers. Based on a fit-fluency framework the present research shows that depth of disclosure in peer-to-peer markets has a positive effect on product evaluation when self-construal is interdependent but this positive effect is eliminated when self-construal is independent.

9-GG: Narrative Engagement: A Model for Suicide Prevention

Caroline Graham Austin, Montana State University, USA
Sarah Keller, Montana State University, USA

This paper explores one community-based approach to addressing suicide. Narrative engagement encourages people to collectively share personal stories yielding information about shared perceptions attitudes and beliefs. Such community engagement shines light into "dark closets" reducing stigma and isolation. Identifying communal strengths and weaknesses builds resiliency and identifies potential resources.

11-J: Moral Legitimation of Hybrid Consumption Practices: A Study of Gluten-Free Lifestyles

Ana Babic Rosario, University of Denver, USA

This study explores how consumers legitimize hybrid consumption practices such as gluten-free eating to support their identity work. Based on netnographic interview and archival data several consumer strategies for moral legitimation were identified. The insights extend the work on consumer and practice legitimation to the context of hybridized cultural forms.

14-U: Seeing Through Consumer: Predicting Consumer Preferences and Choices by using Deep Learning Neural Networks

Marija Banovic, Aarhus University, Denmark
Vladan Arsenijevic, Seven Bridges Genomics, Serbia

Training neural networks with consumer data can critically change marketing practice. This research shows that consumer choices can be predicted by usage of deep learning neural networks. Apart from prediction of what consumer is most likely to select we can optimize the product to fit consumer's preferences.

5-M: Saved by the Past? Activated Disease Threat Promotes Consumer Preferences for Nostalgic Products

Dovilė Barauskaitė, ISM University of Management and Economics, Lithuania
Justina Gineikienė, ISM University of Management and Economics, Lithuania
Bob M. Fennis, University of Groningen, The Netherlands

Consumer research experienced a surge in interest in when and why consumers prefer nostalgic products. The present work complements this literature by examining the role of a yet untested antecedent for nostalgic consumption – salient disease threat. Across two studies we show that activated disease threat promotes heightened consumer nostalgic preferences.

7-G: How the Uniqueness of Goods Influences Consumers' Response to Price Increase for Experiences versus Objects

Wilson Bastos, Catholic University of Portugal, Portugal

This research shows that consumers react more favorably to a price increase when it is associated with an experiential good than a material one. Further it examines five potential explanations (closeness to the self conversational value impression management social relatedness and purchase uniqueness) and reveals uniqueness as the mechanism.

7-C: Conceptualizing the Digital Experience in Luxury

Wided Batat, University of Lyon 2, France
Olivier Sinai, Birkbeck, University of London, UK

This research introduces a theory of digital luxury experience conceptualizing what it is and identifying its drivers. This is of importance to luxury consumption as it offers a framework to understand digital luxury an empirical phenomenon which has gained prominence in the last 10 years and has remained poorly understood.

7-H: Identity Construction Through Destination Experience: An Introspective Approach

Wided Batat, University of Lyon 2, France

This research draws on a subjective personal introspection (SPI) approach and Breakwell's identity process theory (IPT) principles to show how elements from different cultures are performed by an individual to form a unique patchwork identity and how this patchwork identity will contribute to deepen consumer experience of a cultural destination.

11-I: Effects of the Qualification of Potentially Misleading Claims on Production Characteristics on Buying Intention

Tino Bech-Larsen, Aarhus University, Denmark
George Tsalis, Aarhus University, Denmark
Trine Moerk, Aarhus University, Denmark
Klaus G. Grunert, Aarhus University, Denmark

This consumer (n=1420) study analyzes the qualification of potentially misleading statements about production processes based on conjoint ratings of taste health and animal welfare qualities and buying intentions. Deception potential is revealed by mediation tests of taste health and AW ratings on the effects of conjoint attributes on buying intentions.

14-O: The Neuroscience Viewpoint on the Interaction Effect between Persuasive Arguments and Celebrity on Attitude Change

Lien-Ti Bei, National Chengchi University, Taiwan
Li-Keng Cheng, National Chengchi University, Taiwan
Wei-Chin Hsu, National Taiwan University of Science and Technology, Taiwan
Yu-Shan Athena Chen, Technische Universiteit Eindhoven, The Netherlands

This study investigated the interaction effect between arguments and celebrity on attitude. The results of traditional and fMRI experiments showed that heuristic arguments with celebrity required more cognitive resources than strong and weak arguments. Also consumers generated stronger emotion reaction toward celebrities with heuristic arguments than strong and weak arguments.

9-CC: Will Consumers Accept Foods Made from Surplus Ingredients?

Siddharth Bhatt, Drexel University, USA
Jeonggyu Lee, Drexel University, USA
Jonathan Deutsch, Drexel University, USA
Hasan Ayaz, Drexel University, USA
Benjamin Fulton, Drexel University, USA
Rajneesh Suri, Drexel University, USA

To address the global food waste problem researchers have proposed creating foods from ingredients that would otherwise be wasted. This research examines consumers' perceptions of - Value Added Surplus Products which are foods made from surplus ingredients to conclude that consumers indeed accept these as a new category.

12-F: The Motivation to Exclude Others and its Impact on Brand Commitment

Samantha Bittner, Florida State University, USA
Tatiana Fajardo, Florida State University, USA

This research examines exclusion in the context of brand communities. The authors demonstrate that in communities of high (low) personal relevance consumers are more (less) motivated to exclude others. Furthermore in communities of high (low) personal relevance consumers report higher brand commitment after excluding (including) another from the brand community.

4-Q: The Use of Ethnically Ambiguous Models in Advertising to Preserve Consumer Well-being in an Organic Multicultural Market

Wim Booyse, University of Pretoria, South Africa
Samantha Swanepoel, University of Pretoria, South Africa

Our research compares a multiculturalized consumers' feeling of well-being when evaluating advertisements with differing variations of ethnic targeting. Consumers within a multicultural market (South Africa) have a greater feeling of consumer wellbeing when evaluating an advertisement containing ethnically ambiguous models compared to models of multiple ethnicities or individual ethnic models.

9-T: Savoring Stress: Can Feeling Stressed Reduce the Rate of Satiation?

Benjamin Borenstein, University of Miami, USA
Juliano Laran, University of Miami, USA
Luke Nowlan, University of Miami, USA

In this research we propose that stress reduces the rate of satiation to hedonic consumption experiences. In order to restore control stressed individuals engage more with the activities they are currently pursuing. As a result they take longer to satiate to music (study 1) and food (study 2).

20-J: Promotional Reviews, Social Influence, and the Information Content of Online Reviews

Leif Brandes, University of Warwick, UK
Rosa Cacabelos, University of Zurich, Switzerland
Egon Franck, University of Zurich, Switzerland

Does social influence during the review provision process reduce the information content of reviews when individuals are exposed to promotional reviews? We show that social influence reduces the evaluation gap between products of different quality levels but that this reduction is insufficient to make average review scores uninformative.

1-G: I Want the Best, So Give Me All the Bells and Whistles: How Maximizers versus Satisficers Evaluate Feature-Rich Products

Daniel Brannon, University of Northern Colorado, USA
Brandon Soltwisch, University of Northern Colorado, USA

We find that maximizers (vs. satisficers) give more favorable evaluations to feature-rich products indicating that they are less likely to anticipate feature fatigue. Underlying this relationship is a dual process whereby maximizers perceive feature-rich products as status signals as well as overestimate how much they will use the additional features.

11-S: When Do Ethical Consumers Elicit Inspiration Instead of Denigration?

Claire Brouwer, Universitat Pompeu Fabra, Spain
Jan Willem Bolderdijk, University of Groningen, The Netherlands
Gert Cornelissen, Universitat Pompeu Fabra, Spain

This work identifies a boundary condition under which ethically motivated consumers elicit positive responses from observers rather than typically negative ones. We show that exemplars have the potential to harvest applause and can inspire others to emulate but only if there is sufficient psychological distance between themselves and potential observers.

20-K: Provision of Sales Volume Information Influences Consumers' Preferences Via Perceived Purchase and Word-of-Mouth Popularity

Adrian Camilleri, RMIT University, Australia

Across three experiments we show that when consumers are presented with both the number of online reviews and the number of sales many of them use the ratio between these numbers – the reviewer percentage – to infer a product's "word-of-mouth popularity" which is distinct from a product's "purchase popularity".

2-A: Shante you Stay/ Sashay Away: Approaching Language Within Brand Assemblages

Mario Campana, Goldsmiths, University of London, UK
Katherine Duffy, University of Glasgow, UK
Alessandro Caliendo, Middlesex University, UK

This research extends brand assemblage theory to contribute to understanding how language assembles and evolves in brand niche communities. We question how consumers of RuPaul's DragRace create and circulate a cultural product then we explore how this is scaled-up and mainstreamed moving from a brand minor to a brand major.

9-L: Healthy or Happy? How Awe Enhances Consumers' Preferences for Healthy Products

Fei Cao, Renmin University of China, P.R. China
Xia Wang, Renmin University of China, P.R. China
Ze Wang, University of Central Florida, USA

Three studies demonstrate that experiencing awe (vs. neutral emotion) enhances consumers' preferences for healthy products (vs. unhealthy products). The effect is driven by analytic processing and is stronger for consumers with chronic affective (vs. cognitive) information processing style.

7-K: Negotiated Outsourcing – Towards an Understanding of Market Tension in Enduring Consumption Experiences

Flavia Cardoso, Universidad Adolfo Ibáñez, Chile
Pilar Rojas-Gaviria, Pontificia Universidad Católica de Chile, Chile
Daiane Scaraboto, Pontificia Universidad Católica de Chile, Chile

We contribute to a recent stream of research on consumer outsourcing by examining enduring (i.e. long-term transformational) consumption experiences. We identify cultural and social sources of tension related to outsourcing in the schooling market and map the emergence of a parallel market in which these issues are negotiated and resolved.

2-R: Oxytocin Increases Trust for Familiar and Familial Brands

Lilian Carvalho, Fundacao Getulio Vargas, Brazil
Gad Saad, Concordia University, Canada
Eliane Brito, Fundacao Getulio Vargas, Brazil

We designed two experiments to investigate the relationship between oxytocin and brand trust. The first study found that both known and unknown brands can reap the effects of oxytocin. In the second study we investigated if oxytocin had effects for both social vs. status stimuli and also found significant effects.

17-A: Consumer Perceptions of Social Robots

Noah Castelo, Columbia University, USA
Bernd Schmitt, Columbia University, USA

Robots are being used in a range of consumption settings. We explore how consumers' perceptions of robots depend on the robots' memory and emotionality. Using a social robot called Nadine we find that emotion and memory interact in shaping consumers' perceptions of the robot.

5-Q: The Effect of Working with Ingroup versus Outgroup Members on Affective Forecasting Bias

Lorenzo Cecutti, The Chinese University of Hong Kong, China
Jessica Kwong, The Chinese University of Hong Kong, China

Normally individual's emotionality is considered detrimental to shared goals. However the present findings show that in group settings affective forecast bias can be functional to goal pursuit. We found that when working with ingroup members participants' affective forecast motivated goal persistence. Yet this pattern reduced when working with outgroup members.

3-F: Pride Shapes Decisions through Construal Level: The Effect of Authentic vs. Hubristic Pride on Construal Level

Melis Ceylan, Koc University, Turkey
Nilüfer Aydınoglu, Koc University, Turkey
Selin Atalay, Frankfurt School of Finance and Management, Germany

Pride is a pervasive emotion. Thus it is critical to understand how this emotion affects how consumers construe information and make subsequent choices. This research demonstrates that individuals experiencing authentic (hubristic) pride adopt lower- (higher-) levels of construal. This result contributes to research in emotions and judgment & decision making.

10-C: Calendar Framing Affects Perception and Anticipation of Sunday

Rebecca Chae, University of Michigan, USA
Christine Kang, California State University Long Beach, USA

We examine the effects of calendar framing on time perception and anticipatory emotions. We demonstrate how the location of Sunday on a calendar (i.e. at the beginning vs. the end of the week) influences perception and anticipation of Sunday. We further discuss its implications on marketing communications.

5-O: The Effect of Antecedents of Sadness on Brand Evaluation

Luxi Chai, University of Kansas, USA
Yexin Jessica Li, University of Kansas, USA

The current paper contributes to research on emotion in consumer attitudes and behaviors by showing that when consumers experience sadness from status loss they value brand competence and rate competent brands more desirable than warm brands. Ratings of brand traits do not differ when consumers experience sadness from social loss.

9-A: “I Reward Myself with Salad!” Framing Healthy Food Option as a Reward Increases Purchasing Intention

Luxi Chai, University of Kansas, USA
Marija Grishin, University of Kansas, USA

The current research examines the impact of gratification-enhancing framing on healthy food-related decision making by demonstrating that framing the healthy (vs. unhealthy) food option as a reward increases the rewarding feeling and purchase intention.

16-A: Adding a Charitable Donation to a Product or Adding a Product to a Charitable Donation? How Much You Can Raise Depends on How You Frame the Case

Chia-Chi Chang, National Chiao-Tung University, Taiwan
Po-Yu Chen, National Chiao-Tung University, Taiwan

For charity sales hedonic products will solicit more help than utilitarian products. For donation with a thank-you gift adding a charitable donation to utilitarian products tend to be more effective in soliciting more help than adding the same donation to hedonic products.

19-D: Studying Bets and Hedges in Simple Lotteries

Subimal Chatterjee, SUNY Binghamton, USA
Satadruta Mookherjee, SUNY Binghamton, USA

We use a simple lottery to test if consumers value a hedge against losing in any way that is different from how they value the risk and test some potential explanations that might drive these valuations.

3-H: Through the Looking Glass: Role of Construal Level on Description-Intensive Reviews

Swagato Chatterjee, Institute for Financial Management and Research, India
Aruna Divya T, IIM Ahmedabad, India

Focus on consumer engagement has led service providers to explore contextual factors influencing consumers' satisfaction. In this paper we draw insights from Construal Level Theory to identify the conditions when own vs. others' experiences along with Process vs. Outcome attributes of services become more important in overall service evaluation.

14-M: The Making of a Successful Advocate: How Incentivizing Consumer Referrals Affects Persuasion

Lauren Cheatham, Stanford University, USA
Zakary Tormala, Stanford University, USA

When it comes to consumer product and service referrals do incentives work? We find that there is an important tradeoff such that incentivizing referrals increases reach but undermines the effectiveness of the advocacy. We provide evidence for this tradeoff being driven by a shift in intrinsic motivation.

4-G: Examining Tourists' Intentions to Revisit Religion Processions: The Role of Religiosity and Flow Experience

Annie Chen, University of West London, UK
Norman Peng, University of Westminster, UK

The purpose of this research is to examine the factors that contribute to tourists' intentions to re-participate in religious processions. The results from 109 participants show flow experience positively affects revisit intentions. Addition religiosity positively moderates the relationship between flow experiences and revisit intentions.

5-B: Coping with On-going Terror and Threats: Resilience, Place Attachment, and Behaviors

Ning (Chris) Chen, University of Canterbury, New Zealand
Rohail Ashraf, Lahore University of Management Sciences, Pakistan

This study looks at regions in Pakistan where people live in constant terror of terrorism political unrest and threats of death and aim to understand how people cope with the extreme situations how their attachment to the place evolves and changes and how people's perceptions and ideologies on consumption shift.

6-A: Chooser or Suitor: The Effects of Mating Cues on Men's vs. Women's Reaction to Brand Rejection

Rui Chen, Xiamen University, China
Chun-Ming Yang, Ming Chuan University, Taiwan
Hao Shen, Chinese University of Hong Kong, China

Once mating motives are activated males will respond to rejection less negatively than they otherwise would whereas this effect does not occur for females. Two studies examine the marketing implications of these effects.

7-M: When a Minor Problem Causes a Major Trouble for Experiential Purchases

Qihui Chen, Peking University, China
Jingjing Ma, Peking University, China

Although past research has consistently shown that experiential purchases produce higher satisfaction than material purchases this research shows that experiential purchases could lead to lower satisfaction when these purchases are mixed-valence purchases. This is because consumers evaluate experiential purchases based on feelings; a minor problem could cause a major dissatisfaction.

5-P: The Effect of Nostalgia Advertising on Brand Loyalty

Jia Chen, University of Illinois at Chicago, USA
Jingjing Ma, Peking University, China

Prior research showed that nostalgic ads of certain brands improve consumers' attitude towards these brands. Here we propose that if a brand has made inconsistent changes of its positioning in the past nostalgic ads can also result in decreased consumer loyalty. We speculate that self-brand connection might be a mechanism.

8-F: Or Else! The Positive Effect of an Advisor's Ultimatum on Perceived Expertise

Shirley Shuo Chen, University of Alberta, Canada
Kyle B Murray, University of Alberta, Canada

This research examines how advice given with an ultimatum affects perceived expertise in the context of financial decision-making. In a series of three studies we find that perceptions of expertise increase when an advisor threatens to provide no future advice if the current recommendation is not accepted.

10-E: An Institutional Perspective of Country-of-Origin and Its Effects on Consumer Purchase Preference

Shijiao Chen, University of Otago, New Zealand
Damien Mather, University of Otago, New Zealand
Hongzhi Gao, Victoria University of Wellington, New Zealand
John Knight, University of Otago, New Zealand

This paper conceptualizes country-of-origin (COO) cues as indicators of country institutions and tests the effect of COO cues on consumers' perceptions and purchase preference in the Chinese food market. This paper includes a survey experiment and a choice modelling experiment and offer implications for international marketing researchers and practitioners.

20-T: When Too Many Friends Inhibit Talking: The Impact of Social Roles on Social Sharing Online

Yu-Jen Chen, Lingnan, Hong Kong

We study how social roles affects online sharing behavior. We propose that as the number of friends increases consumers may perceive role conflict due to the perceived difficulty in managing diverse role expectation. As distinct social roles are made salient they may inhibit online sharing behavior.

1-B: Cross-Cultural Differences in Aesthetic Judgments of Products: The Role of Cognitive Styles

Tseng-Ping Chiu, University of Michigan, USA
Carolyn Yoon, University of Michigan, USA
Shinobu Kitayama, University of Michigan, USA

This study investigates cross-cultural differences in consumers' aesthetic judgments of products in a matching versus non-matching context. Our findings suggest that those with holistic cognitive styles (East Asians) are more tolerant of object-context mismatch than those with more analytic styles (European Americans).

18-A: Green by Itself, But Brown in Comparison: The Influence of Sustainability Disclosures at the Shelf

Yoon-Na Cho, Villanova University, USA
Robin Soster, University of Arkansas, USA
Scot Burton, University of Arkansas, USA

Consumers receive little or no consistent brand level sustainability information. Drawing from comparative processing and information disclosure literatures we conduct (1) a retail laboratory experiment and (2) a field study in a retail store to examine effects of provision of brand-level sustainability information on choices product evaluations and retailer perceptions.

18-E: Not Green or Healthy as You Think? Misperceptions From Sustainability Labeling

Yoon-Na Cho, Villanova University, USA

The trend of environmental consciousness in food is expected to increase as consumers demand more information on environmental and social impacts. Drawing from consumers' lay theories and the match-up hypothesis we examine the influence of healthfulness of food and sustainability levels on product evaluations to promote green food decisions.

8-I: How Temporal Separation in Budgeting Affects Spending Behavior

Yuna Choe, Texas A&M University, USA
Christina Kan, Texas A&M University, USA

We propose that as the temporal separation between budgeting and purchase increases people become more willing to overspend. Budgeting money may produce similar pain of payment to spending money and as people adapt to the cost with the the passage of time the pain associated with the decision lessens thereby increasing spending.

5-N: Take it Humorously: Effects of Humorous Rebuttals to Negative Attacks

Hsuan-Yi Chou, National Sun Yat-sen University, Taiwan
Xing-Yu Chu, National Sun Yat-sen University, Taiwan
Ching Chin, National Sun Yat-sen University, Taiwan

Response to election attacks might have a greater impact on the effects of the attack and on voters' evaluations of both candidates. However this issue is under-researched. This study analyzes the relative effects of different rebuttal strategies and demonstrates the moderation of the responding candidate gender and negative attack type.

6-C: Mr. Right vs. Mr. Right Now: The Impact of Male Physical Dominance on Women's Consumption Patterns

Brett Christenson, University of Alabama, USA
Christine Ringler, University of Alabama, USA
Nancy Sirianni, University of Alabama, USA

Evolutionary psychology posits the motivations for consumption are made to satisfy genetic and reproductive goals. However the relationship between evolutionary drivers and gender roles has yet to be examined. We look at the interaction between male physical dominance and traditional gender roles on women's consumption of self-enhancing versus homemaking products.

12-B: Interpersonal Face: A Major Motivation for Luxury Consumption in Asia

Jung-Han Chung, Sogang University, South Korea
Young-Won Ha, Sogang University, South Korea

We investigate whether face affects consumers' desires for luxury consumption. Across three experiments we show that interpersonal face as well as authentic pride is a critical factor in Asia and that Asian consumers are willing to pay a face premium. Marketers need to formulate a strategic plan to elicit face motivation for Asian consumers.

4-M: Psychological Antecedents of Luxury Brand Purchase Intent in Asian Market

Hoeun Chung, Fayetteville State University, USA

Despite of much attention given to the penchant for luxury consumption among Asian consumers our understanding on the underlying psychological reasons of this phenomenon is limited. The primary purpose of the current research was to explore culture-relevant psychological correlates of luxury brand purchase intent based on social consumption related theories.

8-A: Attenuating Money Illusion? How Personalization Affects the Consideration of Inflation in the Consumers' Financial Planning

Henning Cordes, University of Muenster, Germany

Carsten Erner, University of Muenster, Germany, and University of California Los Angeles, USA

Thomas Langer, University of Muenster, Germany

We study how letting consumers construct their personal inflation rate affects the consideration of inflation in the long-term financial planning. We find that the personalization is not beneficial: The complex elicitation procedure reduces the subjective knowledge about inflation which induces consumers to care less about inflation in their financial planning.

9-AA: What Did You Eat at School Today? The Influence of Preschool on Children's Food Consumption

T. Bettina Cornwell, University of Oregon, USA

Sung-Hee Paik, University of Oregon, USA

Eric Setten, University of Oregon, USA

This observational study shows significant differences across classrooms in the consumption of condiments vegetables grain and protein in publicly funded preschools. We theorize several possible mediators of this "classroom effect" on consumption. This research aids in the understanding of food socialization and has public policy implications for early childhood programs.

2-Y: Uncommon Beauty: Disabled Models in Ads Improve Brand Liking

Martina Cossu, Bocconi University, Italy

Zachary Estes, Bocconi University, Italy

Two studies demonstrate that advertisements involving a disabled model increase brand liking. A first study demonstrates the main effect using as stimuli female disabled models. A second study replicates this result in the lab using both female and male models and tests for political correctness by measuring respondents' response times.

18-H: The Authenticity of Corporate Social Responsibility Actions on Brand Symbolism

Diego Costa Pinto, ESPM Business School, Brazil

Márcia Maurer Herter, ESPM Business School, Brazil

Leonardo Nicolao, UFRGS, Brazil

Mellina Terres, UFCSPA, Brazil

This research analyzes how corporate social responsibility (CSR) actions (related or unrelated to the company's core business) influence brand symbolism. Findings suggest that CSR actions unrelated (vs related) to the company's core business increase perception of brand social consciousness influencing brand symbolism and having downstream effects on behavioral intentions.

11-U: Doing Good by Buying from a Peer: When and Why Consumers Prefer Peer Economy Options

John Costello, The Ohio State University, USA
Rebecca Walker Reczek, The Ohio State University, USA

This research finds that consumers evaluate peer economy purchases as more prosocial than similar traditional options and that these evaluations mediate higher purchase intentions. This relative preference is attenuated when the consumer's focus is drawn to the fact that the peer-to-peer provider is a corporate entity vs. an individual.

11-T: Carpe Diem: Examining the Impact of Hedonic Experiences on Prosocial Behavior

Daniela Cristian, BI Norwegian Business School, Norway
Bob Fennis, University of Groningen, The Netherlands
Luk Warlop, BI Norwegian Business School, Norway

We examine whether consumers behave more altruistically after engaging in volitional hedonic consumption. Results show that consuming pleasurable foods fosters intentional as well as factual helping behavior. This facilitating effect of hedonic consumption is more prominent for consumers that are chronically prone to disinhibit.

7-D: Do Hedonic Experiences Facilitate the Disregard of Sunk Costs?

Daniela Cristian, BI Norwegian Business School, Norway
Bob Fennis, University of Groningen, The Netherlands
Luk Warlop, BI Norwegian Business School, Norway

Besides enjoyment hedonic experiences lead to myopic behaviors and enhance a present-moment orientation. This seemingly "myopic" focus reduces the consideration of past and leads to positive outcomes. We show that following hedonic consumption consumers display lower sensitivity to sunk costs. Thus under particular conditions yielding to temptation is beneficial.

16-F: I'm Just Trying to Help: How Prosocial Bragging Behaviors Hurt and Help Nonprofit Organizations

Michelle Daniels, Arizona State University, USA
Kirk Kristofferson, Arizona State University, USA
Andrea Morales, Arizona State University, USA

Consumers frequently brag about their volunteering behaviors. While prior research has shown that bragging negatively impacts the bragger our research examines the negative spillover effects of one's bragging on the non-profit organization. We find that viewing a volunteer's bragging actually negatively affects both attitude toward and support for the organization.

16-I: Structure-Seeking in the Sharing Economy

Alexander Davidson, Concordia University, Canada
Mohammad Reza Habibi, California State University Fullerton, USA
Michel Laroche, Concordia University, Canada

The sharing economy has transformed peer-to-peer consumption into a multi-billion dollar industry. Despite its success resistance towards participation prevails and has been shown to be related to perceptions that sharing economy experiences lack structure and consistency. The current research identifies personal need for structure as a psychological barrier towards participation.

15-G: The Smell of Selling: Olfactory Cues as a route for Product Aesthetic Preferences

Ramona De Luca, FGV-EAESP Escola de Administração de Empresas de São Paulo, Brazil
Delane Botelho, FGV-EAESP Escola de Administração de Empresas de São Paulo, Brazil

Olfactory information is not simply emotionally experienced but also cognitively processed by consumers in the marketplace. This theoretical article explores the effect of scent on decision-making. In particular we propose that scent affects stimulus processing fluency and product aesthetic preferences especially for atypical and no scent-based products.

16-J: Temporal Focus and Consumer Response to Donation Appeals

Yoshiko DeMotta, Fairleigh Dickinson University, USA

This research shows that people who are hopeful respond to a donation appeal positively when the appeal suggests their contribution enhances the wellbeing of both themselves and other people more than when the appeal suggests it enhances other people's wellbeing. This effect reverses when people are nostalgic.

19-B: Keeping a Low Profile: When Outcome Uncertainty Promotes Behavioral Inhibition

Xun Deng, Shanghai JiaoTong University, China
Liangyan Wang, Shanghai JiaoTong University, China

We propose that when waiting for uncertain outcomes of important life events people tend to display behavioral inhibition and keep a low profile in public. Three experiments support this "low-profile effect" hypothesis. The shorter the temporal distance of the outcome the stronger the low-profile effect.

20-R: Weird Products: Too Weird For Purchase, But Perfect For Sharing.

Qian (Claire) Deng, University of Alberta, Canada
Paul Messinger, University of Alberta, Canada

This paper challenges the common view that weirdness is negative and usually leads to negative consumers' responses. Specifically we found that compared to regular products consumers' information-share (purchase) intentions and behavior toward weird products are higher (lower) because of perceived funniness (failed sense-making of the product usefulness).

2-L: Decomposing Consumer Evaluations of Brand Extensions: Market-based Congruity versus Engineering-based Congruity

Qian (Claire) Deng, University of Alberta, Canada
Paul Messinger, University of Alberta, Canada

For brand extensions we identify two fundamental and robust dimensions of congruity: market-based congruity (including target-market image usage-occasion fit scale items) and engineering-based congruity (including feature function resource fit). We further find that market-based congruity has a much larger effect on consumers' overall evaluation of brand extensions than engineering-based congruity.

10-G: Consumer Reasoning Reduces Post-Choice Satisfaction while Increasing Commitment

Alexander DePaoli, Northeastern University, USA

Past literature argues that reasoning about a product decision leads consumers to choose less satisfying options. I find that paradoxically it also increases consumers' commitment to those options. Acting through distinct channels reasoning steers choice toward products which are rated as less satisfying while simultaneously promoting consistency with those choices.

9-EE: Compulsive Consumption and Smoking Behavior

Timothy Dewhirst, University of Guelph, Canada
Drew Harden, University of Guelph, Canada
Wonkyong Beth Lee, Western University

In the spirit of transformative consumer research that aims to inform policy and improve well-being this qualitative study uses the tobacco industry's consumer research made public from litigation to examine compulsive consumption. Compulsive consumers are linked by common traits such as low self-esteem proneness to fantasy urgency and sensation-seeking.

3-D: Exploring the Role of Consumption Values and Self-Construal in the Purchase of (In) Conspicuous Luxury Goods and Shopping Preferences: A Questionnaire Study

Karolina Dovgialo, London School of Economics, UK
Ben Voyer, ESCP Europe, UK

We investigate luxury preferences for quiet vs loud luxury goods online vs offline shopping preferences and individual consumer differences. We found significant relationships between: i) bandwagon consumption interdependent self and preference for loud goods and ii) snob consumption independent self and willing to pay a premium for quiet goods.

17-M: The Dark Side of Competition: How Competition Results Predict Unethical Behavior

Rui Du, University of Hawaii, USA
Qimei Chen, University of Hawaii, USA
Miao Hu, University of Hawaii, USA

Our findings suggest that the association between competition results and unethical behaviors is moderated by power such that in the high power conditions losers are more likely to engage in unethical behaviors than winners. When differentiating beneficiaries of unethical behaviors a three-way interaction shows that both winners and losers lie.

20-S: When Having Too Many Facebook 'Friends' Hinders Your Online Social Activity: The Impact of Social Identity Complexity

Kimberly Duval, Concordia University, Canada
H. Onur Bodur, Concordia University, Canada

This research shows that having more Facebook 'friends' decreases online engagement (likes shares comments) and purchase intentions for featured products for individuals with complex social identities. This effect is reversed however by highlighting a specific reference group when using normative messages. Findings have implications for marketers both online and offline.

9-Z: Using Practices Theories to Analyze Food Practices Related to Food Waste and Healthy Eating

Margot Dyen, Montpellier Supagro, France
Lucie Sirieix, Montpellier Supagro, France
Sandrine Costa, Montpellier, INRA, France

Consumers have to integrate recommended behaviors related to food waste and healthy eating. This work studies it holistically with practice theories. A two-step qualitative methodology shows that individuals and environment play variable roles in practices structuration and that each individual has various conduits of practices in his/her own framework.

9-II: The Resilient Consumer

Akon Ekpo, Rutgers University, USA
Samantha Cross, Iowa State University, USA

This paper uses a novel mixed-method approach to investigate how behaviors and attitudes towards disability differs among disabled consumers. The authors argue that acknowledgment of one's own marketplace vulnerabilities and societal constraints may result in greater control and awareness of the need to build and invoke resilience in the marketplace.

20-G: Is it Safe to Spread the Word? Exploring the Impact of Psychological Safety in Virtual Communities on Consumer Choice

André Escórcio Soares, Coventry University, UK
Anvita Kumar, Coventry University, UK

This study introduces the concept of psychological safety as a facet of social contagion in online networks. Specifically it explores the impact of psychological safety on member participation level and subsequent influence on consumer choice. Academic and managerial implications of this study are discussed herein.

8-C: Higher Price Higher Quality? How Feeling Financially Constrained Affects Consumers' Price-Quality Judgment

Yafeng Fan, Renmin University of China, China
Jing Jiang, Renmin University of China, China

The paper examines how consumers make price-quality judgment when they feel financially constrained. The results showed that there is an interactive effect of financial constraint and value consciousness on consumer's price-quality judgment. When feeling financially constrained consumers with high value consciousness (vs. low consciousness) tend to make higher price-quality judgment.

4-C: Culture Matters: How Power Distance Belief Influences the Effectiveness of Scarcity Appeal in Advertising

Yafeng Fan, Renmin University of China, China
Jing Jiang, Renmin University of China, China

The article proposes that power distance can moderate the effect of scarcity appeal on product evaluation and the perceived threat from other consumers mediated this moderating effect. In addition we try to examine the moderating role played by product type (publicly vs. privately consumed products).

12-J: When Failure Isn't the End: How Temporal Framing of Goal Failures Can Affect Goal Reengagement

Matthew Farmer, University of Arizona, USA
Jennifer Savary, University of Arizona, USA

The way in which consumers fail goals can impact goal reengagement. We demonstrate that holding magnitude constant integration of failures into fewer (versus separation into several) incidents leads to better attitude toward and likelihood of goal reengagement. This effect reverses when failure separation scenarios are evaluated alongside failure integration scenarios.

6-H: Marketplace Resources and Gender: A Standpoint Analysis of Status Bias, Cultural Stereotypes and the Production of Positional Inequalities

Shelagh Ferguson, University of Otago, New Zealand
Jan Brace-Govan, Monash University, Australia
Diane Martin, Aalto University, Finland

This study investigates the ways market resources support or hamper women negotiating a hyper-masculine context and the dynamic interactions between homosociality status gender-bias in the perpetuation of cultural stereotypes and positional inequalities. Standpoint analysis shows that highly accomplished female mountain climbers experience status gender-bias in their consumption community.

2-T: The Effect of Brand Heritage and Brand Authenticity on Consumer-Brand Relationships

Francielle Frizzo, Federal University of Parana, Brazil
Jose Carlos Korelo, Federal University of Parana, Brazil
Paulo Henrique Prado, Federal University of Parana, Brazil

Drawing on consumer-brand relationships theory this paper examines the brand heritage and the brand authenticity as determinants of the consumer self-reinforcing assets. The findings show that the effect of these brand stimuli on brand-self distance occurs through experiential and hedonic benefits delivered from the brand.

4-J: I Am What I Bought: A Cross-Cultural Study on Consumers' Evaluations toward Different Types of Purchases and Advertisings

Pei-Wen Fu, National Sun Yat-sen University, Taiwan
Ruoyun Lin, Leibniz-Institut für Wissensmedien, Germany
Sonja Utz, Leibniz-Institut für Wissensmedien, Germany
Chi-Cheng Wu, National Sun Yat-sen University, Taiwan

This study investigates how material values influence Western and Eastern consumers' perceptions toward material and experiential purchases and whether the differences would further be reflected on their advertising attitudes. The results show that both Eastern and Western consumers have a more positive attitude toward experiential-values appeal advertisings.

8-H: Second Guess Yourself, But Do It Right: When Does Making A Second Estimate Improve Quantitative Judgments?

Celia Gaertig, University of Pennsylvania, USA
Joseph Simmons, University of Pennsylvania, USA

When does averaging multiple estimates from the same person improve quantitative judgment? We find that averaging participants' first and second estimate is less helpful when they are first asked to consider whether their first answer was too high or too low.

19-L: The Effect of Long-Term Versus Short-Term Orientation on Variety Seeking

Huachao Gao, University of Victoria, Canada
Yinlong Zhang, University of Texas at San Antonio, USA

This research focuses on the understudied cultural dimension of long- versus short-term orientation. Specifically we find that long-term oriented consumers have a higher preference for dynamics and changes which in turn makes them to engage in more variety-seeking behaviors than their short-term oriented counterparts.

9-V: Take a Bite out of Apple: How Does Static Food Advertising Signaling Dynamic Influence Food Consumption

Fei Gao, HEC Paris, France
Weiwei Zhang, University of Otago, New Zealand
Tina M. Lowrey, HEC Paris, France

The present study demonstrated that static food advertisements signaling dynamic can positively influence people's judgments toward foods and found that it influences female's and male's portion size choices from different directions. Furthermore we also demonstrated the role of mental imagery plays in this effect.

20-L: Sell Out Without Losing Out: Overcoming the Harmful Impact of Incentivized Reviews

Maximilian Gerrath, Leeds University, UK
Bryan Usrey, University of East Anglia, UK

Despite the commonality of incentivized product reviews research widely neglected its impact on product review blogs. Three experimental examine the impact of review valence (negative vs. neutral vs. positive) disclosure (intrinsically vs. extrinsically motivated) and attachment on review credibility and blog loyalty.

10-M: Ownership Polarization: An Alternate Account of the Endowment Effect

Colleen Giblin, Carnegie Mellon University, USA
Carey Morewedge, Boston University, USA

We find that merely associating an experience with the self in turn polarizes evaluations: the good things in life seem even better but the bad things seem even worse. This finding is inconsistent with previous theory supporting a new perspective on the cognitive framing effects of ownership.

5-A: Affecting Consumers: A fMRI Study on Regulatory Focus Framed Information in the Field of Animal Welfare

Nadine Gier, Heinrich-Heine-Universität, Germany
Caspar Krampe, Heinrich-Heine-Universität, Germany
Peter Kenning, Heinrich-Heine-Universität, Germany

Applying regulatory focus theory to animal welfare information we show that promotion focus framed information elicits greater subjective liking indicated by increased neural activity in the vmPFC. Moreover framed information influence neural processing of subsequent information demonstrated by a greater activity in ACC an effect not seen on behavioral level.

9-BB: When Innovation Collides with Nature: Mere Consideration of Novel Food Products Can Decrease Evaluations of the Entire Product Category

Justina Gineikiene, ISM University of Management and Economics, Lithuania
Bob Fennis, University of Groningen, The Netherlands

We show that exposure to novel products entailing an inherent trade-off between healthiness and naturalness can lead to ambivalent evaluations. In turn such evaluations may spill over from single product exemplars and negatively affect evaluations and willingness to try the entire product category. This negative impact on ambivalence was not invariant but a function of (higher) levels of preference for predictability.

4-S: When You Expect It the Yeast: The Emergence of Craft Beer Culture in Finland

Alexei Gloukhovtsev, Aalto University, Finland

This working paper contributes to literature examining the impact of globalization on consumer behavior. Initial findings from the Finnish craft beer context illustrate how global consumer culture takes root in local hegemonic consumptionscapes by tapping into consumer resistance movements and consumer identity work with the aid of cultural intermediaries.

10-B: Do You Feel Like a Fraud? How Experiencing the Impostor Phenomenon Influences Consumption Choices

Emily Goldsmith, Marymount Manhattan College, USA
Stephen Gould, Baruch College, USA

Most people occasionally feel like a fraud. Usually we overcome these feelings by acknowledging why we deserve our accomplishments. There are times when despite all external evidence we feel like an impostor. We propose that a person experiencing the impostor phenomenon prefers products that allow them to hide fraudulent feelings.

17-O: Unaffordable Option and Sensitivity to Social Inequality

Pierrick Gomez, NEOMA Business School, France
Adilson Borges, NEOMA Business School, France

This research investigates the effect of adding an unaffordable option to a choice set on sensitivity to social inequality. Two experiments demonstrate that adding an unaffordable option to a choice set fosters concern for social inequality and diminishes support for group based dominance especially for individuals high in political conservatism.

14-J: Social Comparison Direction and Its Impact on Consumer Preference for Distinctive Products

Xiushuang Gong, Renmin University, China
Ying Ding, Renmin University, China
Yafeng Fan, Renmin University, China

This paper examines how direction of comparison influences consumer preference for distinctive products. Across two experiments we show that consumers are more inclined to choose unique products after making upward comparisons than downward comparisons. This effect is mediated by consumer need for uniqueness.

2-Q: Low Fit in Co-Branding: Explaining the Success of Designer-For-Retailer Collaborations

Gabriel Gonzales, Pennsylvania State University, USA
Johanna Slot, Pennsylvania State University, USA
Margaret Meloy, Pennsylvania State University, USA

The current research finds that co-branded collaborations between low-cost retailers and high-end designers are attractive to consumers due to a 'misfit' between collaboration partners providing consumers with access to otherwise inaccessible products. The designer's creative control moderates demand. Ironically product attractiveness is attenuated if prices are lower than expected.

17-P: When Not Having Enough Prompts Consumers to Show Off: Reminders of Resource Scarcity Prompt Narcissism

Laura Goodyear, Concordia University, Canada
Caroline Roux, Concordia University, Canada
Ali Tezer, Université de Montréal, Canada
Kelly Goldsmith, Vanderbilt University, USA

We propose that reminders of resource scarcity prompt consumers to become more narcissistic and consequently shifts their product preferences. Across three experiments we demonstrate that: scarcity (vs. control) increases narcissistic tendencies narcissism mediates the effect of scarcity on selfishness and scarcity shifts consumers' preferences toward products with more prominent brands.

10-T: The Moderating Effect of Handedness on Lateral Placement Effects

Stephen Gould, Baruch College, USA
Emily Goldsmith, Marymount Manhattan College, USA

This research examines differences in product preference for people based on handedness. We find that right-handers are influenced by display order while left-handers are not. No matter which side a stimulus is placed on left-handers will not vary in their choices. Right-handers favor the choice that is presented first.

2-I: Communication Style Mismatch on Twitter and Facebook: How Luxury Brands Fail to Communicate Their Desirability and Exclusivity

Simone Griesser, University of Warwick, UK
Qing Wang, University of Warwick, UK
Thomas T. Hills, University of Warwick, UK

The essence of luxury is exclusivity and desirability which is fostered by abstract language. Consumers use more abstract words when tweeting luxury brands than functional brands. Luxury brands responding fail to employ similarly abstract language suggesting a mismatch of communication style and hindering processing fluency which enhances brand communication evaluation.

5-F: Forget Your Regret: Invoking Post-Purchase Hyperopia Mitigates Impulse Purchase Regret

Jamie L. Grigsby, Midwestern State University, USA
Robert D. Jewell, Kent State University, USA
Colin Campbell, Kent State University, USA

This research investigates how regret over an impulse purchase can be reduced post-purchase thus improving customer satisfaction. If customers think about a time in the distant past in which they made a hyperopic choice they are happier with their decision to indulge in a recent impulse purchase.

7-F: Googled Experiences: Internet-induced Confidence in Decision Abilities Increases Enjoyment

Tito L. H. Grillo, University of Texas at Austin, USA
Cristiane Pizzutti, Federal University of Rio Grande do Sul, Brazil
Adrian F. Ward, University of Texas at Austin, USA

Consumers increasingly use the Internet to prepare for decisions. The current studies show that Internet search elicits a “feeling of already knowing” that inflates consumers’ decision confidence (S1 S2). This confidence may be self-fulfilling; searching online before choosing experiences increases consumers’ experience enjoyment independently of the option they choose (S3).

4-L: Mixed Emotions Taking Me Over: How Anticipatory Emotions and Civic Risk Determine Choices for Stigmatized Products

Jerry Grimes, Grenoble Ecole de Management, France

Fighting temptations is human nature but how exactly do we reconcile our personal desires for stigmatized products whose consumption may negatively impact our civic standing? Two studies demonstrate how consumers appraise two closely linked stigmatized products (alcohol and cannabis) differently considering situational factors one’s anticipatory emotions and civic risk perception.

9-E: Children's Food-related Consumer Socialization: Parental Goals and Strategies

Alice Grønhøj, Aarhus University, Denmark
Malene Gram, Aalborg University, Denmark

We study food-related consumer socialization through family interviews in a qualitative study. Parents socialize children for healthy eating but other concerns such as preserving family cohesion are perceived as more important. The findings suggest that family dynamics parents' goals strategies and context are important for understanding children's healthy eating socialization.

9-C: Brand Authenticity Revisited: The Case of Three Times a Day

Amélie Guèvremont, Université du Québec à Montréal, Canada

This research examines the construction of an authentic brand image in an online community. Based on a netnography of Three Times a Day brand and five individual interviews four authenticity dimensions are identified: brand virtuousness brand proximity brand instinct brand imperfections. Results confirm the complex context-contingent nature of brand authenticity.

12-A: Input vs. Output-Based Framing and How They Influence Motivation

Manissa Gunadi, Erasmus University Rotterdam, The Netherlands
Bram Van den Bergh, Erasmus University Rotterdam, The Netherlands

Should people be told to perform 10000 steps as fast as they can or to complete as many steps as they can in 24 hours? Our results suggest that stipulating expected output (i.e. quantity) leads to higher motivation compared to specifying expected input (i.e. duration).

17-K: Role of Group Cohesiveness in Consumers' Responses to Mobile Promotions

Reetika Gupta, ESSEC Business School, Singapore
Sourjo Mukherjee, ESSEC Business School, France
Kasthuri Jayarajah, Singapore Management University, Singapore

This research examines the role of social networks in consumers' responses to mobile promotions. Using CLT we show that in cohesive groups consumers have a more favourable attitude towards the proximal promotion (shorter lead time) than the distal promotion enabling the marketer to deploy real-time consumer-specific targeted promotion strategies.

Practicing the (un)Healthy = Tasty Intuition: Towards an Ecological View of the Relationship between Health and Taste Consumer Judgments.

Simona Haasova, University of Vienna, Austria
Arnd Florack, University of Vienna, Austria
Christoph Welles, University of Vienna, Austria

Do consumers apply the unhealthy=tasty intuition to real food products from a supermarket? Three studies (two representative) revealed that consumers mostly find healthier products also tastier but this relationship varies between products and individuals. Consumer judgments might rely rather on package cues simultaneously implying tastiness and healthiness than the intuition.

2-E: Are Brands Known by the Company They Keep? The Effects of Speech Rate on Employee and Brand Perceptions

Fatima Hajjat, Ithaca College, USA
Elizabeth Miller, University of Massachusetts, USA

We examine the effect of employee speech rate on perceptions of employee and brand personality. Across four experiments we find that slower-speaking employees are perceived more negatively than employees speaking at a fast or normal rate. These employee perceptions then "spill over" to affect customers' perceptions of the brand.

3-C: Does Incompetence Hurt More than Immorality? Construal Levels Affect Responses to Negative Brand Information

Bing Han, Shanghai Jiao Tong University, China
Liangyan Wang, Shanghai Jiao Tong University, China
Ke Xue, Shanghai Jiao Tong University, China

In three experiments the authors find that for consumers with a high (low) construal level incompetence (immorality) information causes lower brand evaluation than does immorality (incompetence) information respectively in manufacturing and service industries. Also we confirm that information accessibility and diagnosticity mediate this interaction effect.

2-X: To Collaborate or to Support: The Effects of Implicit Theory on Consumer Response to Anthropomorphized Brand Roles

Bing Han, Shanghai Jiao Tong University, China
Liangyan Wang, Shanghai Jiao Tong University, China
Ke Xue, Shanghai Jiao Tong University, China

Through three experiments in manufacturing and service industries the authors find that anthropomorphized brand roles (partner vs. servant) and consumers' implicit theories (entity vs. incremental) can interactively impact brand evaluation as well as purchase intention. Also we confirm that consumers' perceived efficacy mediates this interaction effect.

3-G: Reducing Regret for Maximizers: The Role of Construal Level

Louise Hassan, Bangor University, UK
Edward Shiu, Bangor University, UK
Miriam McGowan, Bangor University, UK

Maximizers generally regret their choices more than satisficers. We are the first to suggest a strategy easily undertaken in the marketplace to break through the regret-maximize-regret cycle. Across three experiments we show that manipulating the construal maximizers experience to more abstract level reduces the intensity of the affective response (regret).

7-L: Role of Arousal in Experiencing Feeling of Missing Out

Ceren Hayran, Doctoral Candidate in Marketing Koc University, Turkey
Zeynep Gürhan-Canli, Professor of Marketing at Koc University, Turkey

This research enhances our knowledge about the consequences of feeling of missing out (FOMO) on desirable experiences that are taking place in one's environment. Based on the circumplex model of affect we examine how the arousal dimension of a FOMO state influences individuals' experience and product preferences in consumer context.

16-H: Secret Keeping Spurs Conformity Consumption

Dongjin He, Hong Kong Polytechnic University, China
Yijie Wang, Hong Kong Polytechnic University, China
Yuwei Jiang, Hong Kong Polytechnic University, China
Gerald Gorn, Hong Kong Polytechnic University, China

This research shows that secret keeping increases consumers' conformity behavior in consumption. This effect is mediated by the motivation to avoid social attention. Moreover perceived self-control moderates the effect of secret keeping on conformity such that the effect is more salient for consumers with lower perceived self-control.

2-K: Consumer Responses to Anthropomorphized Brand Alliances

Dongjin He, Hong Kong Polytechnic University, China
Fangyuan Chen, Hong Kong Polytechnic University, China
Yuwei Jiang, Hong Kong Polytechnic University, China

We explore the impact of brand anthropomorphism on consumers' perceptions and reactions toward brand alliance. In three studies we demonstrate that when a human schema was activated (vs. not) consumers felt more negatively about the termination of a brand alliance due to the relationship norm associated with humanlike alliance relationship.

13-H: The Consumption of Digital Live Content: How Live Streaming Enhances Interest in Uninteresting Content

Daniel He, Columbia University, USA
Jonathan Hurwitz, Columbia University, USA
Ran Kivetz, Columbia University, USA

We investigate the psychological benefits of viewing digitally live streamed content particularly content normally considered uninteresting to watch. Using an online video platform we propose and find that compared to prerecorded content live streamed content increases consumers' intention to join in on uninteresting activities because live experiences make mundane activities feel more social.

5-D: Does Humor in Advertising Trigger Competence and Warmth Inferences about Advertisers?

Chi Hoang, BI Norwegian Business School, Norway
Luk Warlop, BI Norwegian Business School, Norway
Klemens Knoferle, BI Norwegian Business School, Norway

This study proposes that people make warmth and competence inferences about advertisers who express humor in advertising. Advertisers are perceived as competent but not warm when using incongruity to elicit laughter as both warm and competent when using arousal humor and as neither competent nor warm when using disparaging humor.

2-V: The Influence of Sex Appeal in Advertising: The Moderating Role of Brand Loyalty

Sujeong Hong, Sungkyunkwan University, South Korea

This research shows that consumers exhibiting high loyalty toward a brand react more negatively to sex appeals in brand advertising than those exhibiting low loyalty. We intended to examine an additional boundary condition under which the effect of sex appeal can be either enhanced or diminished.

13-L: When Dissimilar Others Positively Impact Online Purchase Intentions

Rahil Hosseini, Pompeu Fabra University, Spain
Ana Valenzuela, Baruch College, USA & ESADE Business School, Spain
Maria Galli, ESADE Business School, Spain

Research on the influence of others in product adoption has generally found a positive role of similar-other product advocates. We study the influence of dissimilar-other product advocates in online contexts and find that dissimilar advocates can encourage product adoption by catering to certain motivations particularly when perceived social presence increases.

12-I: Upward Social Comparison in Goal Pursuit: Exploring the Role of Regulatory Focus

Yu Hu, Salem State University, USA

An experiment showed that during a goal pursuit a person's regulatory focus affected how social information is used in goal monitoring judgment. Specifically in an upward social comparison assimilation effect is more prominent in people with promotion focus whereas contrast effect is more prominent in people with prevention-focus.

19-K: Sleepiness, Need for Stimulation, and Variety-Seeking by Consumers

Zhongqiang (Tak) Huang, University of Hong Kong, Hong Kong
Yitian (Sky) Liang, University of British Columbia, Canada
Charles B. Weinberg, University of British Columbia, Canada
Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong

Previous research has revealed the negative impact of sleep deprivation on health but no research to date has investigated its effects on consumer behavior. This investigation fills this void by showing that sleepier consumers tend to seek more variety which is driven by a desire for sensation to maintain wakefulness.

16-P: Renting Alone? Relationship Status and Differential Appeal of Acquisition Modes

Li Huang, Hofstra University, USA
Anastasiya Pocheptsova Ghosh, University of Arizona, USA

We investigate the impact of relationship status on preference for acquisition mode: renting or buying. We find that single consumers are more likely to rent products than married counterparts however buying preferences are not affected by the relationship status. This tendency is attenuated by increasing prevention focus of single consumers.

16-N: Exploring Fling Relationships with Rented Products

Li Huang, Hofstra University, USA
Natalie Truong, Nanyang Technological University, Singapore
Jennifer Argo, University of Alberta, Canada

How do consumers form relationships with rented products? Across three studies we found that renting a product is conceptually similar to a fling resulting in higher excitement compared to consuming an owned product. We validate the mediating role of fling perception on not only excitement but also various downstream behaviors.

20-E: How Broadcasting vs. Narrowcasting on Social Media Affects Consumer Memories

Li Huang, Hofstra University, USA
Frank Zheng, University of Texas at Austin, USA
Adrian Ward, University of Texas at Austin, USA

How do audiences impact the memories shared on social media? We find that sharing with a small group attenuates sharer's memories as compared to a large group. This advantage is due to outsourcing memories to identifiable audiences and is diminished by enhancing the perceived heterogeneity of large group.

18-B: Jumping on the Bandwagon or Seeking Novelty: An Experimental Study on the Effectiveness of Heuristics to Promote Pro-Environmental Behavior.

Liselot Hudders, University of Ghent, Belgium
Veroline Cauberghe, University of Ghent, Belgium
Carla Mingolla, University of Ghent, Belgium

This study examines the impact of two distinct forms of heuristics (bandwagon and novelty) when promoting sustainable behavior. Results show that the effect of a bandwagon heuristic is mediated by normative influence while novelty heuristic is mediated by perceived uniqueness. In addition the self-concept regulates the susceptibility for the heuristic.

9-W: Taste Perception and Creativity

Young Eun Huh, HKUST, Hong Kong
Yoonah Hong, Hongik University, South Korea
Nara Youn, Hongik University, South Korea

Taste perception plays a key role in consumers' food decisions. The current research examines consumers' taste preference for a snack/drink to enhance their creativity and how different tastes influence performance on a creativity task.

17-G: How Satisfied Are You with Your Purchase?: Role of Experience Variety and Self-Construal Level

Kyoung Tae Huh, Seoul National University, South Korea
Youseok Lee, Seoul National University, South Korea
Sang-Hoon Kim, Seoul National University, South Korea

Prior research reveals that perceiving less variety in product usage experiences increases the satisfaction on the purchase. This research extends the finding by showing that utilitarian value plays a role in producing this effect and that this outcome is enhanced for interdependent thinkers who recognize greater similarity among product attributes.

17-J: Robo-Chat: Social Perceptions of Artificial Intelligence Assistants

Claudia Iglesias, Wilfrid Laurier University, Canada
Grant Packard, Wilfrid Laurier University, Canada

We examine how the speech of artificial intelligence (AI) assistants (e.g. Siri) impacts perceptions of them as persuasion agents. A lab study reveals that first name addressing by AI assistants shifts perceptual mediators of the persuasion attempt from functional (i.e. processed like a product) to personal dimensions (like a person).

2-N: Does the Negativity Effect Really Work? The Positive-Negative Asymmetry in Computer Brand Evaluation.

Magdalena Jablonska, SWPS University of Social Sciences and Humanities, Poland
Andrzej Falkowski, SWPS University of Social Sciences and Humanities, Poland

We challenge the negativity effect and present empirical evidence showing that in some situations positive information about the brand may have stronger effect on brand evaluation than the negative one. The effect is moderated by the reference point. Our findings add to the discussion on the effectiveness of negative advertising.

9-K: Healthy Cake or Decadent Cake, Could Dialecticism Be the Answer?

Alexander Jakubaneck, Norwegian School of Economics, Norway
Alexander Fedorikhin, Indiana University, USA
Nina Iversen, BI Norwegian Business School, Norway

Research on drivers of consumer reactions to indulgent products with healthy claims has been limited. We focus on dialectical thinking to predict and explain responses to these products within and across cultures. We find that consumers with situationally and chronically accessible dialecticism are significantly more accepting of such products.

11-E: Giving Money versus Giving Time: The Timing Effect of Thank-You Gifts on Donation Satisfaction

Miaolei (Liam) Jia, National University of Singapore, Singapore
Isabel Ding, National University of Singapore, Singapore

Charity organizations often give thank-you gifts to donors. We demonstrate that when giving money receiving thank-you gifts after the donation (vs. before the donation) decreases donors' donation satisfaction. However when giving time receiving thank-you gifts after the donation (vs. before the donation) increases donors' donation satisfaction.

10-A: Does Purging Lead to Better Self-Control? The Role of the "Simplification" Mindset

Lei Jia, Ohio State University, USA
Xiaoyan Deng, Ohio State University, USA
Xiaoqing Yang, University of Wisconsin - Milwaukee, USA

We propose that purging can activate a simplification mindset that features a mental process of simplifying prioritizing and abstracting. Such a mindset can carry-over to a subsequent unrelated context with decision outcomes that involve self-control.

14-P: The Power of Verbs: The Effect of Verbs on Purchase Intention

Miaolei (Liam) Jia, National University of Singapore, Singapore
Isabel Ding, National University of Singapore, Singapore

The usage of concrete verbs such as “Grab the Gold Bars” is commonplace in marketing advertising and promotions. We demonstrate that concrete verbs (vs. adjectives) increase consumers’ purchase intention. However using explicitly instructive verbs (e.g. “Buy Now”) decreases consumers’ purchase intention.

1-L: The Spillover Effect of Beauty: Narcissists’ Overemphasis on Aesthetics in Product Choice

Lei Jia, Ohio State University, USA
Xiaojing Yang, University of Wisconsin - Milwaukee, USA
Huifang Mao, Iowa State University, USA
Xiaoyan Deng, Ohio State University, USA

We propose that narcissism both as a personality trait and a temporary state increases the preference for aesthetics over utilitarian attributes in consumer product choice even for products with little symbolic and social signaling values and such an effect is mediated by self-possession link.

8-G: Power, Economic Situation and Financial Risk Taking

Jinfeng (Jenny) Jiao, State University of New York at Binghamton, USA
Fang-Chi Lu, Korea University, South Korea

This paper focuses on the effect of an individual’s economic situation and feeling of power on financial risk taking. Across three studies we illustrate that an individual’s level of power increases his or her financial risk taking and that this effect is moderated by economic situation.

11-K: Pride and Dishonesty Why Does Authentic Pride Lead to More Dishonesty?

Jinfeng (Jenny) Jiao, State University of New York at Binghamton, USA
Cathy Cole, University of Iowa, USA
Gary Gaeth, University of Iowa, USA

This paper focuses on authentic pride and hubristic pride as antecedents to consumer dishonesty and has both theoretical and empirical implications. We further examine the moderating role of cognitive resources in influencing pride effects on dishonesty. We demonstrate that it is moral disengagement that mediates the found effect.

11-D: How Power States Affect Charitable Behaviors towards In-Group versus Out-group Recipients

Fei Jin, Peking University, China
Ping Tu, Peking University, China
Huawei Zhu, Wuhan University, China
Keyi Li, Peking University, China

People primed with low power demonstrate stronger willingness to in-group than out-group members whereas individuals in high power state show similar propensities to both in-group and out-group members. For the low power helping in-group victims heightens reciprocity which in turn increases their propensity to behave generously.

10-N: Quantification and Experience in Effortful Task: Moderating Role of Causality Orientation, Gender.

Daoyan Jin, University College of Southeast Norway, Norway
Halgeir Halvari, University College of Southeast Norway, Norway
Natalia Maehle, Western Norway University of Applied Sciences, Norway
Christopher Niemiec, University of Rochester, USA

This study aims to conduct experiments to investigate the effect of quantification on people's experience (e.g. vitality enjoyment) in effortful task. Another focus of this paper is to explore the moderating role of individual differences (e.g. causality orientation gender) on the relationship between quantification and effortful task experience.

14-A: An Official Apology Would End the Matter: Investigation on the Fit Between Message Content and Communication Method of Mobile Marketing (Text Message vs. Instant Message)

Sunghee Jun, Seoul National University, South Korea
Kiwon Park, Seoul National University, South Korea

These days most companies are engaging in direct communication with their customers via instant messengers. However little research investigates the differences between instant messages and text messages and how marketers use them effectively. Our objective is to explore varying perceptions toward instant messages and text messages and suggest optimal strategies.

2-J: Consumer Brand Sabotage: When and Why Does it Cause Damage among Other Consumers?

Andrea Kähr, University of Bern, Switzerland
Bettina Nyffenegger, University of Bern, Switzerland
Harley Krohmer, University of Bern, Switzerland
Wayne D. Hoyer, University of Texas at Austin, USA

This article shows that consumer brand sabotage (CBS) can damage the brand by decreasing consumers' brand attitude and purchase intention and by increasing negative word-of-mouth. Indirect effects of CBS on consumers' attitude and behavior through their cognitions were significant for consumers with high (vs. low) brand relationship quality only.

15-F: The Self-regulatory Power of Environmental Lighting

Seo Yoon Kang, Hongik University, Korea
Nara Youn, Hongik University, Korea
Heakyung Cecilia Yoon, Hongik University, Korea

The current research investigates the impacts of color temperature and its interaction with brightness on consumers' self-control. The interaction of brightness and color temperature creates fluent (vs. disfluent) lighting condition that leads to less (vs. more) cognitively depleted mental state and consequentially enhances self-control.

11-N: The Impact of Vice Magnitude on Evaluations of Vice-Virtue Bundles

Mustafa Karatas, Koc University, Turkey
Zeynep Gürhan-Canli, Koc University, Turkey

We show that low (vs. high) comparability of payoffs of vice and virtue components leads to a more abstract (vs. concrete) processing and a credentials-based (vs. credentials-based) justification process. Subsequently increasing the vice component of the vice-virtue bundle increases (vs. decreases) bundle attractiveness under low (vs. high) payoff comparability.

6-J: Vulnerable or Agentic? Medicalized Consumption and its Impact on Consumer Identity

Richard Kedzior, Bucknell University, USA

Over the last few decades the notions of masculinity have undergone significant changes. Traditional masculinity which is associated with the pursuit of agentic goals physical strength domination and resourcefulness had to be renegotiated to accommodate new emerging male identities. This paper investigates the impact of medicalization on consumer notions of masculinity.

2-G: Brand Activism in the Age of Resistance: What Does it Mean?

Joya A. Kemper, University of Canterbury, New Zealand
Paul W. Ballantine, University of Canterbury, New Zealand

With protests becoming mainstream increased skepticism of key institutions and overall the re-emergence of populism brands have also decided to raise their voices in protest. What brand activism is and how it can be implemented is discussed.

12-H: Understanding the Motivation to Help Under Mortality Salience: Self-Worth Account Versus Cultural Standards Account

Sara Kim, University of Hong Kong, Hong Kong
Youngsoo Kim, LSR/UX Lab, LG Electronics, South Korea
Soraya Lambotte, AbbVie, UK
Minhi Hahn, Korean Advanced Institute of Science and Technology, South Korea

Our research teases apart two accounts underlying the effect of mortality salience on prosocial behavior in prior work: self-worth enhancement and cultural standards reinforcement. We develop a framework for understanding which account primarily drives helping behavior under what circumstances and provide direct empirical evidence that these two accounts are distinct.

1-I: The Effect of Color Saturation on Satiation: High Saturation Increases Satiation of the Product

Hakkyun Kim, Sungkyunkwan University, South Korea
Eunmi Jeon, Sungkyunkwan University, South Korea
Jungyun Kang, National Taiwan Normal University, Taiwan

This research investigated how color saturation influences consumer behavior. In other words consumers can expect to become quickly satiated when they use products with high saturation than when they use products with low saturation of a color. Thus we demonstrated a mediating role of expected satiation between product colors and purchase intentions.

16-E: Gift Cards vs. Cash: The Effects of Money Perception on Asymmetric Preferences for Gift Cards between Gift Givers and Receivers

Min Jung Kim, Manhattan College, USA

The current research suggests that individuals will have different preferences for gift cards vs. cash that offer the same exchange value depending on their roles (i.e. givers vs. receivers) and money perceptions (i.e. whether they focus on the exchange value of money or the additional meaning of money).

14-H: Narrative Advertising Effectiveness: The Role of Ad Relevance, Ad Vividness, and Ad Message Explicitness

Eunjin (Anna) Kim, Southern Methodist University, USA
Eunseon (Penny) Kwon, Texas Christian University, USA

While prior literature has focused on the positive aspects of narrative vs. non-narrative ads we investigate a framework for narrative-advertising effectiveness. A study with 40 commercials (440 participants) confirms that ad relevance ad vividness message explicitness goal engagement emotional engagement and ad skepticism contribute to the persuasiveness of narrative advertising.

5-S: The Joint Effect of Affect and Information-processing Style on Price Judgment

Kaeun Kim, University of Massachusetts, USA
Elizabeth Miller, University of Massachusetts, USA

The present research shows that affective states influence consumers' price judgment depending on the currently accessible mode of processing. Findings from two experiments suggest that positive affect increases price-as-quality judgments only when global processing is salient whereas negative affect facilitates price-quality perception when local processing is dominant.

3-A: “Mannequin and I”: How Social Distance from Mannequins and Self-Construals of Shoppers Affect Product Evaluation

Pielah Kim, Philadelphia University, USA
Xiaoyan Deng, Ohio State University, USA

This research investigates the effect of mannequin design on consumer's product evaluation. We find that interdependents but not independents perceive a closer social distance from abstract (vs. realistic) mannequins and evaluate the products wore by abstract (vs. realistic) mannequins more positively. Moreover perceived social distance mediates product evaluation.

16-G: Receiving Less for More: Inequality Aversion in Crowdfunding

Joonkyung Kim, University of Toronto, Canada

When a beneficiary has a lower economic standing than the benefactor the benefactor is more likely to give the money to the beneficiary if the beneficiary promises a low-cost token of appreciation rather than a high-cost token of appreciation. It is because the low-cost token better restores equality.

5-U: When Do People Make Affectively Negative Self-Presentation?

Dan King, University of Texas Rio Grande Valley, USA
Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand
Zachary Mendenhall, McGill University, Canada

Our research identifies conditions under which consumers prefer negative branding –imagery and words that elicit negative emotional responses. We argue that this phenomenon is underpinned by a reflexive brain process we share with mammals called “dominance signaling” –a response that emerges when humans compete with intrasexual rivals for mating opportunities.

10-O: Sequence Fluency Effects on Consumers' Judgments of Truth

Dan King, University of Texas Rio Grande Valley, USA
Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand

Brand claims come in the form of “X causes Y” in which X is the brand and Y is the purported effect. Experiments using subliminal and supraliminal manipulations show that brand claims will be judged as more truthful if they conform to symbolic sequences that are stored in the mind.

13-C: Creating Brand Reputation: How Employees Express Their Brand in Social Media Networks

Stephanie Kogler, University of Innsbruck, Austria
Joonas Rokka, EMLYON Business School, France
Andrea Hemetsberger, University of Innsbruck, Austria

This study compares the official Instagram account of the fashion brand Hollister with the private Instagram accounts of its employees. The analysis reveals that employees stabilize brand image by mimicking the brands' visual language in terms of style postures gestures and themes.

10-K: Free to Choose: Belief in Free Will and Indecisiveness

Michail D. Kokkoris, Vienna University of Economics and Business, Austria
Roy Baumeister, University of Queensland, Australia
Ulrich Kühnen, Jacobs University, Germany

We explore consequences of belief in free will for consumer decision making. Studies 1 and 2 suggest that stronger free will belief is associated with reduced indecisiveness. Studies 3 and 4 show that this beneficial effect of free will belief is limited to consumers with high (vs. low) self-concept clarity.

12-G: Too Much of a Fun Thing: When Many Fun Activities Lead to Productivity

Kate Kooi, University of Miami, USA
William Nowlan, University of Miami, USA
Juliano Laran, University of Miami, USA

Research on goal pursuit often focuses on regulatory goals but the current research focuses on an indulgence goal—specifically having fun. We show that consumers who generate many (vs. few) means to have fun find themselves feeling productive and are therefore less likely to pursue the goal of having fun.

20-B: Investigating Online Reviews: The Moderating Role of Scarcity Appeal

Elika Kordrostami, Humboldt State University, USA
Yuping Liu-Thompkins, Old Dominion University, USA
Vahid Rahmani, Old Dominion University, USA

Using Amazon.com data we found that scarcity appeals make consumers pay more attention to the average rating for the item on Amazon.com. Per the results of the OLS regression buyers on Amazon.com use the average rating of reviews as a heuristic in their purchase decision-making when scarcity appeals are present.

14-E: Do We Always Appreciate Creative Ads? Unlocking the Meaning of Highly Novel Ads

Afra Koulaei, University College of Southeast Norway, Norway

Consumers appreciate creativity but at the same time when experience uncertainty they form negative associations with novelty an attribute that makes an ad creative in the first place. This research suggests that the negative associations appraised from uncertainty can be mitigated by unlocking the meaning of the highly novel ads.

12-E: The Impact of Purchase Motivation on Happiness: Experiential and Material Purchases

Sofia Kousi, Athens University of Economics & Business, Greece
Flora Kokkinaki, Athens University of Economics & Business, Greece
Stavros Drakopoulos, National and Kapodistrian University of Athens, Greece

The experience recommendation posits that experiential purchases make people happier than material purchases. The present research aims to demonstrate that this is partly due to the different underlying goals that motivate these two disposable income purchase types. To this end the results of three experiments are described.

14-R: Leaving the Lab: Can Mobile fNIRS Enhance Consumer Research?

Caspar Krampe, Heinrich-Heine-Universität, Germany
Nadine Gier, Heinrich-Heine-Universität, Germany
Enrique Strelow, Justus Liebig Universität, Germany
Peter Kenning, Heinrich-Heine-Universität, Germany

This work aims to demonstrate that mobile fNIRS is an appropriate neuroimaging method for measuring consumers' prefrontal neural reaction to brand related information. To achieve this we replicated the neural 'winner-take-it-all' effect of consumers' first-choice-brand indicating the utility of applying mobile fNIRS in consumer research.

13-D: Extending the Herding Effect to the Consumption Experience: The Case of Online Music

Zachary Krastel, Concordia University, Canada
H. Onur Bodur, Concordia University, Canada

Others' opinions can act as a heuristic when deciding what to consume. However we show the "herding effect" also affects preferences during consumption. We find social information is more important for some individuals and for some music types and can have strong negative effects on song preferences in online environments.

16-M: Bridging the Chasm for Materialists: The Case of Renting Luxury

Goedele Krekels, HEC Lausanne, Switzerland
Bruno Kocher, HEC Lausanne, Switzerland
Sandor Czellar, HEC Lausanne, Switzerland
Brigitte Muller, IAE de Toulon, France

Though literature would predict that materialistic people dislike renting luxury giving them less control over the product in two studies we show that for high materialists renting luxury leads to similar self-image and product perceptions as buying. For low materialists we only find positive effects for buying luxury not renting.

17-Q: When Saying Less Tells Me More: The Relation Between Socio-economic Status (SES) and Luxury Justification

Goedele Krekels, HEC Lausanne, Switzerland
Sandor Czellar, HEC Lausanne, Switzerland
David Dubois, INSEAD, France
Gilles Laurent, INSEEC Business School, France
Bruno Kocher, HEC Lausanne, Switzerland

This research examines whether luxury signalers justify their consumption and how this influences the receiver's perceptions. We show that high SES people justify their luxury consumption less and that a lack of justification is perceived as indicating higher SES. However this can lead to negative product and personality perceptions.

20-F: How People Compose and Detect Insincere Product Reviews: Combining Experimental and Automated-Text-Analysis Approaches

Ann Kronrod, University of Massachusetts - Lowell, USA
Jeff Lee, New York University, Shanghai, China
Ivan Gordeliy, École Normale Supérieure, France

We explore how consumers compose and read true/fake reviews. We confirm predictions regarding the linguistic aspects of insincere reviews using automatic text analysis. We also find that awareness of these aspects does not improve fake review composition or detection suggesting these aspects are outcomes of deep psychological processes of lying.

2-D: A Brand Community's Response to the Brand's Transgression: The Role of Collective Psychological Ownership

Christina Kuchmaner, Kent State University, USA
Jennifer Wiggins, Kent State University, USA
Pamela Grimm, Kent State University, USA

We show that brand community members who perceive collective psychological ownership of the brand particularly those with high status within the community are less likely to engage in destructive actions in response to a brand transgression. Rather these consumers view themselves as partially responsible for helping the brand recover.

17-F: A Little Knowledge is a Dangerous Thing: When Co-Production Leads Consumers to Abandon a Firm for a Do-It-Yourself Alternative

Christina Kuchmaner, Kent State University, USA
Jennifer Wiggins, Kent State University, USA
Colin Campbell, Kent State University, USA

Co-production research has primarily focused on the benefits of co-production to firms. We suggest that consumers who attribute a successful co-production experience to themselves are more likely to leave the firm for a do-it-yourself alternative. Firms can mitigate this effect by manipulating the type of employee feedback given to consumers.

2-P: How Mortality Salience Impacts Consumers' Preference for Brands

Polina Landgraf, IE University, Spain
Antonios Stamatogiannakis, IE University, Spain
Haiyang Yang, Johns Hopkins University, USA

We demonstrate in field and lab studies that mortality salience can dampen consumers' preference for brands with exciting personalities but not for those with other brand personalities (e.g. sincerity). We explore potential mechanisms underlying this phenomenon. Our findings add to terror management and brand personality theories and offer managerial insights.

2-O: Environmental Threats and the Brand Incumbency Advantage

Even Lanseng, Norwegian School of Management, Norway

The idea that the incumbency advantage is limited to certain environmental threats is examined. Two studies demonstrate the incumbency advantage in the presence of pathogen threat cues and two studies show a diminished incumbency advantage in the presence of social exclusion and mating cues.

17-N: The Dissimilarity Magnifying Bias

Negin Latifi Kasani, ESSEC Business School, France
Claudiu Dimofte, San Diego State, USA

We introduce and examine a dissimilarity magnifying bias in social perception according to which others are considered first as exemplars of the least favorably perceived group to which they belong even when they are simultaneously members of more favorably perceived groups. The bias and its implications are assessed in the context of brand user group membership.

1-E: Exploring the Concept of Beauty in Consumer Research: A Multidisciplinary Framework and Research Agenda

Marina Leban, ESCP Europe, France
Benjamin Voyer, ESCP Europe, France

This research lays the foundations of an interdisciplinary conceptual framework and research agenda for studying and understanding beauty consumer behavior. We integrate findings from evolutionary cognitive and cultural psychology and identify: i) the mechanisms behind beauty perceptions and ii) the role of beauty in consumers' perceptions of products.

1-C: Differential Preference toward Aesthetic Design Elements of Airline Livery: An Examination of Design-Activity Congruency

Jeongmin Lee, Gachon University, South Korea
Wujin Chu, Seoul National University, South Korea
Dawon Kang, Seoul National University, South Korea
Jisu Yi, Seoul National University, South Korea

Consumers seek congruency between aesthetic design and the activity being performed. As such we show that business travelers prefer airline livery designs that use darker tones primary colors and geometric lines. On the other hand vacation travelers' design preference is split between toned-down designs and colorful designs.

10-D: "What a Loss of a Freebie!": Promotion Framing and Consumer Product Returns

Shinhyoung Lee, Seoul National University, South Korea
Youjae Yi, Seoul National University, South Korea

This research examines the effect of promotion framing on consumer product returns hypothesizing that framing a promotion as a free gift (vs. bundle no-promotion) reduces product return intention by making consumers perceive more loss in giving up a "freebie"-with-purchase.

13-E: I Want to Share My Information!: The Effects of Social Exclusion on Consumers' Information Disclosure Intentions

Jiyoung Lee, University of Texas at Austin, USA
Andrew Gershoff, University of Texas at Austin, USA

The current paper proposes that social exclusion heightens consumers' willingness to disclose personal information to brands. Four studies demonstrate the proposed effect of social exclusion on information disclosure intentions which is driven by the desire for social connection. Two boundary conditions (i.e. brand benefit relationship likelihood) are also tested.

12-C: Missing, not Empty: Effects of Absence of Expected Objects in a Space on Motivation and Performance

Jaewoo Lee, Boston University, USA
Kyeongheui Kim, Sungkyunkwan University, South Korea
Minjung Koo, Sungkyunkwan University, South Korea
Eunyoung Song, University of Florida, USA

We examine how the absence of expected objects in a space (e.g. bookshelves without books no dumbbells in the rack) impairs individuals' general motivation to work and performance. We propose that such effects occur because exposure to spatial absence causes depletion of psychological resources or energy.

11-B: Donor Social Class Influences Appreciation of Donation

Jacob Lee, UNIST, South Korea
Christine Kang, California State University Long Beach, USA
Kate Min, Cornell University, USA

This research finds that charitable gift recipients appreciate gifts from lower (vs. upper) social class donors more because they incurred greater self-cost to give. We identify a boundary condition for this effect and find that the amount of the charitable gift (small vs. large) matters.

9-P: My Meal and My Recipe: Social Media Intervention in Rural Food Consumption

Eric Li, University of British Columbia, Canada
Cristalle Smith, University of British Columbia, Canada
Xin Zhao, Lancaster University, UK
Sarah Weseen, University of British Columbia, Canada

This paper employed a social media intervention approach to examine how residents in rural communities share healthy food information through the "My Meal My Recipe" social media campaign. Our findings identify key factors to promote healthy eating in rural communities that constantly facing challenges on food security and healthy living.

4-B: Beyond Lei Feng! Global Fashion Brands and Modern Girl Archetypes in Emerging Chinese Market

Eric Li, University of British Columbia, Canada
Xin Zhao, Lancaster University, UK
Fiona Li, Independent Researcher, China
Magnum Lam, Hong Kong Design Institute, Hong Kong
Wing-sun Liu, Hong Kong Polytechnic University, Hong Kong

This paper examines the role of global fashion brands in the construction of "modern girl" archetypes in China. Through a semiotic analysis of printed advertisements published in popular fashion magazines we identified four "modern girl" archetypes and presented the dialogical relationship between brand-created imageries and local cultural imagination.

13-B: Competitive or Complementary? An Empirical Look at Interactions between Reselling and Agency Selling in Platform-Based Retailing

Qi Li, Nanjing University, China
Quansheng Wang, Nanjing University, China
Peijian Song, Nanjing University, China

Online platforms have become increasingly ubiquitous in retailing. We use empirical evidences to indicate the interactions between reselling and agent selling. Additionally we also recognize how the spillovers and the popularity of agent selling impact such interact relationship in a platform. Our findings provide important theoretical contributions and managerial implications.

11-O: The Influences of Morality-Irrelevant Inspiration on the Two Faces of Morality Behavior

Jianping Liang, Sun Yat-sen University, China
Zengxiang Chen, Nankai University, China
Jing Lei, University of Melbourne, Australia

We propose a common antecedent for both faces of morality and found that morality-irrelevant inspirational experiences could decrease proscriptive morality and increase prescriptive morality via emotional and cognitive transcendence. This is the first paper to explore the roles played by transcendence resulted from inspiration and its consequences on source-irrelevant issues.

10-P: Solving the Paradox of a Large Assortment: The Moderating Role of Choice Mode

Mikyong Lim, Sogang University, Republic of Korea
Young-Won Ha, Sogang University, Republic of Korea

Prior research on the effect of assortment size on purchase behavior revealed that consumers prefer a large (vs. small) assortment but are less satisfied with the selected product from a large (vs. small) assortment. We demonstrate that the moderating effect of choice mode (instrumental vs. experiential) can explain this paradox.

5-T: The Silver Lining of Envy on Social Media? – The Relationships Between Post Content, Envy Type, and Purchase Intention

Ruoyun Lin, Leibniz-Institut für Wissensmedien, Germany

Three studies were conducted to examine the relationships between post content (experiential vs. material purchases) envy type (benign vs. malicious envy) and purchase intention (same vs. similar object). Results indicated that post content did not predict envy type but benign/malicious envy predicted purchase intention of a same/similar product respectively.

13-I: The Development and Validation of a Scale for Virtual Identity versus Actual Identity

Chia-Wei Joy Lin, University of Tennessee at Chattanooga, USA
Yinlong Zhang, University of Texas at San Antonio, USA

This research aimed at developing a theory-based scale for virtual identity. Five studies were conducted to examine refine and validate the proposed virtual identity scale. We demonstrated that this newly developed scale is a reliable and valid measure that captures the centrality meaning affect and behavior dimensions of virtual identity.

14-T: On the Proliferation of Latent Construct in Consumer Research: A Historical Perspective

Shan Lin, Norwegian School of Economics and Business Administration, Norway

The paper reviews constructs used in JCR papers published between 1974 and 2013 and analyzes them by network analysis. Authors visualize the state of the field together with how knowledge accumulates propose the approaches of construct development and call for attention for the usage of several problematic constructs.

20-P: Trust is Good, Control is Effort – The Paradoxical Role of Privacy Concerns in Customer Loyalty Programs

Helena M. Lischka, Heinrich-Heine-Universität Düsseldorf, Germany
Verena Bergers, Heinrich-Heine-Universität Düsseldorf, Germany
Peter Kenning, Heinrich-Heine-Universität Düsseldorf, Germany

Consumers' rising concerns about data safety and privacy threats may also affect consumer behavior particularly in the context of customer loyalty card programs. Using structural equation modeling our work provides insights into the role of trustworthiness and risk beliefs investigating why consumers seldom translate their privacy concerns into actual behavior.

15-D: Product Touch and Consumers' Online and Offline Buying: The Moderation Effect of Mental Representation

Wumei Liu, Lanzhou University, China
Rajeev Batra, University of Michigan, USA
Haizhong Wang, Sun Yat-Sen University, China

Prior research displays inconsistency on whether product touch increases consumers' purchase intention (PI) of the product. We show that the effect of touch on PI is evident when consumers' mental representation of a product is concrete but not when abstract. Mediators of the moderation effect of mental representation are tested.

14-C: Claiming to be Good in Parts or in Whole? The Joint Effect of Ad Headline and Body Copy on Ad Effectiveness

Xuefeng Liu, Loyola University Maryland, USA
Jason Zhang, Loyola University Maryland, USA
Jibo He, Wichita State University, USA

This study considers ad headline and body copy as two distinct components of an ad and shows that their effects are interactive rather than additive in terms of delivering product information. It also extends the classic hypothesis-testing framework by showing that hypotheses could be formed and tested within an ad.

7-B: Bad Experiences Increase Social Closeness Over Time

Kailuo Liu, University of Toronto, Canada
Cindy Chan, University of Toronto, Canada

The paper explores how shared bad consumption experiences influence consumer relationships. Although past research shows bad experiences generate lasting personal unhappiness we find that bad experiences can benefit consumers in a new dimension – strengthening social relationships with others who shared the experiences.

2-C: “We are Breaking Up”: The Direct and Mediating Effects of Conceptual Metaphors on Brand Relationships

Alberto Lopez, Tecnológico de Monterrey, Mexico
Martin Reimann, University of Arizona, USA
Raquel Castaño, Tecnológico de Monterrey, Mexico

Across three experiments this research investigates the effects of relationship metaphors (e.g. “breaking-up”) on brand relationship strength. Drawing on conceptual metaphor theory this work demonstrates that consumers who break a pencil (vs. put together a puzzle) have a weaker (vs. stronger) brand relationship. These effects are mediated by persuasion.

10-J: Fluency Leads to Overconfidence in Decision Making

Fang-Chi Lu, Korea University, South Korea
Jinfeng (Jenny) Jiao, State University of New York at Binghamton, USA

In this paper we explore an antecedence of overconfidence: perceptual fluency. Across our three studies we demonstrate that perceptual fluency leads to a greater overconfidence bias and that the metacognitive experience of feeling right in information processing underlies this fluency effect.

14-D: Consumer Reactance to Persuasive Messages: How Personal Preferences Influence Attitude and Attitude Change

Sabrina Lucke, Technical University of Munich, Germany
Joerg Koenigstorfer, Technical University of Munich, Germany
Angela Y. Lee, Northwestern University, USA

Consumer preferences that is in our study consumers' affiliation with the sender of a message drive not only immediate reactance to persuasion when there is a mismatch between the sender and own preferences but also a delayed increase in attitude. Negative (partly positive) emotions mediate the process.

19-M: The Impact of the Maximizing Mindset on Variety Seeking Behaviors

Jingjing Ma, Peking University, China

When consumers are making choices among a diverse portfolio of options for future consumption they tend to choose too many varieties that are inconsistent with their preferences at the time of consumption. This research shows that activating a maximizing mindset can reduce this variety seeking tendency especially for familiar products.

10-S: The Effect of Maximizing on Consumer Response to Features and Price

Zhenfeng Ma, Wilfrid Laurier University, Canada
Jingjing Ma, Peking University, China

This research shows that the activation of a maximizing mindset elevates consumers' tendency to choose feature-rich products even when these features are nonessential and these products more expensive. We argue that the reason maximizers are more feature focused is because maximizing makes consumers more promotion focused and less prevention focused.

7-E: Emotional Cocktails: Mixed Emotions, Gratifications, and the Enjoyment of Various Types of Movie Genre

Robert Madrigal, California State University at Chico, USA
Colleen Bee, Oregon State University, USA
Brandon Reich, University of Oregon, USA
Troy Campbell, University of Oregon, USA
Nathan Warren, University of Oregon, USA

This research examines the role of mixed emotions in the enjoyment of entertainment experiences. The present study shows that a mix of co-occurring opposite-valence emotions predicts overall enjoyment for films across three genres (bittersweet low-brow comedy and suspense) mediated by genre-specific gratifications.

9-HH: The Power Framework of Addictive Consumption: When, Why, and How Emotion Regulation Leads to Addictive Consumption

Olga Martin, University of Washington, USA
Shailendra P. Jain, University of Washington, USA

Most explanations of addictive behaviors posit emotion regulation as the primary motivation for such behaviors. We develop a framework to understand why emotion regulation may lead to addictive consumption when this influence occurs and how it operates. We find perceived powerlessness mediates the relationship between emotion regulation and addictive consumption.

4-K: Methods to Improve Construct Measurement Equivalency in Cross-Cultural Consumer Research

Veronica Martin Ruiz, Iowa State University, USA
Jose A. Rosa, Iowa State University, USA

The Construct Measurement Equivalency Method is a theory-grounded approach to research instrument translation in cross-cultural inquiry. It can enhance cross-cultural research validity and reliability help make target population instruments more culturally and linguistically relevant attenuate the loss of linguistic and cultural nuances and make possible a more natural response flow.

15-H: The Sophisticated Brand Scent: The Effects of Scent Type on Brand Sophistication

Márcia Maurer Herter, ESPM Business School, Brazil
Diego Costa Pinto, ESPM Business School, Brazil
Mellina Terres, UFCSPA, Brazil
Leonardo Nicolao, UFRGS, Brazil

This research examines the effects of scent type on brand sophistication. In two studies we show that woody (vs. floral) scent enhances brand sophistication. In addition findings suggest that brand sophistication mediates the effect of scent type (woody vs. floral) on consumer's willingness to pay.

4-D: Decomposing Cultural Effects in the Valuation of Time: Orientation, End and Progress

Yan Meng, Grenoble Ecole de Management, France
Ana Valenzuela, Baruch College, CUNY, USA & ESADE, Spain

Individuals of Western cultural identity assign a higher monetary value to the future and are willing to wait a longer time for a larger amount of money than Easterners because of East Asians' past orientation future ambiguity and belief that time-related events progress following trends that may reverse.

15-E: Putting Scent Where It Belongs: The Effects of Scent Intensity and Presentation Order on Scented Product Evaluation

Hua (Meg) Meng, Longwood University, USA
Cesar Zamudio, Kent State University, USA
Robert D. Jewell, Kent State University, USA

This research investigates how to effectively promote a new scented product and how to sequence its presentation alongside other scented products. This study examines the interactive effects of presentation order and scent intensity on the focal scent's evaluation and suggests the optimal placement of the focal scent.

17-B: Every Crowd Has a Silver Lining: Threat Unleashes the Positive Aspects of Social Density

Uwe Messer, University of Bamberg, Germany
Alexander Leischnig, University of Bamberg, Germany
Elisabeth Distler, University of Bamberg, Germany

Does activation of the self-protection system change consumer reactions to the social store environment? Drawing from evolutionary psychology theory we show that an activated self-protection motive increases approach of socially dense retail environments. This effect is contingent on people's general concern about interpersonal danger.

6-D: On Biological Origins of Materialism

Uwe Messer, University of Bamberg, Germany
Alexander Leischnig, University of Bamberg, Germany
Elisabeth Distler, University of Bamberg, Germany

Drawing from biological research on prenatal testosterone and status drive we examine the relationship between digit ratio (a proxy of prenatal testosterone exposure) and materialism showing that higher exposure is linked to higher materialism in men. A potential reason is that men are more strongly predisposed to focus on possessions.

14-S: Liminality in Consumer Research

Laetitia Mimoun, HEC Paris, France
Fleura Bardhi, City University of London, UK

This article integrates disparate consumer research on liminality a transitional state of betwixt and between. It introduces a theory of consumer liminality including a theoretical framework explaining what liminality is and what structures it and the concept of liminal consumer performances which captures how consumers do liminality.

20-H: Perseverance of the Underdog Effect in the Face of Negative Reviews

Dong-Jun Min, University of New Orleans, USA
Anja Luethi, University of New Orleans, USA
Kyeong Sam Min, University of New Orleans, USA

People like rooting for underdogs. However it is questionable whether their support for an underdog's brand continues even after they hear something negative about the brand. In this research we examine when and why negative reviews are more detrimental for a top dog's brand compared to an underdog's brand.

1-H: The Effect of Abstract Versus Representational Art Imagery on Product Luxuriousness Perception And Evaluation

Tingting Mo, Zhongnan University of Economics and Law, China
Xiaoyan Deng, Ohio State University, USA

This research demonstrates that applying abstract (vs. representational) art imagery to product design increased consumers' perceptions of product luxuriousness and enhanced purchase intention (experiments 1 & 3). However this "luxury infusion" effect is much reduced for higher (vs. lower) value products (experiment 2).

4-O: Tension and Trust: Crossing the Border Between Hybrid Economies and Home

Michael Moorhouse, Western University, Canada
June Cotte, Western University, Canada

Research into sharing (Belk 2010 2014) and hybrid economies (Bardhi and Eckhardt 2012; Scaraboto 2015) has blossomed. We outline a conceptual framework to organize theory and research on the trust required and tension inherent in sharing exchanges in one's home.

8-B: Eliminating the Paper Trail: Consumers Prefer Using Cash over Cards for More Painful Purchases

Joshua Morris, Stanford University, USA
Szu-chi Huang, Stanford University, USA

We propose that when consumers make more painful purchases (e.g. due to guilt or low transaction utility) they will be more likely to use cash than a debit or credit card in order to reduce their "paper trail" and the likelihood of recalling their painful financial activity in the future.

16-B: Consumer Benevolence and Risk Taking: Is Altruism Perilous?

Sudipta Mukherjee, Virginia Tech, USA
Sam Bond, Georgia Tech, USA
Mario Pandelaere, Virginia Tech, USA

Our research examines the relationship between consumer benevolence and risk taking. We find across three 3 studies that at both trait and situational levels benevolence is related to increased risk taking. Specifically we find that behaving benevolently results in decreased risk perception and subsequently increased risk taking.

10-I: Do Deals Really Help Save Money: Deal Salience Results in Increased Consumer Spending

Sudipta Mukherjee, Virginia Tech, USA
Mario Pandelaere, Virginia Tech, USA

Consumers have the lay belief that looking for deals helps in saving money. In this paper over a series of 4 experiments we test this lay belief and find results that indicate to the contrary. We find that deal salience decreases self-control and increases consumer spending.

11-F: Looking a Free Gift in The Mouth: The Effect of Free Gifts on Charitable Behavior

Ashesh Mukherjee, McGill University, Canada
Raj Raghunathan, University of Texas at Austin, USA
Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand

Charities often include free gifts such as cards stickers pens calendars and memory sticks in their donation appeals. Using the theoretical perspective of fit this research identifies gift origin as a new moderator of the effect of free gifts on charitable behavior.

5-H: I'm Scared, Want to Listen? Incidental Fear's Influence on Self-Disclosure to Brands

Anupama Mukund Bharadwaj, University of Washington, USA
Lea Dunn, University of Washington, USA

Self-disclosure is an increasingly popular topic within marketing yet scant literature has considered emotional impact on whether one divulges information to others. We examine the impact of fear on self-disclosure showing that people who experience a frightening event alone are more likely to self-disclose even when the act is risky.

5-E: Fight or Flight? Consumers' Implicit and Explicit Emotional Reactions to Looming Threat

Lana Mulier, Ghent University, Belgium
Hendrik Slabbinck, Ghent University, Belgium
Iris Vermeir, Ghent University, Belgium

We used face reading technology to examine the emotional effects of the looming bias. We find evidence that looming stimuli elicit more negative emotions in consumers compared to receding stimuli and that animal threat leads to more negative emotions than human facial threat but only when it's looming.

18-D: Me First, Then the Environment: Pro-Environmental Behavior in Communal vs. Agentic Narcissists

Iman Naderi, Fairfield University, USA

Across two experiments and following a new formulation of narcissism (i.e. the agency-communion model) this research investigates whether agentic and communal narcissists differ in their likelihood to engage in various forms of pro-environmental behavior. Supporting this proposition this study also shows that perceived self-sacrifice and perceived social-benefits could influence these two groups of consumers' decision to purchase eco-friendly products.

5-C: Do Consumers Get What They Want? How Desires Influence Consumer Happiness

Leonardo Nicolao, UFRGS, Brazil
Vinicius Brei, UFRGS, Brazil

This research shows that the intensity of consumption desires predicts expected happiness for both material and experiential purchases. However this pattern does not hold for experienced happiness with past purchases. Past happiness increases with the intensity of desires for material purchases but not for experiences.

8-D: How Price Path Characteristics Shape Investment Behavior

Sven Nolte, University of Muenster, Germany
Judith Schneider, University of Muenster, Germany

Consumers making financial decisions are confronted with price charts. In a laboratory experiment we strip charts of their information content by providing participants with full information via a different channel. Participants are influenced even by informationally irrelevant paths. We identify four important visual characteristics of charts that bias consumer decisions.

10-H: Creativity in Real Life: How a Creative Mindset Affects Intertemporal Preferences

Luke Nowlan, University of Miami, USA
Carter Morgan, University of Miami, USA

This paper explores how thinking creatively affects consumers' intertemporal preferences. We suggest that a creative mindset diminishes the vividness with which consumers perceive products and thus increases consumers' patience for the product. We support this framework across two studies.

4-E: Domains of Consumer Tranquility and the "Tranquility Gap"

Hyewon Oh, University of Illinois at Urbana-Champaign, USA
Cele Otnes, University of Illinois at Urbana-Champaign, USA
Ravi Mehta, University of Illinois at Urbana-Champaign, USA

How do consumers leverage the marketplace to experience tranquility? We find three domains of tranquility: "everyday home" "everyday marketplace" and "extraordinary marketplace" which are shaped by the interaction between consumers' level of control in the domain and their need to comply with gatekeepers. Specific sources of "tranquility gap" are discussed.

9-M: Improving the Efficacy of Posted Calorie Information Through the Strategic Use of Provincial Norms

Ashley Otto, Baylor University, USA
Brennan Davis, California Polytechnic State University, USA
Kirk Wakefield, Baylor University, USA
Joshua Clarkson, University of Cincinnati, USA

This research addresses a critical issue in regard to how to improve the failed efficacy of the mandate requiring the posting of calorie information on restaurant menus. In response we propose a means by which to improve the efficacy of this mandate through the strategic use of provincial norms.

20-O: The Presence of Familiar Words Drive Social Media Likes, Comments, and Shares

Ethan Pancer, Saint Mary's University, Canada
Vincent Chandler, Saint Mary's University, Canada
Maxwell Poole, Saint Mary's University, Canada

Consistent with a processing fluency account we find that online posts with a higher ratio of familiar words are associated with higher social media engagement. We analyzed Facebook posts and tweets from Humans of New York over a 3-year period to see how word familiarity shape these interactions.

14-L: The Effect of Stress on the Persuasiveness of (Central vs. Peripheral) Advertising Messages

Shirish Panchal, Wilfrid Laurier University, Canada
Dr. Tripat Gill, Wilfrid Laurier University, Canada
Dr. Zhenfeng Ma, Wilfrid Laurier University, Canada

The present research is the first study to examine the effect of stress on the persuasiveness of two key types of advertising messages (central vs. peripheral). Contrary to the negative connotation of stress we show the beneficial effect of moderate stress on information processing and its downstream effect.

18-G: The Asymmetric Effect of Going Green versus Going Luxury

Jooyoung Park, Peking University, China

Brand/line extension research has failed to investigate how consumers evaluate products with the same attributes differently depending on the focal attribute of their parent brand. This study shows that a pro-environmental product extended by a luxury brand is better accepted than a luxury product extended by a pro-environmental brand.

10-L: Number-location Bias: Do Consumers Correctly Process the Number?

Jihye Park, Hankuk University of Foreign Studies, South Korea
Yoon Jin Ma, Illinois State University, USA

This study investigated whether consumers process numeric information with spatial cues and whether a number-location bias is attenuated or strengthened by verticality of visual focus. Results of a series of experiments revealed that the verticality effect was stronger than the horizontality effect of numeric information on perceived magnitude.

6-I: The Impact of Mixed-Sex Competition on Women's Choice of Androgynous Products

Jooyoung Park, Peking University, China
Fayrouz Souissi, Peking University, China

The simultaneous emergence of unisex dressing with women entering competitive environments makes it judicious to study the popularity of androgynous products in the context of mixed-sex competition. This study aims to fill a gap in the literature by investigating women's choice of androgynous products in the context of mixed-sex competition.

11-G: Pride and Donation Behaviors

Sungjun (Steven) Park, Korea Advanced Institute of Science and Technology (KAIST), South Korea
Yong J. Hyun, Korea Advanced Institute of Science and Technology (KAIST), South Korea

By using the donation amount of real money results indicate that participants experiencing authentic pride placed a more lenient bar to them while requiring others a stricter moral bar. The results become insignificant to participants when experiencing hubristic pride.

14-F: Free But Suspicious Gift Promotion: the Influence of Product-gift Fit on Devaluating the Promoted Product

Yookyung Park, Seoul National University, Korea
Youjae Yi, Seoul National University, Korea

The present research demonstrates that when a low-fit gift (vs. a high-fit gift) is provided upon purchase consumers' judgments on the promoted product's value are undermined. This influence is mediated by perceived deceptiveness of the offer and moderated by consumer shopping orientation.

2-S: The Asymmetric Attribution toward Brands (Underdog vs. Top-dog) upon Brand Crisis (External vs. Internal)

Kiwan Park, Seoul National University, Republic of Korea
Yaeri Kim, Seoul National University, Republic of Korea
Seojin stacey Lee, Seoul National University, Republic of Korea

We identify that in service domain where perceived warmth from the brand is particularly important service failure especially caused by the underdog brand is considered more serious. However in product context where brands' competence is more important than warmth people express less forgiveness intention on top-dog brands' crisis.

1-J: The Effect of Incidental Disgust on Aesthetic Preference

Kiwan Park, Seoul National University, South Korea
Seojin Stacey Lee, Seoul National University, South Korea
Joonkyung Kim, University of Toronto, Canada

Current work shows that an exposure to disease related stimuli will lead to a more favorable evaluation for simple designs and less favorable evaluation for designs visually complex. This research contributes to the emotion and art literature by showing how avoidance tendency triggered by disgust can influence aesthetic evaluation.

19-H: An Individual Choice vs. A Bundle Choice: The Effect of Choice Mechanics on Diversification Bias

Jihye Park, Hankuk University of Foreign Studies, South Korea

To the extension of Mittelman et al. (2014) this study examined how choice mechanics influence variety seeking in the multiple product choice context. The expected satiety drove variety seeking in the individual choice mechanics whereas relationships of items were more likely to be considered when consumers chose a bundle.

13-F: Location-based Services Effect on Online Purchase Intention

Jean-Eric Pelet, ESCE International Business School, France
Jashim Khan, University of Surrey, UK
Kelly Cowart, University of South Florida Sarasota-Manatee, USA

This paper presents an empirically tested model explaining the relationship between social media location-based services (LBS) user emotion and online purchase intention.

14-G: Incorporating Vanity into a Luxury Value-Attitude-Behavior Model- Evidence from Luxury Restaurant Consumers

Norman Peng, University of Westminster, UK
Annie Chen, University of West London, UK
Li-Wei Mai, University of Westminster, UK
Stella Kladou, Sheffield Hallam University, UK

Existing theories of the effect of luxury value on consumers may require adjustment when applied to service-based products. To contribute to the literature this study incorporates a "vanity" variable into a luxury value-attitude-behavior model. A total of 150 participants from the UK completed questionnaires. All hypotheses are supported.

3-B: Can Implicit Theory Influence Construal Level?

Sara Penner, University of Manitoba, Canada
Olya Bullard, University of Winnipeg, Canada
Kelley J. Main, University of Manitoba, Canada

This research examines the relationship between implicit theory and construal level. Three studies show that holding an incremental (vs. entity) theory is associated with abstract (vs. concrete) information processing. The likely underlying mechanism is positivity shift that results from holding an implicit (vs. entity) theory.

16-L: When is More Better? Will How Many People Ask Affect the Outcome?

Sara Penner, University of Manitoba, Canada
Kelley Main, University of Manitoba, Canada
Jennifer Argo, University of Alberta, Canada

Why do many non-profits use multiple solicitors in their donation requests with the belief it will improve their fundraising results? We explore this through the lens of attitude and discover that men and women have very different reactions related to the gender and number of people asking for the gift.

11-M: Puritan Peers or Egoistic Entrepreneurs? An Examination of Moral Identity in Collaborative Consumption

Rebeca Perren, California State University San Marcos, USA
Kristin Stewart, California State University San Marcos, USA

Despite proponents of collaborative consumption portraying peers as moral citizens of society recent findings suggest that egoistic motives drive participation. Platform-providing firms rely on users' cooperative behaviors; thus this research examines how prolonged participation diminishes moral identity. Findings reveal important implications for the success of emerging peer exchange business models.

18-F: Redeeming Guilty Pleasures - Sustainable Consumption Across Vice and Virtue Categories

Anne Odile Peschel, Aarhus University, Denmark
Jessica Aschemann-Witzel, Aarhus University, Denmark

The trend of upcycling is observable in different areas of consumption – including in the food industry as ‘waste to food’. While consumers avoided upcycling in virtue categories it seemed to offset the guilty pleasure of consuming vice products. Therefore it could be an alternative approach for marketing sustainable ingredients.

9-Y: Too Large to Eat it All: How Package Size Impacts Anticipated Food Waste, Intentions and Preferences

Olivia Petit, INSEEC Business School, France
Renaud Lunardo, KEDGE Business School, France
Bradley J. Rickard, Cornell University, USA

Through three experiments we demonstrate that larger packages prompt anticipated food waste which then reduces purchase intentions. In addition results reveal that when being primed with food waste consumers are less likely to prefer large packages even if such packages are associated with a promotion.

9-U: Smell-o-Vision: Olfactory and Visual Store Atmospherics Prime Healthy Food Choices

Megan Phillips, Auckland University of Technology, New Zealand
Sommer Kapitan, Auckland University of Technology, New Zealand

The present research investigates the ability of store atmospherics to nudge shoppers towards purchasing healthier foods. An observation study and an experimental study together demonstrate that store atmospherics can be tailored to create a message of healthfulness and act as a prime to persuade shoppers to purchase healthier foods.

5-I: Judgement and Decision-Making: The effect of induced emotional uncertainty on predicted utility and forecasting accuracy.

Athanasios Polyportis, Athens University of Economics & Business, Greece
Flora Kokkinaki, Athens University of Economics & Business, Greece

The purpose of the research is to explore the effects of the certainty-uncertainty appraisal dimension of incidental emotions on predicted utility and affective forecasting accuracy. Emotions associated with uncertainty seem to result in smaller forecasting error and utility overprediction. To this end the results of two experiments are described.

6-F: The Red Derogation Effect

Nicolas Pontes, Queensland University of Technology, Australia
JoAndrea Hoegg, University of British Columbia, Canada

This research demonstrates that the red-attractiveness effect of women viewing men is moderated by mate retention goals and that the effect is mediated by perceived threat. Additionally we show that the red-threat link is moderated by self-control strength such that the effect dissipates when self-control resources have been depleted.

11-H: Being Good Versus Being the Better: Consumer Responses to Preferential Treatment.

Vivian Pontes, Queensland University of Technology, Australia
Nicolas Pontes, Queensland University of Technology, Australia
Dominique Greer, Queensland University of Technology, Australia

This research shows that extent to which preferential treatment can lead to negative versus positive emotions. In particular when a benefit given causes some harm to others the positive effects of being advantaged are mitigated by the arousal of negative moral emotions which in turn decreasing customer satisfaction.

5-K: Pride and Shame Moderate the Effect of Regulatory Focus on Risk Taking Propensity

Aylar Pour Mohammad, Bocconi University, Italy
Gulen Sarial Abi, Bocconi University, Italy

How self-conscious emotions affect risk taking behavior? Prior literature has indicated that promotion (prevention) focus is associated with risk seeking (risk avoiding) propensity (Bryant and Dunford 2008). Two experiments demonstrate that positive (negative) self-conscious emotions may attenuate the effect of promotion (prevention) focus on risk taking propensity.

7-J: Making Money Meaningful: Fostering Meaningful Lives Through Growth-Based Experiential Purchases

Emily Powell, New York University, USA
Adam Alter, New York University, USA

As consumers strive for "the good life" they must search for both happiness and meaning. Across two studies we show that consumers who spend more money on growth-based experiences (as opposed to purely enjoyment-based experiences) derive greater meaning from those experiences and in their lives as a whole.

20-Q: Understanding Word-of-Mouth Transmission

Ashleigh E. Powell, RMIT University, Australia
Adrian R. Camilleri, RMIT University, Australia
Angela R. Dobele, RMIT University, Australia
Constantino Stavros, RMIT University, Australia

We integrate emergent consumer psychology findings regarding emotional arousal self-enhancement and communication context by examining how these factors interact to influence word-of-mouth transmission.

17-L: Social TV and Viewing Experience

Emily Powell, New York University, USA
Alixandra Barasch, New York University, USA

We examine the effect of social TV on viewers' likelihood to watch a show again. We find that social TV increases repeat viewing when viewers are alone (but not in a group) and when they create content related to the show (but not unrelated content).

9-S: Presentation Style Affects Decision Processes: A Dietary Choice Study

Mona Prakash, Duke University, USA
Jonathan Winkle, Duke University, USA
Nicolette Sullivan, Duke University, USA
Gavan Fitzsimons, Duke University, USA
John Pearson, Duke University, USA
Scott Huettel, Duke University, USA

When making decisions the available options can often take a variety of forms. For example menus can have some options that have images while others are described in words. This paper explores how the visual form in which an option is presented can bias decision processing.

11-Q: The Viciousness and Caring of Sharing: Morality and Motivations of Online Shamers

Chen Pundak, Tel Aviv University, Israel
Yael Steinhart, Tel Aviv University, Israel
Jacob Goldenberg, Interdisciplinary Center Herzliya, Israel

We focus on public shaming in online social networks. Shaming entails two contradictory outcomes: informal enforcement against deviant behavior and a violation of privacy rights. A set of studies shows the duality of shaming and that identification of the wrongdoer moderates the effect of morality on participation in public shaming.

15-B: It 'Sounds' Healthy to Me! The Influence of Sound on Food Choice.

Eduardo Rech, UFRGS, Brazil
Cristiane Pizzutti, UFRGS, Brazil
Eric Yorkston, Texas Christian University, USA

Studies on sensory stimulation has given little attention to sound influencing consumers' choice. One of our purposes is to contribute with transformative research by exploring a way to increase consumption of healthy food. Our first results are encouraging since it is showing significant associations between sound and choice for food.

7-I: Is a Smartwatch a Fashion Item or an IT Device?: Moderating Effect of Category Frame in Smartwatch Adoption

Jong-Youn Rha, Seoul National University, Korea
Jin-Myong Lee, Chungnam National University, Korea
Sunny Park, Seoul National University, Korea
Eunsun Cho, Seoul National University, Korea
Bo Han Lee, Seoul National University, Korea

A smartwatch is an innovative product that has both IT and fashion product attributes. Based on previous studies that suggest consumers develop knowledge schema for new products using prior knowledge of existing product categories we investigated the moderating effect of the category frame on consumers' intention to adopt smartwatches.

10-U: To Search or Not to Search? Exploring Consumer's Sensitivity to Task Importance

Yefim Roth, Israel Institute of Technology, Israel
Kinneret Teodorescu, Israel Institute of Technology, Israel

Previous search literature suggests that consumers "do not search much". We show that in certain settings consumers search extensively. Furthermore they often do not allocate their search effort effectively searching equal amount of time or even longer in situations with minor or even negligible benefit for their effort.

9-DD: "Works With/For You!" How Framing Health-Related Products as Partners Versus Servants Impacts the Consumption of Indulgences

Caroline Roux, Concordia University, Canada
Kelly Goldsmith, Vanderbilt University, USA
Kamila Sobol, Concordia University, Canada
Laura Goodyear, Concordia University, Canada

We investigate the impact of engaging with a health-related product that is framed as either a partner (co-producer of the benefit) or servant (provider of the benefit) on goal-conflicting behavior. Specifically we find that framing a health-related product as a servant (vs. partner) increases enjoyment from and desire for indulgences.

2-M: Distancing from the Envied Person: How Envy, Personal Distance and Framing Brand Availability Affects Brand Evaluations

Rajat Roy, Bond University, Australia
Subimal Chatterjee, State University of New York at Binghamton, USA

Feeling malicious (relative to benign) envy engenders more distancing from the envied person making a brand that is not preferred by the envied person more attractive than the brand that is and this effect is exaggerated if the brands are in limited supply rather than in excess demand.

9-F: Destigmatizing the Overweight Consumers: A Communal Perspective

Nada Sayarh, University of Geneva, Switzerland

While stigma is socially detrimental consumer researchers have little to say about how it relates to consumption. Also this concept has been mainly investigated from an individual perspective. In this paper we indicate how consumption communities have the potential to transform the stigmatized reduce their stigma and improve their well-being.

14-N: The Effect of Public Commitment in Consumers' Satisfaction

Fernanda Scherer, UFRGS, Brazil
Cristiane Pizzutti, UFRGS, Brazil
Clara Koetz, Rennes School of Business, France

Our study demonstrates that public commitment with an imminent consumption experience (e.g. check-in in social media) increases customers' expectations which negatively impacts on their subsequent satisfaction with the product. This mediation of the expectation showed to be total when the performance was high but partial when the performance was low.

11-A: "Doing Good and Having Fun" - The Role of Moral Obligation and Perceived Enjoyment For Explaining Foodsharing Intention

Nadine Schreiner, Heinrich Heine University Düsseldorf, Germany
Sarah Blümle, Heinrich Heine University Düsseldorf, Germany
Peter Kenning, Heinrich Heine University Düsseldorf, Germany

This research focus on a combination of morality and hedonism to explain foodsharing behavior. A modified version of field theory was applied to differentiate the consumer's and provider's perspective. Results confirmed that foodsharing can be explained by moral obligation and perceived enjoyment even though the latter is comparatively weak.

19-E: Surprise me! How Uncertainty Labels Affect Product Consumption

Anika Schumacher, Maastricht University, The Netherlands
Caroline Goukens, Maastricht University, The Netherlands
Kelly Geyskens, Maastricht University, The Netherlands
Martin Reimann, University of Arizona, USA

Uncertainty labels such as "mystery" or "surprise" are frequently used to encourage product choice e.g. "surprise sale" Kinder Surprise®. Yet the actual consumption consequences of these labels are poorly understood. Across five studies we show that labels of uncertainty increase indulgent consumption holding the actual level of uncertainty constant.

18-C: Let Market Know How Your Firm is Implementing Corporate Social Responsibility

Junhee Seok, Seoul National University, Korea
Sarang Go, Seoul National University, Korea
Youseok Lee, Seoul National University, Korea
Byungdo Kim, Seoul National University, Korea

So far many studies examined the effect of CSR on firm value but the results have been contradictory. According to our findings publicizing CSR is the key variable that affects firm value and the corporate reputation mediate this relationship. Furthermore the effect of CSR varies depending on the firm size.

4-R: Transnational Consumption

Zahra Sharifonnasabi, University of London, UK
Fleura Bardhi, University of London, UK

We examine transnational lifestyle to identify the nature of consumption when consumers inhabit multiple countries simultaneously. A distinct notion of home emerged: fragmented transnational home anchored in various localities. We conceptualize transnational consumption as fragmented and localized where specific consumption goals are appointed and practices are associated in each locality.

2-Z: When Not to Surprise? The Role of Rewards and Communal Mindset on Perceptions of Brand Value

Sirajul Shibly, State University of New York at Binghamton, USA
Subimal Chatterjee, State University of New York at Binghamton, USA

We show that surprise relative to certain rewards positively impact brand-value perceptions among consumers who see the rewards as a signal of building a communal relationship. Surprise hurts value perceptions of consumers with less communal mindset particularly for cash rewards (relative to gift cards).

14-B: Can't Switch Off: The Impact of an Attentional Bias on Attitudes

Sunaina Shrivastava, University of Iowa, USA
Gaurav Jain, Rensselaer Polytechnic Institute, USA
Dhananjay Nayakankuppam, University of Iowa, USA
Gary Gaeth, University of Iowa, USA

We show that individuals' attention gets chained in incomplete events even when that attention is normatively unwarranted i.e when the outcomes are known and no further action is needed. We show that such a non-normative chaining of attention leads to negative attitudes towards entities associated with the event.

17-H: Publicity as Justification

Kao Si, The Chinese University of Hong Kong, China
Xianchi Dai, The Chinese University of Hong Kong, China

Whereas public displays of negative conducts are undesirable we show a counter-intuitive positive effect of publicity on people's inference and evaluation of negative conducts. Observers evaluate an apparently negative behavior more favorably when it is done publicly than privately. Evidence supports an inference mechanism of the current effect.

19-G: Hot Streak! Consumer Inferences from Streaks of Virtuous Choices

Jackie Silverman, University of Pennsylvania, USA
Alixandra Barasch, New York University, USA
Deborah Small, University of Pennsylvania, USA

In three studies we demonstrate that people infer that others are more likely to choose a virtuous option over a vice option after a recent streak compared to other patterns of choices even when holding the base rate of choosing virtue constant. This effect is driven by higher perceived commitment to the virtuous behavior.

11-P: The Positive Effect of Moral Licensing on Human Behavior: When a Virtuous Act Motivates You to Work Hard

Anirban Som, IIM Trichy, India

Moral licensing theory argues that individuals who initially exhibit moral behaviors subsequently resort to immoral behaviors. Literature in the context of moral licensing predominantly highlights the negative consequences of this phenomenon. The current research contributes to this literature by highlighting the positive effects of moral licensing on individuals' behaviors.

1-D: Effects of Logo Colorfulness on Consumer Judgments

Jiaqi Song, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong

Consumers have more favorable attitudes toward a brand when its logo contains multiple colors than a single color. This effect is driven by an increase of the perceived product variety of the company and moderated by brand positioning and the external attribution of the logo colorfulness.

9-Q: Packaging Glossiness Thwarts Perceived Food Healthiness

Jiaqi Song, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Anish Nagpal, University of Melbourne, Australia
Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong

Two studies demonstrate that consumers judge food and beverages with glossy exterior packages as less healthy than those in matte packages. This effect is driven by the belief that food and beverages in glossy packaging are more processed and moderated by the stereotyped perceived healthiness of the food category.

1-K: The Impact of Visual Glossiness on Psychological Newness and Product Judgment

Jiaqi Song, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Gerald J. Gorn, Hong Kong Polytechnic University, Hong Kong

Two studies in this research show that consumers have more favorable evaluations of products with a glossy as opposed to a matte surface. In addition this effect is found to be driven by the heightened psychological newness of products with a glossy appearance.

7-N: “You Grin At Each Other, You Celebrate Together, You Hug Strangers”: Consequences of Shared Identity Within Crowds at Sporting and Music Events

Maximilian Stieler, University of Bayreuth, Germany
Fergus G. Neville, University of St. Andrews, UK
Claas Christian Germelmann, University of Bayreuth, Germany

Building on contemporary crowd psychology this paper investigates if and how individuals experience a shared identity with strangers at diverse crowd events. We conducted qualitative semi-structured interviews with crowd participants in three different crowd contexts. Findings suggest that shared identity led to increased intimacy with strangers and intense positive feelings.

3-E: Neurological Evidence for an Interrelation Between Imagery, Psychological Distance, and Construal

Paul E. Stillman, Ohio State University, USA
Hyojin Lee, San Jose State University, USA
Xiaoyan Deng, Ohio State University, USA
Rao Unnava, University of California Davis, USA
Kentaro Fujita, Ohio State University, USA

While many researchers have investigated the effects of visualization in marketing limited research has directly explored the nature of mental images due to methodological limitations. In the present research we employ fMRI technique to investigate consumers' mental imagery. We found a fundamental relationship between mental imagery psychological distance and construal.

16-O: I Am What I Borrow: Trait Transfer in Borrowed and Rented Products

Rusty Stough, University of Wisconsin, USA
Page Moreau, University of Wisconsin, USA

We extend work on identity by examining how consumers view themselves through products they either rent or borrow. We found an increase in satisfaction with rented products from an anonymous source than from borrowed products and evidence for trait transfer when products are borrowed.

5-L: Psychological Drivers of Customer Compliance: Self-Identity Threats and Discrete Emotions

Kristina Stuhler, Old Dominion University, USA
Chuanyi Tang, Old Dominion University, USA
Mahesh Gopinath, Old Dominion University, USA

This research develops and tests a theoretical framework on consumer compliance by incorporating self-identity theory and cognitive-emotion theory. We propose self-identity threats and discrete emotions influence customer compliance. A qualitative study will be conducted first to develop and refine the theoretical framework which will then be tested by experimental design.

10-F: Choice of Ownership – How Choosing Enhances the Endowment Effect on Product Pricing and Evaluation

Daniel Sun, University of Calgary, Canada
Mehdi Murali, University of Calgary, Canada

We all have possessions but not all of our possessions are valued equally. The initial choice of ownership may trigger subsequent differential connections to a particular possession. This research investigates the effect of choice on product ownership in terms of both pricing and evaluation.

19-F: Vegas it Up to Boost Your Performance!

Arash Talebi, ESSEC Business School, France
Sonja Prokopec, ESSEC Business School, France

Two pilots and one lab study show that using uncertain price promotions leads to desirable placebo effects. This research expands the scope of marketing placebo effects to desirable placebo effects in promotional settings. Moreover we propose that the effect is mediated by enhanced feelings of empowerment due to heightened self-attribution.

4-A: Beauty is in the Eye of the Beholder: Young Girl's Perception of Female Attractiveness in New Zealand, India, and Fiji

Tabitha Thomas, University of Otago, New Zealand
Kirsten Robertson, University of Otago, New Zealand
Maree Thyne, University of Otago, New Zealand

This research investigates 6-12-year-old girls' perception of female attractiveness in three countries. The findings underscore the importance of understanding how the beauty ideals and stereotypes prevailing in the society influences young girls' notion of what constitutes beauty and the impact it can have on their well-being.

4-I: Good Looks, Possessions, and Stereotypes: The Relationship Between Physical Attractiveness and Materialism

Tabitha Thomas, University of Otago, New Zealand
Kirsten Robertson, University of Otago, New Zealand
Maree Thyne, University of Otago, New Zealand

Prior research has shown that internalizing materialism and appearance related ideals negatively impact adults' well-being however little is known whether young children also internalize similar ideals. Thus in the present research using Dittmar's (2008) framework we examine the ages at which children start perceiving links between physical attractiveness and materialism.

9-N: Medicalization in Finnish Functional Foods: The Normalization of Medical Disorders

Jack Tillotson, Aalto University, Finland

I examine the normalization of medical disorders as consumers organize around discourses surrounding the functional food market. Medicalization – the definition and treatment of social problems as medical issues - is a widespread phenomenon but understudied in consumer research. This paper looks at functional foods as a form of medicalization.

2-F: Are the Eyes the Mirror to the Soul?: The Influence of Eye Gaze Direction on Narrative Transportation and Self-Brand Connection

Ngoc (Rita) To, University of Houston, USA

Vanessa Patrick, University of Houston, USA

We aim to demonstrate the influence of ad model's gaze direction (direct versus averted) on consumer self-brand connection. With two studies we demonstrate that averted (versus direct) gaze enhances narrative transportation which drives self-brand connection. We also examine the moderating role of rational (vs. emotional) appeals on this relationship.

7-A: Assembling the Ritual: Consumer Experiences in a Diverse Network

Omer Torlak, Turkish Competition Authority, Turkey

Mujdat Ozmen, Eskisehir Osmangazi University, Turkey

Muhammet Ali Tiltay, Eskisehir Osmangazi University, Turkey

Mahmut Sami Islek, Anadolu University, Turkey

Ufuk Ay, KTO Karatay University, Turkey

We investigate the formation of consumer's consumption ritual parts and discourses associated with Feast of Sacrifice. This study contributes to the literature on religious rituals and practices because of viewing ritual as an assemblage including material and expressive features as well as human and non-human actors.

15-A: Does it Sound Crowded to You? A Proposed Multisensorial Approach to Crowding Research

Fernanda Trindade Deyl, Pontificia Universidade Católica do Rio Grande do Sul, Brazil

Lélis Balestrin Espartel, Pontificia Universidade Católica do Rio Grande do Sul, Brazil

Research regarding crowding is broad in academia; however few studies focus on its auditory perspective. The present study proposes a broader approach to crowding research by putting emphasis on the auditory variables present in retail environments which may contribute to the perception of density and consequent perception of crowding.

14-K: The Effect of Service Providers' Attractiveness on Consumers' Preferences for Status Quo

Natalie Truong, Nanyang Technological University, China

Jennifer Argo, University of Alberta, Canada

George Christopoulos, Nanyang Technological University, China

How does beauty influence the consumer's decision process and choices? In two studies we found that with exposure to attractive (vs. unattractive) female salespersons female participants were more likely to prefer the traditional over the innovative products (study 1) and demonstrated higher preference for status quo (study 2).

5-W: Why Firms Should Be Thankful for Thankful Customers: Incidental Gratitude Increases Satisfaction with Consumption Experiences

Arianna Uhalde, University of Southern California, USA
Valerie Folkes, University of Southern California, USA

Three studies demonstrate incidental gratitude influences consumers' reactions to product failure experiences. Incidental gratitude (vs. non-emotionally infused thoughts about others incidental pride in oneself and incidental admiration of others) 1) increases satisfaction by fostering compassion and 2) reduces behaviors like spreading negative WOM and grudge-holding against the firm.

4-P: The Emancipatory Alliance for Social Activism: The Symbiotic Interplay between Subcultures and Social Movements

Emre Ulusoy, Youngstown State University, USA

While subcultures mold potentially destructive youth rebellion into constructive activism and mobilize individuals to social movements social movements imbue subcultures with a radical political edge the two working together to seek meaningful social and cultural change.

20-D: False Positives: How Double-sided Review Systems Affect Consumers' Rating Valence

Bryan Usrey, University of East Anglia, UK
Antje Graul, Leeds University, UK

Drawing on reciprocity literature three studies demonstrate that double-sided review systems in peer-to-peer service schemes positively affect consumers' rating valence due to activating their psychological perception of "pre-ciprocity" of the review – leading to false positives. The effect is strengthened in a socially distant and attenuated in a private review scenario.

10-Q: The Compromise Effect in Post-Purchase Consumption Behavior: Evidences from Field Experiments.

Veronica Valli, University of Mannheim, Germany
Florian Stahl, University of Mannheim, Germany
Elisa Montaguti, University of Bologna, Italy

This paper investigates the impact of the compromise effect (Simonson 1989) on post-purchase consumption. Results of a field experiment suggest that the selection of an intermediate option vs. an extreme one in a choice set leads to an increase in the number of (complementary) items purchased after the first choice.

17-E: Glass Houses: Disability Perceptions in the Consumption Environment

Helen van der Sluis, Arizona State University, USA
Adriana Samper, Arizona State University, USA
Kirk Kristofferson, Arizona State University, USA

While marketing and public policy decision-makers express heightened sensitivity to stigmatized groups such as people with disabilities little research has examined their impact on the consumption environment. We find that people view disabled individuals higher in moral character but also punish them more harshly when they engage in moral violations.

9-D: Bring Back My Childhood! Nostalgia as Mediator of Retro-Food and Consumer Based Brand Equity

Caty Velez, Tecnológico de Monterrey, Mexico
Miriam C. Flores, Tecnológico de Monterrey, Mexico

This research will expand the field/area of retro-branding by recognizing the effect of nostalgia as well as authenticity in the relationship between a retro-food product and Consumer Based Brand Equity (CBBE). A mixed methodology that includes a netnography and two quantitative studies will be used.

11-W: The Impact of Perceived Temperature on Responses to PSA ads

Akshaya Vijayalakshmi, Indian Institute of Management Ahmedabad, India
Meng-Hsien (Jenny) Lin, California State University Monterey Bay, USA
Melika Kordrostami, California State University San Bernadino, USA

This working paper finds that the affiliative sensations triggered through priming of warm/cold touch can increase the effectiveness of public service announcement (PSA) by increasing empathy threat perceptions and donations to the cause. However this is likely to be true only for high need for touch participants.

19-I: How Brand Preference Similarity Influences Married Couples' Brand Variety Seeking Over Time

Anna Vredeveld, Berry College, USA
Selcan Kara, University of Massachusetts - Dartmouth, USA

This research examines how married consumers' brand preference similarity influences brand variety seeking behavior. Findings contribute to extant work on shared brand consumption and variety seeking by illustrating how romantic relationship partners engage in purposeful brand variety seeking as a part of their relationships.

12-D: The Impact of Brand Exposure on Perceived Goal Progress and Goal Satiation

Darlene Walsh, Concordia University, Canada
Francis Jarry, Concordia University, Canada

Though prior research finds that exposure to a brand can activate brand-related goals we show that brand exposure can satiate brand-related goals. Further we show that goal satiation occurs because consumers who are susceptible to goal satiation also experience perceived progress towards achieving the brand-related goal.

9-I: Eating with Friends: Preference for Handmade Foods

Xin Wang, Nanjing University, China
Chunqu Xiao, Nanjing University, China
Hong Zhu, Nanjing University, China

What people choose to eat varies as a function of relationships with co-eater(s). When eating with friends consumers prefer handmade foods relative to manufactured foods. They prefer manufactured foods when with new acquaintance. When they try to strengthen social relations they choose handmade foods.

17-C: Fluid Compensation: The Role of the Interdependent Self

Qin Wang, Arizona State University, USA
Monika Lisjak, Arizona State University, USA
Naomi Mandel, Arizona State University, USA

When consumers experience a threat to the self they may cope by engaging in fluid compensation—affirming the self in important domains that are unrelated to the threat. Three experiments show that people with an interdependent (vs. independent) self are more likely to engage in fluid compensation to offset self-threat.

4-F: Essentialism Increases Status Consumption of High-Class (not Low-Class) Consumers

Xue Wang, Chinese University of Hong Kong, China
Ying-Yi Hong, Chinese University of Hong Kong, China
Robert S. Wyer, Chinese University of Hong Kong, China

We proposed that essentialist beliefs of social class (i.e. social class is immutable and biological-based) would increase status consumption of high- but not low-class people. With both measuring and manipulating essentialism four studies consistently supported the hypothesis. We further found that entitlement could explain the relationship.

19-J: Show Me More! Powerlessness Drives Variety Seeking

Wangshuai Wang, Shanghai Jiao Tong University, China

This research investigates the impact of power on variety seeking behavior. Results from four studies provide convergent support that feeling powerless relative to feeling powerful nudges individuals toward variety seeking. Additionally we reveal that perceived autonomy mediates this relationship.

5-G: How Notifications of Product Changes Influence Consumer Ambivalence

Yiru Wang, Kent State University, USA
Jennifer Wiggins, Kent State University, USA
César Zamudio, Kent State University, USA

Notifications of product changes could increase consumer ambivalence towards the product. We find that this will be mitigated when the notification is framed to be consistent with the timing of the notification. Specifically when the change is in the distal (proximal) future the notification should be framed abstractly (concretely).

10-V: Truncated Text, Truncated Thought

Adrian Ward, University of Texas at Austin, USA
Noah Castelo, Columbia University, USA
Kurt Gray, University of North Carolina, USA

We show that frequency of text messaging is negatively associated with the ability to understand logic and meaning in context. Frequently engaging in the kind of truncated thought characteristic of text messaging appears to cause a similarly truncated style of thinking.

19-C: Keeping the Streak Alive!

Danny Weathers, Clemson University, USA
T. Andrew Poehlman, Clemson University, USA

Consider a man who has eaten a Big Mac daily since 1972 or a runner who's run a mile 2034 straight days. What motivates people to engage in 'streaks'? Our research suggests streaks serve to motivate people in identity relevant domains and temporal specificity is a cue for continuance.

9-B: A Nuanced Nutritional System Facilitates the Recognition of Healthy Options, Increases Sales and Choice of Healthy Foods: A Comparison Between 3-Colors and 5-Colors Traffic-Lights Systems

Carolina O.C. Werle, Grenoble Ecole de Management, France
Kévin Roche, Grenoble Ecole de Management, France
Olivier Trendel, Grenoble Ecole de Management, France
Amanda Yamim, Grenoble Ecole de Management, France

Simplified nutritional-labeling systems provide single indicators of nutritional quality. Four studies compared two nutrition-labeling systems varying in complexity. A more subtle system (traffic-light with five colors instead of three) increases healthy choice and purchase. The 5-color system facilitates nutritional information processing and this influences healthiness perception of food products.

Moderately Simple Fbdg Work Better than Complex or Oversimplified Recommendations to Influence Food Consumption in a Real Setting

Carolina O.C. Werle, Grenoble Ecole de Management, France
Kévin Roche, Grenoble Ecole de Management, France
Olivier Corneille, Université Catholique de Louvain, Belgique
Caroline Roux, Grenoble Ecole de Management, France

Food based dietary guidelines (FBDG) are regularly updated by governments but their efficacy is questioned. Previous research suggested that simple actionable guidelines can change behavior but evidence confirming their efficacy is still scarce. Patrons of a restaurant received tray-sets containing FBDG varying in complexity. Moderately simple FBDG influenced food consumption.

2-B: “Reclaiming the News”: Episodes of Contention in the News Field

Verena E. Wieser, University of Innsbruck, Austria

This study adopts a field-theoretical lens to investigate how incumbents and challengers negotiate power relations in the news field in the digital age. Interviews with market experts in German-speaking countries reveal how traditional newspaper brands navigate episodes of contention through collective attribution of threats and organizational appropriation.

4-N: Perspective Flexibility Matters: The Influence of Cultural Syndromes on Attribution of Service Failures

Vincent Chi Wong, Lingnan University, Hong Kong, China
Feifei Huang, Chinese University of Hong Kong, China

Customers with a collectivistic (vs. individualistic) orientation or a long-term (vs. short-term) orientation are likely to attribute a service failure more to service provider’s contextual factors and less to service provider’s dispositional factors. These effects are mediated by the flexibility of perspectives customers take when making a judgment.

14-Q: Trend versus End State: The Role of Implicit Theories in Interpreting Communications Conveying a Partial Reduction in Negative Product Attributes

Vincent Chi Wong, Lingnan University, Hong Kong, China
Lei Su, Hong Kong Baptist University, China
Howard Pong-Yuen Lam, Chinese University of Hong Kong, China

The results of four experiments show that the communication of partially reduced negativity of a product attribute will lead to higher (lower) product evaluations among consumers who are incremental (entity) theorists. This communication effect is mediated by consumers’ trend-based versus end-state-based interpretation of the reduced-negativity communication.

6-B: How Scarcity Influences Mate Preference in Romantic Relationship and Subsequent Mating Strategy?

Yinghao Wu, Renmin University, China
Jing Jiang, Renmin University, China

The current research proposes that perceived general scarcity which includes but far beyond a scarce mate pool will polarize people’s mate preference for romantic partners that such selectivity differs across gender and mate-value and that those with relatively low mate value will adopt collective strategies to enhance their attractiveness.

5-J: Partner or Servant: How Anthropomorphized Brand Role Releases the Negative Effect of Social Exclusion

Yinghao Wu, Renmin University, China
Jing Jiang, Renmin University, China

The current research shows that socially excluded (vs. included) consumers are willing to pay more for anthropomorphized brands. More importantly when brand plays a servant role people with high (vs. low) self-esteem are likely to pay more but such a discrepancy disappears when brand plays a partner role. The need for control recovery mediates the above relationship.

16-K: The Impact of CSR Transgressions on Consumer Support for Non-profits: The Role of Negative Moral Emotions and Political Identity

Chunyan Xie, Western Norway University of Applied Sciences, Norway
Richard P. Bagozzi, University of Michigan, USA
Silvia Mari, University of Milano-Bicocca, Italy

We develop and test new psychological mechanisms underlying consumer support for nonprofits as a function of perception of CSR transgressions. Results showed that the moral emotion of contempt mediates the relationship between perceived corporate community transgressions and consumer support. Further political identity moderates the effects of transgressions on contempt.

11-L: Prosocial Consequences of Corporate Social Irresponsible Actions: The Role of Negative Moral Emotion, Moral Identity, and Empathy

Chunyan Xie, Western Norway University of Applied Sciences, Norway
Richard P. Bagozzi, University of Michigan, USA
Silvia Mari, University of Milano-Bicocca, Italy

We add to extant CSR research by addressing prosocial consequences of corporate social irresponsible actions and providing a psychological mechanism underlying such a novel effect. Results showed that contempt mediates the relationship between corporate community transgressions and consumer support for nonprofits. Further moral identity and empathy moderate the effects.

9-G: Diets with Cheat Days: The Effect of Implicit Self-Theories on Recovery from Goal-Inconsistent Behavior

Yi Xie, Arizona State University, USA
Naomi Mandel, Arizona State University, USA
Meryl Gardner, University of Delaware, USA

Dieters fall into two types: Abstainers who completely avoid temptations and moderators who occasionally break the rules. We show that lay beliefs about the renewability of self-control determine which approach people choose. Our results suggest that there is no "best" strategy: dieters are more successful when they follow their beliefs.

9-H: Does Larger Portion Sizes => Lower Calories? How Healthiness Beliefs Impact Calorie Estimation

Jieru Xie, Virginia Tech, USA
Fengyan Cai, Shanghai Jiao Tong University, China
Rajesh Bagchi, Virginia Tech, USA

We demonstrate a paradoxical relationship between portion size and caloric content where a larger- (vs. smaller-) sized healthy food item is judged as containing lower calories. This occurs because of a misguided notion that if a food-item is healthy then more of it is healthier.

5-R: The Feeling of Being Moved

Ji (Jill) Xiong, National University of Singapore, Singapore
Leonard Lee, National University of Singapore, Singapore
Yih Hwai Lee, National University of Singapore, Singapore

We propose and demonstrate that being moved is a mixed emotion that connects with self-transcendence core value(s) of perceived personal importance. Thus marketing communications such as advertisements that elicit the feeling of being moved increase brand affiliation by highlighting the core value that consumers share with the focal brand.

6-G: Wearing V Neck, Getting More Trust: An Evolutionary Psychology Approach to Examine the Effect of Collar Style on Trust

Jialiang Xu, University of Manitoba, Canada
Fang Wan, University of Manitoba, Canada
Chenbo Zhong, University of Toronto, Canada

“What a strange power there is in clothing” ---- Isaac Bashevis Singer. Adopting evolutionary psychology perspectives we conducted two experiments and found that one’s sweater Collar styles (V neck vs turtleneck) can affect others’ trust of him and interaction with him.

11-R: Two Faces of Moral Identity Internalization: The Interactive Effect of Lighting, Moral Identity Internalization and Recipient’s Cost on Prosocial Behavior

Jun Yan, University of Manitoba, Canada
Fang Wan, University of Manitoba, Canada
Luke Zhu, University of Manitoba, Canada
Aaron Stone, University of Manitoba, Canada

This paper tests an interactive effect of lighting and moral identity on prosocial behavior. Individuals low in Moral Identity Internalization are more likely to help when the surrounding is bright and the recipient’s cost is low. In contrast individuals high in MII help regardless of lighting and the recipient’s cost.

5-V: When Sadness Comes Alive, Will It Be Less Painful? The Effects of Anthropomorphism on Sadness Regulation

Li Yang, Tsinghua University, China
Fangyuan Chen, Hong Kong Polytechnic University, Hong Kong
Rocky Peng Chen, Hong Kong Baptist University, Hong Kong

Can anthropomorphism contribute to the regulation of sadness? In three studies we demonstrated that anthropomorphic (vs. neutral) thinking decreased the intensity of sadness experience. We suggest that psychological detachment explains this effect. This result offers fresh insights to research on emotions and anthropomorphism and has implications for consumer well-being.

6-E: The Effects of Different Parenting Cues on Consumer’s Regulatory Focus: A Parental Investment Perspective

Chun-Ming Yang, Ming Chuan University, Taiwan

With two studies this research examined the idea that cues emphasizing different aspects of parental investment could lead to different regulatory focus. Specifically cues about prevention (promotion) parental investment (e.g. providing foods) can activate prevention (promotion) focus. We also observed a regulatory fit effect in a marketing communication context.

16-C: Craving for Hope: Scarcity Cues and Their Influences on Persuasiveness of Hope-Appeal Advertising

Chun-Ming Yang, Ming Chuan University, Taiwan
Tzu-Yun Yang, Ming Chuan University, Taiwan
Shu-Ni Hsu, National Taiwan University of Science and Technology, Taiwan

Three studies examined the idea that the salience of resource scarcity decreases consumers' prosocial behaviors (e.g. intention to donate and willingness to pay for fair-trade products) and this effect is mediated by consumers' sense of control. The authors also argue that the presence of hope appeal may reverse this relationship.

11-V: Roughness Increases Prosocial Behavior When People Believe the World Is Fair

Ning Ye, Temple University, USA
Maureen Morrin, Temple University, USA

Our research shows that people with higher belief in a just world (BJW) are more likely to help after being exposed to rough (vs. smooth) haptic image. However for people with lower BJW roughness makes no difference in the helping intention.

15-C: Now It's Personal: The Influence of Touch on the Construction of Preferences

John Yi, University of Arizona, USA
Jesper Nielsen, University of Arizona, USA

Using a tablet versus a mouse when shopping online has shown to increase a shopper's preference for the chosen item. Further study demonstrates that the physical motions relevant to forming a preference increase this preference effect and it is not the preexisting preferences that drive the effect.

11-C: Feature the Benefactor or the Victim? How Charity Advertisements with Different Protagonist Foci Affect Donation Behavior

Bingqing(Miranda) Yin, University of Kansas, USA
Jin Seok Pyone, University of Kansas, USA
Surendra Singh, University of Kansas, USA

We examine charity appeals with different protagonist foci and demonstrate that a charity appeal featuring an identified benefactor can promote more charitable donation compared with a comparable victim-focused charity appeal. Results are explored via moral elevation and charity attitude resulting from portraying a benefactor.

16-D: Don't Appreciate Your Customer Too Much: Business Gift Giving and Verbal Acknowledgement

Yanfen You, University of Wisconsin - Milwaukee, USA
Massimiliano Ostinelli, University of Wisconsin - Milwaukee, USA
Xiaojing Yang, University of Wisconsin - Milwaukee, USA

We examine how verbal acknowledgment of customer value could make business gifts backfire. Business gifts increase customer attitude when customer value is not salient. However their effects could be diminished or become negative when marketers highly acknowledge customer value.

20-I: Political Ideology and Review Evaluation

Sik Chuen Yu, University of Sydney, Australia
Donnel Briley, University of Sydney, Australia
Pennie Frow, University of Sydney, Australia

This research proposes that political ideology affects reviewer similarity's influence on review evaluation. Those who are increasingly conservative tend to have stronger relational motivations. Consequently conservatives value reviews from similar reviewers more than dissimilar ones while liberals do not value reviews from similar and dissimilar reviewers.

20-A: A Taste of Discrimination: A Study on Consumer Reviews on Yelp

Chao Yu, Cornell University, USA
Drew Margolin, Cornell University, USA
Xian Wang, Tsinghua University, China

This paper reveals an asymmetric-discriminative pattern in consumers' online evaluation-making mechanism. We examine how consumers from different social classes discriminate in evaluations on Yelp. A multi-level random-effect model shows discrimination exists in consumers' favorable reviews to outgroups but this effect does not hold for negative evaluations.

13-A: Cyber-Heterotopias in Social Media Platforms: The Illusion of Intimacy in Ephemeral "Stories"

Mariella C. Zavala, University of California Irvine, USA

Using Foucault's notion of heterotopia (1986) this paper conceptualizes the "Stories" feature found in some social media platforms as cyber-heterotopias. Their ephemeral quality and an illusion of intimacy are presented as defining of their heterotopic distinction in an effort to contribute to our understanding of the consumer relations they affect.

20-C: Advice-Seeking Intention: The Interplay of Regulatory Focus and Problem Type

Xianfang Zeng, University of Calgary, Canada
Mehdi Murali, University of Calgary, Canada

This research investigates how regulatory focus and problem type jointly affect advice-seeking intention. When faced with factual problems individuals with a prevention (vs. promotion) focus tend to seek accuracy-based advice; in contrast when presented with judgmental problems those with a promotion (vs. prevention) focus tend to solicit autonomy-based advice.

2-W: The Unofficial Name: Effects of Brand and Product Nicknames on Brand Perception

Zhe Zhang, University of Houston, USA
Vanessa Patrick, University of Houston, USA

We explore the effects of brand nickname (vs. formal name) use on brand perception. We show nicknames anthropomorphize the brand and transform the consumer-brand relationship from transactional to relational. This influences consumers' self-brand connection and brand attachment which leads to enhanced willingness to purchase additional products from the brand.

2-H: Brand Hate

Chun Zhang, Concordia University, Canada
Michel Laroche, Concordia University, Canada

The grounded theory is applied to study the construct brand hate. Seventy-one hated brands are reported through twenty-five in-depth interviews. Three facets of associations of brand hate are presented: emotional cognitive and physical. Four facets of reasons are discovered and six different levels of consequences are obtained.

20-N: The Effect of Uncertain Rewards on Customer Co-promotion Intention: An Exploration of Optimistic Bias

Yuan Zhang, Xiamen University, China
Zhaoyang Guo, Xiamen University, China
Yirang Zhang, Xiamen University, China

Three studies suggest that uncertain rewards affect customers' co-promotion intentions. Study 1 revealed that consumers receiving a lower uncertain reward showed more sharing intention of promotion information and the mechanism was optimistic bias. The controllability facilitated the uncertainty effect (Study 2) and the delay reward inhibited the effect (Study 3).

9-J: Familiarity and Affiliation with Anglo Names Affect Purchase Decisions of Chinese Food

Xian Zhao, University of Kansas, USA

For an unfamiliar Chinese dish attaching it to an Anglicized Chinese name increased Americans' willingness to pay than attaching to an original Chinese name; for the familiar Chinese dish attaching it to an original Chinese name increased anti-multiculturalist Americans' willingness to pay than attaching to an Anglicized Chinese name.

20-M: The Dynamic Diverting Effects of User-generated Contents vs. Firm-generated Contents on Product Browse

Yingnan Zhao, Nanjing University, China
Xin Wang, Nanjing University, China
Quansheng Wang, Nanjing University, China
Peijian Song, Nanjing University, China

The research aims to identify the effects of visits to user-generated and firm-generated contents on visits to product in E-commerce. These effects are different in short- and long-term for new and existing users. Vector auto-regression model indicates that there's difference between the effects of visits toward UGC and FGC.

9-X: The Devil is in the Smile: Smiley Temptation and Motivated Calorie Estimation in Restrained Eaters

Xiaoying Zheng, Nankai University, China

Using smileys in tempting food is a popular product design strategy in the marketplace. However little has been known about how consumers perceive such smiley temptations. Across two studies this research finds that restrained eaters perceive a smiley temptation as containing more calories than a non-smiley temptation.

17-I: Relational Greeting: When and When not to Treat Your Consumers as Family

Qichao Zhu, Tsinghua University, China
Maggie Wenjing Liu, Tsinghua University, China
Chuang Wei, Tsinghua University, China

This research explores effects of relational greeting on consumer purchase intentions. Compared to stranger greeting contact employees' relational greeting towards consumers can lead to higher purchase intentions when consumers' product knowledge is high while the reverse happens with low knowledge. Consumers' feeling of control mediates the effect of relational greeting.

10-R: The Effect of Free Shipping on Consumer Patience

Ozum Zor, Rutgers University, USA
Rafay Siddiqui, Hong Kong Polytechnic University, Hong Kong
Ashwani Monga, Rutgers University, USA

For standard (low fee; slow delivery) versus expedited (high fee; fast delivery) shipping we examine the dynamic that arises when standard shipping is free (vs. low fee). We show an interaction effect: making standard shipping free (vs. low fee) decreases sensitivity to changes in the fee charged for expedited shipping.

DataBlitz

Maximizing Utility but Minimizing Wellbeing: A Meta-Analysis on the Maximizers' Paradox

Alex Belli, University of Technology Sydney, Australia
François Carrillat, University of Technology Sydney, Australia

In an attempt to settle the debate on the relationship between maximization and well-being a sub-group meta-analysis was conducted accounting for well-being dimension valence (positive or negative). Findings revealed maximization is detrimental to well-being regardless of the dimension valence but is moderated by the maximization scale and by long-term orientation.

Mental Stimulation and Cognitive Orientation: Implications for Children's and Adults' Food Choices

Dipayan Biswas, University of South Florida, USA
Annika Abell, University of South Florida, USA
Courtney Szocs, Portland State University, USA

The results of two field experiments with children at a middle school cafeteria and two lab experiments with adults show that undertaking mental stimulation tasks (such as by solving math problems) before making a food choice leads to less indulgent food choices.

There Is No Such Thing as a Free Lunch: The Negative Effect of Zero Price on Consumer Demand

Fengyan Cai, Shanghai Jiao Tong University, China
Xiaomeng Fan, Northwestern University, USA

Both intuition and empirical evidences indicate that people like cheap products and free products are particularly attractive. But we showed a backfiring effect of zero price on consumer demand and identified a moderator that could drive the effect of zero price on demand into either positive or negative direction.

The More Elongated, the More High-end: The Effect of Package Shape on Perceived Brand Status

Huan Chen, Renmin University of China, China
Jun Pang, Renmin University of China, China
Minkyung Koo, University of Illinois at Urbana Champaign, USA

This research examines the effect of package shape on consumers' perceived brand status. Results from three studies show that consumers perceive a product with tall & slim (vs. short & stout) shape to have a high brand status. Moreover perceived attractiveness is the mechanism underlying this effect on brand status perception.

What Make Products Weird? Antecedents to and Underlying Mechanism of Weirdness.

Qian (Claire) Deng, University of Alberta, Canada
Paul Messinger, University of Alberta, Canada

Little research attention is paid to the concept of weirdness because of the negative association of weirdness. This paper challenges this view not only by identifying the key antecedent (extreme incongruity) to the weirdness and the underlying mechanism (failed sense-making) but also by showing its marketing potential (generating more WOM).

When More is Not Merrier: The Effect of Feedback Frequency on Goal Performance

Isabel Ding, National University of Singapore, Singapore
Leonard Lee, National University of Singapore, Singapore

Consumers often receive feedback in goal pursuit. This article examines the effect of feedback frequency on consumers' goal performance — does higher frequency feedback lead to higher goal performance? Four studies demonstrate that while consumers hold the lay belief that higher (vs. lower) frequency feedback leads to higher goal performance empirical results show that it leads to lower goal performance. This occurs because higher frequency feedback increases the level of perceived goal progress which reduces consumers' tendency to continue pursuing the goal. This effect only holds when the feedback information is relevant to goal progress but is attenuated when the information is irrelevant. Furthermore this effect is attenuated when the goal is specific.

The More You Know the More You Search: Post-Decision Information Search and the Effect of Prior Knowledge and Maximizing Tendencies

Maura Ferreira, Pontifical Catholic University of Rio Grande do Sul, Brazil
Cristiane Pizzutti, Federal University of Rio Grande do Sul, Brazil

Previous literature argues that cognitive dissonance and feelings of regret or dissatisfaction increase the amount of information sought in post-decision timespan. We show that the knowledge individuals hold before the decision-making point predicts post-decision information search as well. Additionally we demonstrate that high levels of maximizing tendencies boost this effect.

The Motivating Effect of Expectation-Inconsistent Social Information

Katherine Flaschen, Stanford University, USA
Szu-chi Huang, Stanford University, USA

We explore the impact of expectations about social others on goal-directed behavior. Across four studies we find that people experience a motivational boost from witnessing another person's expectation-inconsistent (versus expectation-consistent) behavior but only when such behavior is goal facilitative (e.g. observing an unfit person jogging).

Yuck! Feelings of Disgust, Self-threats and Compensatory Behaviors.

Elena Fumagalli, HEC Paris, France
L.J. Shrum, HEC Paris, France

Consumers frequently encounter disgusting images. We examine how physical and moral disgust differentially affect consumers' identity and compensatory consumption. We show that physical disgust decreases consumers' sense of power which prompts them to consume conspicuous goods. In contrast moral disgust decreases consumers' self-esteem causing them to act prosocially.

The Effect of Information About Previous Donation Impact on Recurring Donations

Zohar Gilad, Technion – Israel Institute of Technology, Israel
Liat Levontin, Technion – Israel Institute of Technology, Israel

Nonprofits experience around 90% donor attrition rates. Our aim is to understand the antecedents of recurring donations and develop strategies to cope with attrition. As donors are seldom informed about their donations' impact we suggest and find that informing donors about the positive impact of their donation increases subsequent donations.

The Psychophysiology of Touch-Sensitive Interfaces: Somatosensory Encoding of Intensity, Pleasantness, and Technology-Induced Affect-Regulation

Christian Hildebrand, University of Geneva, Switzerland

Building on the segregation of affective touch in the somatosensory cortex we hypothesize and show that touch-sensitive interfaces cause a substantial increase in consumers' arousal relative to valence perceptions (using both objective and subjective measures of affect) ultimately promoting a greater impulse to purchase and willingness-to-pay for a focal product.

Choosing None versus Choosing “None of the Above”: The Effect of No-Choice Decision Expression on Choice Outcomes

Seung Eun (Sonia) Kim, Seoul National University, South Korea
Sung J. Jung, INSEAD, Singapore
Jin M. Kim, Yale University, USA
Kyoungmi Lee, Seoul National University, South Korea

When a ballot does not provide a selectable “none of the above” option voters will cast blank ballots if none of the candidates are desirable – or will they? In this research we investigate whether the choice context in which people must express their no-choice decision alters their choice outcomes.

Friends Without Benefits? How the Costs of Having a Relationship Influence Risk-taking

Jennifer K. Lee, University of Southern California, USA
Lisa A. Cavanaugh, University of British Columbia, Canada

While having close relationships is known to increase risk-taking we identify conditions leading to reduced risk-taking. When consumers focus on the costs (rather than benefits) of having a relationship and when the risk consequence affects both relationship partners risk-taking decreases. However when individuals lack these close relationships risk-taking behavior increases.

Inspired to Speak Up: Role of Inspiration on Minority Opinion Expression

Xingbo Li, University of Louisville, USA
Zengxiang Chen, Sun Yat-sen University, China

Expressing unpopular or minority opinions has consequences even though the opinion holders may have their groups’ best interest at heart. The current research examines when and why inspiration prompts people to express minority opinions.

Effects of Implicit Theories on Customers’ Satisfaction with Service Recovery: The Value of Process

Xiaoyan Liu, Southwestern University of Finance and Economics, China
Shaobo Li, Nanyang Technological University, Singapore
Elison Lim, Nanyang Technological University, Singapore

Three studies examine how implicit theories impact customers’ satisfaction with service recovery. We find that compared to entity theorists incremental theorists express higher satisfaction and are more likely to revisit the firm when the recovery is high in interactional justice regardless of whether or not an appealing compensation is provided.

Incentive Design with Uncertainty: Keep the Hope Alive

Xiyueyao Luo, Chinese University of Hong Kong, China
Luxi Shen, Chinese University of Hong Kong, China

Shen et al. (2015) shows consumers work harder for uncertain rewards than for certain rewards. How can marketers design an effort-score-payoff system with uncertainty? We find that to boost effort investment within a time limit adding uncertainty to the score-payoff part is more effective than the effort-score part.

When Compensatory Consumption Backfires: The Pain and Pleasure of Experiential Purchases

Zichuan Mo, Peking University, China
Jingjing Ma, Peking University, China

Prior research has shown that self-threats can evoke consumption that signals accomplishments in the domain of the threat. However we show that this within-domain compensation is likely to backfire especially when consumers compensate with experiential rather than material purchases. Identity relevance of experiential purchases could be the mechanism.

Appetite for Destruction: Attractive Faces Alter People's Food Choices

Tobias Otterbring, Aarhus University, Denmark, & Karlstad University, Sweden

Directly contradictory to the predictions made by marketing professors exposure to attractive (vs. unattractive) opposite-sex faces made people choose unhealthy rather than healthy foods. This effect primarily influenced people who rated themselves as inferior on self-view-relevant attributes but did not generalize to attractive (vs. unattractive) same-sex faces.

Emoji and Brand Engagement on Social Media

Ethan Pancer, Saint Mary's University, Canada
Lindsay McShane, Carleton University, Canada
Maxwell Poole, Saint Mary's University, Canada

Brands both human and corporate are increasingly communicating with their social media audience using emoji. The current work examines whether emoji use shapes online engagement (likes & retweets). Two field studies demonstrate that emoji presence increases engagement with brands. Facial emoji were particularly effective at increasing engagement with organizations.

The Effect of Competitive Rivalry Associations on Brand Extensions

Nicolas Pontes, Queensland University of Technology, Australia
Vivian Pontes, Queensland University of Technology, Australia

This research demonstrates the extent brands benefits from existing competitive rivalry associations. In particular it shows that market leaders (but not challenger brands) benefit from a second mover advantage even when facing established well-known brands in the extension category. Further we show that a low category fit hinders these effects.

Feeling Flattered or Flawed? The Effects of Consumer Embarrassment on Self-perception

Tracy Rank-Christman, University of Wisconsin - Milwaukee, USA
Danielle Warren, Rutgers University, USA

In a sequence of studies we find that embarrassment stemming from personal mistakes (negative trigger) and special treatment (positive trigger) has a negative impact on consumers' self-perceptions. These effects are augmented by emotional contagion and mediated by feelings of social rejection.

Triangulating the Breadth of Explanatory Depth

Scott Roeder, Washington University in St. Louis, USA
Leif Nelson, University of California, Berkeley, USA

We argue that the illusion of explanatory depth is attenuated not only by explanations of the focal item itself but also by explanations of other entirely different things implying the existence of a domain-agnostic process. We then show that this holds for relatively difficult but not easy explanations.

Effect of Missing Marketing Promotions on Future Consumption

Ilana Shanks, Florida State University, USA

This research examines how missing a marketing promotion acts as a cue to consumers to increase future consumption. Two studies demonstrate that missing a marketing promotion results in consumers intending to increase their food consumption during the next visit. This effect is moderated by deprivation.

When Small Predicts Large: The Effect of Initial Small Contributions on Subsequent Contributions to a Crowdfunding Project

Yael Steinhart, Tel Aviv University, Israel
Leilei Gao, Chinese University of Hong Kong, China
Tingting Fan, Chinese University of Hong Kong, China

Large donations are considered to be vital for crowdfunding success. Herein large-scale field data and lab experiments show that counterintuitively small (rather than large) initial donations increase subsequent donations. This effect is mediated by the lay belief that small (vs. large) donations are likely to be from strangers (vs. friends).

Effort Type Predicts Preferences for Material or Experiential Goods

Christopher A. Summers, University of South Carolina, USA
Eva C. Buechel, University of South Carolina, USA
Gustavo Schneider, University of South Carolina, USA

We propose that effort type can predict consumers' preferences for rewards. In three studies we show that physical effort leads to a greater preference for material rewards whereas mental effort leads to a greater preference for experiential rewards. Our results identify effort type as an antecedent to consumer preference.

“Broken Eggs” and “Good Eggs”: Understanding “Post-IVF” Consumer Ambivalence Through Autography

Jennifer Takhar, Novancia Business School, France

This visual and narratological analysis of IVF consumption through autography/visual memoir demonstrates the multiple representational advantages afforded by the genre for consumer research; notably it allows privileged access to elusive experiential consumer “veracity”. It also elucidates deep consumer ambivalence about IVF that is indissociable from its normalization as a technology.

The Merits of Happy Consumption: Positive Affect and Psychological Ownership

Carina Thürridl, Wirtschafts University, Austria
Bernadette Kamleitner, Wirtschafts University, Austria
Ruta Ruzeviciute, Wirtschafts University, Austria
Stephan Dickert, Queen Mary University of London, UK
Sophie Süssenbach, Wirtschafts University, Austria

The feelings consumers experience during consumption can have powerful effects but can they also influence how possessive one feels towards the consumed? In this paper we examine whether positive affect experienced during brand consumption can instill a sense of ownership for the consumed brand subsequently leading to intended repeat consumption.

Preemptive Social Influence: (Not) Choosing Personal Favorites in Shared Consumption?

Yijie Wang, Hong Kong Polytechnic University, Hong Kong
Dongjin He, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Consumers are less likely to choose their personal favorite option when making decisions for shared consumption. This effect is weakened when consumers believe that they are similar to others or there is a high-power distance in the society and is strengthened when they share consumption with their close friends.

Author Index

A

Aaker, Jennifer 63, 79, 129
 Abell, Annika 906, 1073
 Abella, Mireya Sosa 914
 Abi, Gulen Sarial 1055
 Abi, Gülen Sarial 865, 867
 Abrams, Deborah 1011
 Acar-Burkay, Sinem 1011
 Achar, Chethana 36, 493, 665
 Acikalin, M. Yavuz 42
 Agrawal, Nidhi 36, 493, 665, 890
 Ahluwalia, Rohini 850
 Akdevelioglu, Duygu 1011
 Alemany-Oliver, Mathieu 496
 Almeida, Stefânia Ordovás de 1002
 Alós-Ferrer, Carlos 264
 Alter, Adam 1055
 Alter, Adam L. 270
 Amatulli, Cesare 498
 Amendah, Eklou 1011
 Amine, Abdelmajid 379
 Amir, On 196, 196, 212, 238, 373
 Amri, Nuha Nasser Salem Al. 1001
 An, Donghwy 1012, 1012
 An, Jiyoung 1012
 Anderson, Laurel 1008
 André, Quentin 170, 336
 Angelis, Matteo De 498, 578
 Appau, Samuelson 1008
 Aral, Sinan 181
 Argo, Jennifer 175, 1034, 1054, 1062
 Arias, Robert 500
 Arieli, Dan 222, 731
 Aron-Wisniewsky, Judith 572
 Arsenijevic, Vladan 1013
 Arthur, Damien 1001
 Aschemann-Witzel, Jessica 1054
 Ashraf, Rohail 1019
 Ashworth, Laurence 829
 Atakan, S. Sinem 503
 Atalay, Selin 1018
 Attari, Amin 507, 1013
 Audrezet, Alice 509
 Auschaitrakul, Sumitra 1013, 1039, 1039, 1050
 Austin, Caroline Graham 1013
 Ay, Ufuk 1062
 Ayaz, Hasan 1015
 Aybat, Ozge 91
 Aydınoglu, Nilüfer 1018

B

Bagchi, Rajesh 243, 932, 1067
 Bagozzi, Richard P. 1067, 1067
 Bai, Yuxin 511
 Ballantine, Paul W. 1038
 Banai, Ádám 809
 Banerjee, Akshina 512
 Banker, Sachin 514
 Banovic, Marija 1013
 Barakshina, Tatiana 36
 Barasch, Alixandra 68, 123, 1056, 1059

Barauskaitė, Dovilė 1014
 Barbosa, Belem 785
 Bardhi, Fleura 1049, 1058
 Barger, Victor A. 47
 Barnes, Aaron J. 515
 Barnett, Samuel B. 383
 Barnhart, Michelle 675
 Barone, Michael J. 324, 851
 Barrios, Andres 1008
 Bartels, Daniel M. 96, 346
 Barth, Madeline 518
 Barth-Strieder, Kerstin 520
 Baskentli, Sara 206, 233
 Baskin, Ernest 47, 112, 839
 Bastos, Wilson 1014
 Basu, Shankha 525
 Batat, Wided 1014, 1014
 Batra, Rajeev 1046
 Batra, Rishtee 618
 Baumeister, Roy 1040
 Baxter, Stacey 527
 Beal, Alec 654
 Bebek, Gaye 387
 Bech-Larsen, Tino 1014
 Beck, Joshua 217
 Beck, Joshua T. 74
 Bee, Colleen 1047
 Bei, Lien-Ti 1015
 Bekkers, Rene 79
 Belei, Nina 626, 629
 Belk, Russ 1005
 Belk, Russell 117, 164, 618, 677, 1005
 Bellezza, Silvia 107, 558, 1005
 Belli, Alex 1073
 Bellis, Emanuel de 31
 Bennett, Delancy 860
 Bentley, Kara 530
 Berendt, Johannes 924
 Berger, Jonah 52, 107, 248, 291, 1005
 Bergers, Verena 1045
 Bergh, Bram Van den 1031
 Berman, Jonathan Z. 281, 1006
 Berman, Ron 52
 Berry, Christopher 1008
 Bettman, James 233
 Bettman, James R. 264, 362, 1005, 1006
 Beuckels, Emma 532
 Bezençon, Valéry 787
 Bharadwaj, Anupama Mukund 1050
 Bharadwaj, Sundar 158
 Bhatia, Sudeep 346
 Bhatt, Siddharth 1015
 Bhattacharjee, Amit 534
 Bhattacharya, CB 206
 Bhogal-Nair, Anoop 394
 Bi, Sheng 801
 Biraglia, Alessandro 539
 Biswas, Dipayan 233, 313, 313, 906, 1073
 Bittner, Samantha 1015
 Blank, Ashley Stadler 900
 Bleier, Alexander 140
 Block, Lauren 91, 233, 1006, 1008
 Blocker, Chris 1008

Blocker, Christopher 707
 Blümle, Sarah 1058
 Bock, Dora 858
 Bodenhausen, Galen 595
 Bodur, H. Onur 1025, 1041
 Bolderdijk, Jan Willem 1016
 Bollinger, Bryan 291
 Bond, Sam 1050
 Bond, Samuel 1011
 Bone, Sterling 1008
 Bonnemaizon, Audrey 379
 Booyse, Wim 1015
 Borah, Abhishek 140
 Borenstein, Benjamin 1015
 Borges, Adilson 970, 1029
 Bos, Maarten 276
 Botelho, Delane 1024
 Botner, Keith 42
 Boztug, Yasemin 683
 Brace-Govan, Jan 1027
 Bradford, Tonya Williams 57
 Brakus, J Joško 539
 Brandes, Leif 1007, 1016
 Brannon, Daniel 540, 1016
 Brei, Vinicius 1051
 Brick, Danielle J. 362
 Briley, Donnel 1070
 Brito, Eliane 1017
 Brizi, Ambra 539
 Brokalaki, Zafeirenia 1008
 Brouwer, Claire 1016
 Brown, Stephen 397
 Brucks, Melanie S. 25
 Brucks, Merrie 258
 Bruin, Wändi Bruine de 367
 Bsdurek, Anja 896
 Buechel, Eva 888
 Buechel, Eva C. 1077
 Bullard, Olya 1054
 Bulmer, Sandy 588
 Burgh-Woodman, Hélène de 401
 Burson, Katherine 645
 Burton, Scot 1021
 Büttner, Oliver 286

C

Cabano, Frank 507
 Cacabelos, Rosa 1016
 Cai, Fengyan 1067, 1073
 Calderon, Susan 545
 Caliendo, Alessandro 1016
 Camanho, Nelson 547
 Cambefort, Marine 549
 Cambier, Fanny 551
 Camilleri, Adrian 1016
 Camilleri, Adrian R. 553, 1056
 Campana, Mario 1016
 Campbell, Colin 1030, 1042
 Campbell, Margaret C. 1
 Campbell, Troy 842, 1047
 Canli, Zeynep Gürhan 867

1080 / Author Index

- Cao, C. Clark 258
 Cao, Clark 1007
 Cao, Fei 1017
 Cardoso, Flavia 1017
 Carlson, Kurt 679, 756
 Carlson, Kurt A. 852
 Carmon, Ziv 212
 Carnevale, Marina 313
 Carpenter, Gregory S. 152, 578, 605
 Carrillat, François 1073
 Carter, Erin Percival 63
 Carufel, Courtney A. 68
 Carvalho, Lilian 1017
 Castaño, Raquel 200, 1007, 1046
 Castelo, Noah 1017, 1065
 Castilhos, Rodrigo 1008
 Castilhos, Rodrigo B. 135
 Catapano, Rhia 63
 Cauberghe, Verolien 532
 Cauberghe, Veroline 1034
 Caucigh, Elodie 1007
 Cavanaugh, Lisa A. 31, 1006, 1075
 Cecutti, Lorenzo 1017
 Cerf, Moran 383, 1007
 Cesareo, Ludovica 555, 558
 Ceylan, Melis 1018
 Chabot, Aimee 79
 Chae, Boyoun (Grace) 561
 Chae, Rebecca 1018
 Chai, Luxi 1018, 1018
 Chakravarti, Amitav 999
 Chan, Cindy 270, 302, 1046
 Chan, Eugene 948
 Chandler, Vincent 1051
 Chandon, Pierre 572, 574
 Chang, Chia-Chi 1018
 Chang, Chun-Tuan 563, 565, 732
 Chao, Matthew 346
 Chaplin, Lan Nguyen 1009
 Chartrand, Tanya 961
 Chartrand, Tanya L. 362, 974
 Chatterjee, Promothesh 507, 1013
 Chatterjee, Subimal 1018, 1057, 1059
 Chatterjee, Swagato 1019
 Cheatham, Lauren 152, 1019
 Chen, Annie 1019, 1053
 Chen, Fangyuan 1033, 1068
 Chen, Huan 801, 1073
 Chen, Jia 1020
 Chen, Jinjie 68
 Chen, Lin-Lin 1001
 Chen, Ning (Chris) 1019
 Chen, Po-Yu 1018
 Chen, Qihui 1020
 Chen, Qimei 1025
 Chen, Rocky Peng 350, 1068
 Chen, Rong 964
 Chen, Rui 567, 1019
 Chen, Shijiao 569, 1020
 Chen, Shirley Shuo 1020
 Chen, Yen-Ting 732
 Chen, Yu-Jen 1020
 Chen, Yung-Hsun 1001
 Chen, Yu-Shan Athena 1001, 1015
 Chen, Zengxiang 1045, 1075
 Cheng, Li-Keng 1015
 Cheng, Shirley Y Y 725
 Cheng, Yimin 36
 Cheng, Zhao-Hong 732
 Chin, Ching 1021
 Chiu, Tseng-Ping 1020
 Cho, Eunsun 1057
 Cho, Yoon-Na 1021, 1021
 Choe, Yuna 1021
 Chou, Hsuan-Yi 1021
 Chowdhry, Nivriti 42
 Christenson, Brett 1021
 Christopoulos, George 1062
 Chrysochou, Polymeros 602
 Chu, Wujin 1043
 Chu, Xing-Yu 563, 565, 1021
 Chuang, Yaliang 1001
 Chung, Hoeun 1022
 Chung, Jaeyeon 107
 Chung, Jung-Han 1021
 Chung, Myungjin 571
 Cian, Luca 286, 1006
 Clair, Julian Saint 860
 Clarkson, Joshua 795, 1051
 Clarkson, Joshua J. 74
 Clément, Karine 572
 Clement, Michel 270
 Cléret, Baptiste 1005
 Clergue, Valentina 1007
 Cocker, Hayley 511
 Cole, Cathy 1036
 Colliander, Jonas 1003
 Cook, Laurel 1002
 Corciolani, Matteo 52
 Cordeiro, Rafaela Almeida 1011
 Cordes, Henning 1022
 Corneille, Olivier 1066
 Cornelis, Erlinde 769
 Cornelissen, Gert 1016
 Cornil, Yann 572, 574
 Cornwell, T. Bettina 1022
 Cossu, Martina 1022
 Costa, Sandrine 1025
 Costabile, Michele 578
 Costello, John 1023
 Cotte, June 951, 1049
 Coulter, Robin 1007
 Coulter, Robing A. 57
 Cowart, Kelly 1053
 Craig, Adam 1007
 Craig, Adam W. 297
 Crain, Katherine M. 264
 Cristian, Daniela 1023, 1023
 Critcher, Clayton 217
 Crosby, Elizabeth 1008
 Cross, Samantha 1026
 Cryder, Cynthia 68
 Cryder, Cynthia E. 898, 1006
 Curasi, Carolyn 955
 Cutright, Keisha 146, 555, 561
 Czellar, Sandor 1041, 1041
- D**
- Dagogo-Jack, Sokiente 217
 Dahl, Darren 970
 Dahl, Darren W. 212, 362
 Dai, Hengchen 302
 Dai, Xianchi 723, 885, 1059
 Dallas, Steven 222, 576
 Dallas, Steven K. 91
 Dalli, Daniele 406
 Dalton, Amy N. 228
 Daniels, Michelle 1023
 Dannewald, Till 683
 Davidson, Alexander 1023
 Davis, Brennan 1051
 Davis, Scott W. 629
 Decrop, Alain 1002
 Dellaert, Benedict G. C. 158
 Dellaert, Benedict G.C. 101
 Demmers, Joris 582
 DeMotta, Yoshiko 1024
 Deng, Qian (Claire) 1024, 1024, 1073
 Deng, Xiaoyan 175, 1006, 1035, 1036, 1039, 1049, 1060
 Deng, Xun 1024
 DePaoli, Alexander 583, 1024
 Desai, Preyas 36
 Deutsch, Jonathan 1015
 DeVoe, Sanford 63
 Dewhirst, Timothy 1025
 Deyl, Fernanda Trindade 1062
 Dhal, Darren 1009
 Dhar, Ravi 25, 96, 158, 264
 Dhar, Rhavi 212
 Dholakia, Utpal 42
 Dickert, Stephan 1077
 Diehl, Kristin 31, 341
 Dietvorst, Berkeley J. 302
 Dimofte, Claudiu 1043
 Dimoka, Angelika 1007
 Ding, Isabel 1035, 1036, 1074
 Ding, Ying 243, 1029
 Ding, Yu 585, 990
 Distler, Elisabeth 1048, 1049
 Djedidi, Amina 406
 Dobeles, Angela R. 1056
 Dodds, Sarah 588
 Doering, Tim 1006
 Dolbec, Pierre-Yann 590
 Dolen, Willemijn M. van 582
 Dommer, Sara 458
 Dommer, Sara Loughran 200
 Dong, Ping 307
 Donnelly, Grant E. 191, 319
 Dorri, Sadaf Mokarram 865
 Dose, David B. 874
 Douglas, Brownlie 1005
 Dovgialo, Karolina 1025
 Drake, Carly 410
 Drakopoulos, Stavros 1041
 Drozdova, Natalia 415
 Drumwright, Minette 854
 Du, Rui 1025
 Du, Shuili 206
 Duan, Meng 694
 Dubois, David 578, 1007, 1041
 Duffy, Katherine 1016
 Duhachek, Adam 324, 727
 Duke, Kristen 196
 Dunfield, Derek 514
 Dunn, Elizabeth 63
 Dunn, Elizabeth W. 1006
 Dunn, Lea 36, 1050
 Durante, Kristina 1009
 Duval, Kimberly 1025
 Dyen, Margot 1025

E

Ebrahimi, Mahdi 79
 Eckles, Dean 181
 Ein-Gar, Danit 253, 1009
 Ekpo, Akon 1026
 Ellen, Pam 955
 Emontspool, Julie 438
 Eng, Teck Y. 1007
 Erdem, Tulin 286
 Erner, Carsten 1022
 Esch, Patrick van 928
 Escoe, Brianna 962
 Espartel, Lélis Balestrin 1062
 Estes, Zachary 286, 313, 1022
 Etkin, Jordan 79, 291, 291, 346, 946
 Evangelidis, Ioannis 593
 Evers, Ellen R.K. 276

F

Fajardo, Tatiana 258, 270, 1015
 Falkowski, Andrzej 1035
 Fan, Linying (Sophie) 85, 330
 Fan, Tingting 1077
 Fan, Xiaomeng 595, 1073
 Fan, Yafeng 1026, 1026, 1029
 Farah, Maya 596
 Farmer, Matthew 598, 1026
 Fedorikhin, Alexander 1035
 Feick, Lawrence 743
 Fennis, Bob 856, 1023, 1023, 1028
 Fennis, Bob M. 600, 1011, 1014
 Ferguson, Melissa 91
 Ferguson, Shelagh 1027
 Fernances, Daniel 789
 Fernandes, Daniel 547, 780
 Ferreira, Maura 1074
 Festila, Alexandra 602
 Fischer, Eileen 1007
 Fishbach, Ayelet 91, 129, 146, 181, 248, 356, 714
 Fisher, Eileen 57
 Fisher, Robert J. 729
 Fitzsimons, Gavan 146, 222, 222, 233, 1056
 Fitzsimons, Gavan J. 91, 107, 362, 974, 1006
 Flaschen, Katherine 1074
 Fleck, João Pedro 1002
 Florack, Arnd 1031
 Flores, Miriam C. 1064
 Folkes, Valerie 1063
 Folse, Judith Anne Garretson 264
 Forcum, Lura 603
 Ford, John 826
 Franck, Egon 1016
 Frederick, Shane 96
 Freichel, Markus 640
 Friedman, Liz. 96, 158
 Frizzo, Francielle 1027
 Frow, Pennie 1070
 Fu, Pei-Wen 1027
 Fujita, Kentaro 1060
 Fulton, Benjamin 1015
 Fumagalli, Elena 1074

G

Gaertig, Celia 1027
 Gaeth, Gary 1036, 1059

Gaeth, Gary J. 479
 Gal, David 341, 764, 1005
 Galak, Jeff 112, 217, 276
 Gallage, H.P. Samantha 419
 Galli, Maria 1033
 Galoni, Chelsea 107, 248, 605, 607
 Gao, Fei 1028
 Gao, Hongzhi 569, 1020
 Gao, Huachao 1027
 Gao, Leilei 101, 908, 1077
 Garbarino, Ellen 609
 Garbinsky, Emily N. 612
 Garcia-Rada, Ximena 123, 222
 Gardner, Meryl 1009, 1067
 Gauri, Dinesh 170
 Geiger-Oneto, Stephanie 614
 Geisler, Ally 928
 Germelmann, Claas Christian 1060
 Gerrath, Maximilian 1028
 Gershoff, Andrew 152, 1043
 Gershoff, Andrew D. 778
 Gershon, Rachel 68
 Geyskens, Kelly 1058
 Ghaddar, Suad 469
 Ghosh, Anastasiya Pocheptsova 74, 803, 1034
 Ghoshal, Tanuka 618
 Giblin, Colleen 1028
 Gier, Nadine 1028, 1041
 Giesler, Markus 1007
 Gilad, Zohar 1074
 Gill, Dr. Tripat 1052
 Gineikiene, Justina 600, 1028
 Gineikienė, Justina 1014
 Gino, Francesca 191, 720
 Gino, Francesca 716
 Giroux, Marilyn 620, 892
 Givi, Julian 112, 217
 Gladstone, Joe J. 612
 Gloukhovtsev, Alexei 1028
 Gneezy, and Ayelet 238
 Gneezy, Ayelet 191
 Go, Sarang 1058
 Godfrey, D. Matthew 117, 135
 Goedegebure, Robert P.G. 622
 Goldenberg, Jacob 1056
 Goldsmith, Emily 1029, 1030
 Goldsmith, Kelly 85, 248, 253, 1029, 1057
 Goldstein, Daniel G. 336
 Golf-Papez, Maja 624
 Gomez, Pierrick 1029
 Gonçalves, Dilney 545
 Gong, Han 669
 Gong, Xiushuang 1029
 Gonzales, Gabriel 1029
 Goode, Miranda 951
 Goodman, Joseph K. 123, 228
 Goodyear, Laura 1029, 1057
 Gopinath, Mahesh 1061
 Goranson, Amelia 228
 Gordeliy, Ivan 1042
 Gorn, Gerald 1032
 Gorn, Gerald J. 1034, 1059, 1060, 1060
 Goswami, Indranil 96, 129
 Goukens, Caroline 1058
 Gould, Stephen 1029, 1030
 Gram, Malene 1031
 Grant, Annetta 135
 Graul, Antje 1063

Gray, Kurt 228, 1065
 Grayson, Kent 52, 152, 607, 764
 Greer, Dominique 1055
 Gretry, Anaïs 626, 629
 Grewal, Dhruv 47, 112
 Grewal, Lauren 112, 140
 Griesser, Simone 1030
 Grigsby, Jamie L. 1030
 Grillo, Tito L. H. 1030
 Grimes, Jerry 1030
 Grimm, Pamela 1042
 Grishin, Marija 634, 1018
 Griskevicius, Vladas 85, 253
 Groeppel-Klein, Andrea 636, 640, 896
 Grohmann, Bianca 620
 Grønhoj, Alice 1031
 Grossman, Daniel 641
 Grunert, Klaus G. 1014
 Gu, Yangjie 101
 Guèvremont, Amélie 642, 1031
 Guido, Gianluigi 498
 Gullo, Kelley 146, 291, 362
 Gunadi, Manissa 1031
 Gunadi, Manissa P. 644
 Gunasti, Kunter 799
 Guo, Zhaoyang 1071
 Gupta, Reetika 1031
 Gurdamar, Nazli 281
 Gürhan-Canli, Zeynep 703, 1032, 1037

H

Ha, Young-Won 1021, 1045
 Haasova, Simona 1031
 Habibi, Mohammad Reza 1023
 Hadi, Rhonda 313
 Hagen, Linda 645
 Hagtvædt, Henrik 258
 Hagtvædt, Henrik 1006
 Hahn, Minhi 1038
 Hajjat, Fatima 1031
 Hajjat, Fatima M. 648
 Hall, Matthew J. 650
 Hall-Phillips, Adrienne 1011
 Halvari, Halgeir 1037
 Hamilton, Mitchell 860
 Hamilton, Rebecca 1007, 1009
 Hamilton, Rebecca W. 140, 362
 Hamilton, Ryan 101, 158, 270, 822
 Hampton, William 367
 Han, Bing 1032, 1032
 Han, DaHee 324
 Han, Jerry 152, 652
 Han, John J. 281
 Handelman, Jay M. 135
 Hanson, Sara 1012
 Harden, Drew 1025
 Hardisty, David 63, 654
 Hassan, Louise 1032
 Hattula, Johannes 25
 Häubl, Gerald 101, 158, 158, 186
 Hauser, Oliver 191
 Haws, Kelly 146, 233, 1008
 Hayran, Ceren 1032
 He, Daniel 1033
 He, Dongjin 1032, 1033, 1077
 He, Jibo 1046
 He, Sharlene 152

- He, Xin 753
 Heath, Teresa 419
 Hedgcock, Bill 1007
 Heger, Stephanie 609
 Heideker, Silvia 655
 Hellén, Katarina 657
 Heller, Jonas 928
 Hem, Leif 766
 Hemetsberger, Andrea 474, 1040
 Henry, Paul 1005
 Herd, Kelly 1006
 Herd, Kelly B. 31
 Herpen, Erica van 622
 Herrmann, Andreas 31, 158
 Hershfield, Hal E. 79, 248
 Herter, Márcia Maurer 1022, 1048
 Herzenstein, Michal 52
 Herzog, Walter 25
 Heuvinck, Nico 769
 Hieke, Silke 31
 Hietanen, Joel 1003, 1005
 Hildebrand, Christian 31, 158, 164, 1074
 Hiler, Jacob 1002
 Hill, Sarah 1009
 Hills, Thomas T. 1030
 Hingston, Sean T. 659
 Hmurovic, Jillian 291, 661
 Ho, Cony M. 663
 Hoang, Chi 1033
 Hock, Stefan J. 243
 Hoegg, JoAndrea 561, 970, 1055
 Hoegg, JoAndrea (Joey) 1006
 Hoelzl, Erik 264
 Hoffman, Donna 164
 Hoffman, Donna L. 117
 Hofstetter, Reto 341
 Holmes, Cassie Mogilner 79, 1006, 1007
 Homonoff, Tatiana 170
 Hong, Sujeong 1033
 Hong, Ying-Yi 1065
 Hong, Yoonah 1034
 Horvath, Csilla 626, 629
 Hossain, Shajuti 553
 Hosseini, Rahil 1033
 Hoyer, Wayne 140
 Hoyer, Wayne D. 1037
 Hsee, Christopher 228
 Hsee, Christopher K. 68, 196
 Hsieh, Meng-Hua 493, 665
 Hsu, Ming 196, 667
 Hsu, Shu-Ni 1069
 Hsu, Wei-Chin 1015
 Hu, Miao 1025
 Hu, Yu 1033
 Hu, Yuheng 341
 Huang, Alex 514
 Huang, Feifei 671, 1066
 Huang, Li 673, 1034, 1034, 1034
 Huang, Liang 74
 Huang, Szu-chi 91, 129, 1049, 1074
 Huang, Yanliu 291
 Huang, Yunhui 669, 692
 Huang, Zhongqiang (Tak) 1034
 Huber, Frank 520
 Hudders, Liselot 532, 1034
 Huettel, Scott 1056
 Huff, Aimee 675
 Hughes, Mine Üçok 486
 Huh, Kyoung Tae 1035
 Huh, Young Eun 1034
 Humayun, Mariam 117, 677
 Humphrey, Colman 52
 Humphreys, Ashlee 52
 Hurwitz, Jonathan 1033
 Hutchinison, J. Wesley 297
 Hwang, Heungsun 449
 Hydock, Chris 679
 Hyodo, Jamie D. 650
 Hyun, Yong J. 1052
- I**
 Ibrahim, Nahid 158
 Iglesias, Claudia 1035
 II, Americus Reed 350
 Ilicic, Jasmina 527
 Imas, Alex 238
 Inbar, Yoel 307
 Ince, Elise Chandon 803, 932
 Inman, J. Jeffrey 291, 720
 Inman, Jeff 297
 Irmak, Caglar 930
 Islek, Mahmut Sami 1062
 Ito, Kenichi 31
 Ittersum, Koert van 856
 Ittersum, Koert Van 901
 Iversen, Nina 1035
 Iversen, Nina M. 766
 Iyer, Easwar 989
 Izadi, Anoosha 175
- J**
 Jablonska, Magdalena 1035
 Jahn, Steffen 683
 Jain, Gaurav 479, 1059
 Jain, Shailendra 976
 Jain, Shailendra P. 1047
 Jakubanečs, Alexander 1035
 Jami, Ata 685, 716
 Janakiraman, Narayan 977
 Janiszewski, Chris 356
 Jarry, Francis 1064
 Javornik, Ana 423
 Jayarajah, Kasthuri 1031
 Jenkins, Adrianna 667
 Jeon, Eunmi 1038
 Jeong, Haeyoung 350
 Jewell, Robert D. 1030, 1048
 Jia, Jayson S. 42
 Jia, Lei 175, 1006, 1035, 1036
 Jia, Miaolei (Liam) 233, 286, 964, 1035, 1036
 Jia, Yanli 687
 Jiang, Jing 1026, 1026, 1066, 1067
 Jiang, Yuwei 85, 330, 330, 671, 1006, 1032, 1033, 1059, 1060, 1060, 1077
 Jiao, Jinfeng (Jenny) 330, 1036, 1036, 1046
 Jie, Joseph Yun 689
 Jin, Daoyan 1037
 Jin, Fei 1036
 Jin, Liyin 692
 Jin, Zhenyu 694
 Johar, Gita V. 107
 John, Deborah Roedder 68, 1009
 John, Leslie 68
 John, Leslie K. 319, 341
 Johnson, Eric J. 367
 Johnson, Russell E. 663
 Joseph, Joshy 465
 Josion-Portail, Margaret 379
 Jr., John G. Lynch 170
 Jr., Marcus Cunha 567
 Jun, Sunghee 1037
 Jun, Youjung 181
 Jung, Minah H. 270
 Jung, Sung J. 1075
 Jungfleisch, Hannah 896
 Juntunen, Jouni 481
- K**
 Kahn, Barbara E. 291
 Kähr, Andrea 1037
 Kaju, Alex 698, 768
 Kamleitner, Bernadette 313, 699, 1077
 Kan, Christina 1021
 Kang, Christine 1018, 1044
 Kang, Dawon 1043
 Kang, Jungyun 1038
 Kang, Seo Yoon 1037
 Kangaspunta, Klaus 1003
 Kapitan, Sommer 1055
 Kapoor, Ankur 701, 916
 Kara, Selcan 1011, 1064
 Karantinou, Kalipso 785
 Karatas, Mustafa 703, 940, 1037
 Kardas, Michael 123
 Kardes, Frank 976
 Kardes, Frank R. 962
 Karmarkar, Uma R. 96
 Kasani, Negin Latifi 1043
 Kazakova, Snezhanka 532
 Kedzior, Richard 1038
 Keenan, Elizabeth A. 191, 238
 Keinan, Anat 1005
 Kelleher, Carol 705
 Keller, L. Robin 948
 Keller, Sarah 1013
 Kelley, Corinne 206
 Kelly, Brooke 307
 Kemper, Joya A. 1038
 Kenning, Peter 1028, 1041, 1045, 1058
 Kerrane, Ben 433
 Kerviler, Gwarlann Caffier de 509
 Khan, Fatima Yaqub 428
 Khan, Jashim 1053
 Khan, Sadia Yaqub 428
 Khan, Uzma 42, 583
 Kharuhayothin, Tanyatip 433
 Kidwell, Blair 707
 Kidwell, Virginia Lopez 707
 Kim, Byungdo 1058
 Kim, Claire Heeryung 324, 727
 Kim, Eunjin (Anna) 1039
 Kim, Hakkyun 1038
 Kim, Janghyun 1012
 Kim, Jin M. 1075
 Kim, Joonkyung 1039, 1053
 Kim, Joshua 248
 Kim, Junhee 350
 Kim, Kaeun 1039
 Kim, Kyeongheui 1044
 Kim, Min Jung 1038
 Kim, Nicole Y. 74, 362

Kim, Pielah 1039
 Kim, Sang-Hoon 1035
 Kim, Sara 350, 350, 1038
 Kim, Seung Eun (Sonja) 1075
 Kim, Yaeri 1053
 Kim, Youngsoo 1038
 King, Dan 1013, 1039, 1039
 Kirk, Colleen P. 712
 Kirmani, Amna 1005
 Kitayama, Shinobu 1020
 Kivetz, Ran 1033
 Kladou, Stella 1053
 Kleintop, Elizabeth 928
 Kleppe, Ingeborg A. 415
 Kliebenstein, Stephanie 640
 Knight, John 569, 1020
 Knoferle, Klemens 1033
 Knutson, Brian 367
 Kobel, Sarah 636
 Kocher, Bruno 1007, 1041, 1041
 Koenigstorfer, Joerg 1047
 Koetz, Clara 1058
 Kogler, Stephanie 1040
 Kokkinaki, Flora 1041, 1055
 Kokkoris, Michail D. 206, 264, 1040
 Konya-Baumbach, Elisa 518
 Koo, Minjung 714, 1044
 Koo, Minkyung 1073
 Kooi, Kate 1040
 Kordrostami, Elika 826, 1040
 Kordrostami, Melika 1064
 Korelo, Jose Carlos 1027
 Kosinski, Michal 276
 Kouchaki, Maryam 685, 716
 Koulaei, Afra 1040
 Kousi, Sofia 1041
 Kovacheva, Aleksandra 718
 Kozinets, Robert 1005
 Kramer, Thomas 751
 Krampe, Caspar 1028, 1041
 Krastel, Zachary 1041
 Kraus, Karolina 438
 Krekels, Goedele 1041, 1041
 Kreps, Tamar A. 307
 Krishna, Aradhna 233, 286, 286, 755, 1006
 Kristofferson, Kirk 212, 1009, 1023, 1063
 Krohmer, Harley 1037
 Kronrod, Ann 1042
 Kruger, Liezl-Marié 57
 Ksendzova, Masha 186, 191
 Kuchmaner, Christina 1042, 1042
 Kühnen, Ulrich 1040
 Kumar, Anand 297
 Kumar, Ankita 135
 Kumar, Anvita 1026
 Kumar, Ashish 481
 Kupor, Daniella 42, 181, 196, 835
 Kurt, Didem 720, 959
 Kurultay, Ayse Binay 537
 Kwak, Hyokjin 350, 995
 Kwan, Canice M. C. 725
 Kwan, Canice M. C. 723
 Kwon, Eunseon (Penny) 1039
 Kwon, JaeHwan 727
 Kwong, Jessica 1017

L

Labroo, Aparna 777
 Labroo, Aparna A. 107
 Ladeira, Wagner Junior 580
 Lafreniere, Katherine C. 729
 Lai, Ai-Ling 443
 Lalwani, Ashok 734, 736
 Lam, Howard Pong-Yuen 1066
 Lam, Magnum 1044
 Lambertson, Cait 661, 718, 872
 Lambotte, Soraya 1038
 Lamprinakos, Grigorio 785
 Landgraf, Polina 1042
 Landy, Justin F. 212
 Lane, Kristen 200
 Langer, Thomas 1022
 Langhe, Bart de 336
 Langmaack, Ann-Christin 270
 Lanseng, Even 1042
 Laran, Juliano 85, 175, 356, 356, 1009, 1015, 1040
 Larkin, Ian 346
 Laroche, Michel 1023, 1070
 Larrick, Richard P. 553
 Laurent, Gilles 1041
 Leban, Marina 1043
 LeBoeuf, Robyn A. 898
 Lee, Angela 1009
 Lee, Angela Y. 253
 Lee, Angela Y. 1047
 Lee, Bo Han 1057
 Lee, Boram 1012
 Lee, Chang-Yuan 731
 Lee, Chulsung 1012
 Lee, Hsiao-Ching 732
 Lee, Hsin-Hsuan Meg 454
 Lee, Hyejin 734, 736
 Lee, Hyojin 1060
 Lee, Jacob 1044
 Lee, Jaewoo 1044
 Lee, Jeff 1007, 1042
 Lee, Jennifer K. 31, 1075
 Lee, Jeonggyu 1015
 Lee, Jeongmin 1043
 Lee, Jin-Myong 1057
 Lee, Jiyoung 1043
 Lee, Jonathan 449
 Lee, Kyoungmi 1075
 Lee, Leonard 206, 1008, 1068, 1074
 Lee, Margaret 742
 Lee, Seojin stacey 1053
 Lee, Seojin Stacey 1053
 Lee, Seung Yun 778
 Lee, Shinhyoung 1043
 Lee, Wonkyong Beth 1025
 Lee, Yih Hwai 129, 1068
 Lee, Youseok 1035, 1058
 Lefebvre, Sarah 313
 Lei, Jing 1045
 Leischnig, Alexander 1048, 1049
 Lemaire, Alain 52
 Lembregts, Christophe 644
 Leong, Josiah K. 367
 Leung, Ada 738
 Leung, Eugina 164
 Levav, Johnathan 164
 Levav, Jonathan 25, 96
 Levin, Irwin P 479

Levontin, Liat 253, 1009, 1074
 Levy, Eric 350
 Li, Charis 238
 Li, Eric 1005, 1044, 1044
 Li, Fiona 1044
 Li, Keyi 1036
 Li, Qi 1044
 Li, Shaobo 206, 1075
 Li, Xilin 228
 Li, Xingbo 324, 1075
 Li, Xiuping 206, 233, 286
 Li, Ye 367, 742
 Li, Yexin Jessica 634, 985, 1018
 Li, Yuan 740
 Liang, Jianping 1045
 Liang, Yitian (Sky) 1034
 Lieberman, Alicea J. 25, 212
 Lim, Elison 1075
 Lim, Mikyoung 1045
 Lim, Ming 443
 Lim, Sarah 228
 Lin, Chia-Wei Joy 743, 1045
 Lin, Chien-Wei (Wilson) 747, 749
 Lin, Meng-Hsien (Jenny) 1064
 Lin, Ruoyun 217, 1027, 1045
 Lin, Shan 1045
 Lin, Stephanie 307
 Lin, Szu-Han (Joanna) 663
 Lindridge, Andrew. M. 394
 Lindsey, Charles 976
 Ling, Christopher 751
 Lischka, Helena M. 1045
 Lisjak, Monika 1064
 Litovsky, Yana 281
 Liu, Fan 753
 Liu, Jingshi (Joyce) 228
 Liu, Kailuo 1046
 Liu, Maggie Wenjing 1071
 Liu, Martin 1007
 Liu, Peggy 47, 112, 146, 146, 222, 233, 576
 Liu, Wendy 196, 373, 997
 Liu, Wing-sun 1044
 Liu, Wumei 1046
 Liu, Xiaoyan 1075
 Liu, Xuefeng 1046
 Liu-Thompkins, Yuping 1040
 Loewenstein, George 341, 876
 Loken, Barbara 900, 968
 Longoni, Chiara 47, 286
 Lopez, Alberto 1046
 Loughlin, Deirdre M. O' 705
 Loveland, Katherine E. 755
 Lowe, Michael 458, 755, 1011
 Lowengart, Oded 238
 Lowrey, Tina M. 1028
 Lteif, Lama 91
 Lu, Fang-Chi 1036, 1046
 Lu, Joy 96
 Lu, Wei 694
 Lu, Zoe Y. 756
 Luangrath, Andrea Webb 47
 Lubowski, Ruben 654
 Luca, Ramona De. 1024
 Luce, Mary Frances 36, 264
 Lucke, Sabrina 1047
 Luethi, Anja 1049
 Luna, David 313, 793
 Lunardo, Renaud 758, 1054

- Luo, Jin 694
Luo, Xiyueyao 1075
Lupoli, Matt 238
Luri, Ignacio 57, 117, 762
Lusch, Robert F. 117
Lutz, Richard 1007
Lyle, Keith B. 324
Lynch, John G. 780
- M**
- Ma, Dr. Zhenfeng 1052
Ma, Jingjing . 764, 1020, 1020, 1047, 1047, 1075
Ma, Yoon Jin 1052
Ma, Yu 170
Ma, Zhenfeng 1047
MacInnis, Debbie 21
Macinnis, Deborah 1007
Maclaran, Pauline 397
Madrigal, Robert 842, 1047
Madzharov, Adriana 1006
Maehle, Natalia 766, 1037
Maeng, Ahreum 243
Maglio, Sam 248
Maglio, Sam J. 698, 768
Mai, Li-Wei 1053
Maimaran, Michal 74
Main, Kelley 1054
Main, Kelley J. 1054
Majmundar, Anuja 769
Malkoc, Selin A. 123
Malter, Alan 36
Mandel, Naomi 540, 1064, 1067
Mannetti, Lucia 539
Mao, Huifang 1036
Margolin, Drew 1070
Mari, Silvia 1067, 1067
Marozzo, Veronica 771
Marques, Thiago Rafael Ferreira 1001
Martin, Brett A.S. 699
Martin, Diane 1027
Martin, Kelly D. 57
Martin, Olga 1047
Martinovici, Ana 286
Marzooqi, Sara Mohamed Al. 1001
Mas, Erick 707
Mason, Marlys 824
Masset, Julie 1002
Mastrogiannis, Dimitrious 36
Mather, Damien 569, 1020
Mathras, Daniele 1008
Mathur, Pragya 91
Matz, Sandra 276
Mazodier, Marc 91
McAlexander, Brandon 675
McAlexander, Jim 675
McColl-Kennedy, Janet 1008
McEachern, Morven G. 785
McFerran, Brent 146, 212, 362, 1009
McGill, Ann 362
McGowan, Miriam 1032
McShane, Lindsay 1076
Mead, Nicole L. 330
Mehta, Ravi 175, 1006, 1051
Mellers, Barbara 346
Mello, Rafael 1002
Meloy, Margaret 1029
Meloy, Margaret G. 852
Melumad, Shiri 25, 52
Mende, Martin 206, 1008
Mendenhall, Zachary 1039
Meng, Hua (Meg) 1048
Meng, Rachel 181
Meng, Yan 1048
Meng, Zhu 85
Menon, Geeta 47
Messer, Uwe 1048, 1049
Messinger, Paul 1024, 1024, 1073
Mette, Frederike Monika Budiner 580
Meyer, Robert 52
Meyers-Levy, Joan 968
Meyvis, Tom 186
Miceli, Gaetano 771
Mick, David 1007, 1008
Miller, Chadwick 458
Miller, Elizabeth 1031, 1039
Miller, Elizabeth G. 989
Miller, Elizabeth G. 648
Mimoun, Laetitia 773, 1049
Min, Bora 152
Min, Dong-Jun 1049
Min, Hyun Jeong 775
Min, Kate 1044
Min, Kyeong Sam 1049
Mingolla, Carla 1034
Minton, Elizabeth 614
Mishra, Arul 42, 831
Mishra, Himanshu 42, 831
Mittal, Chiraag 85, 253, 1009
Mittal, Vikas 894
Mo, Tingting 1049
Mo, Zichuan 1075
Mochon, Daniel 196
Moerk, Trine 1014
Mogilner, Cassie 63, 302
Mohammad, Aylar Pour 1055
Mohr, Gina S. 952
Moldovan, Sarit 884
Monga, Ashwani 888, 1072
Montaguti, Elisa 1063
Mookherjee, Satadruta 1018
Moon, Alice 276
Moore, Sarah G. 222
Moorhouse, Michael 1049
Morales, Andrea 1009, 1023
Morales, Andrea C. 212, 362
Moreau, Page 31, 31, 1060
Morewedge, Carey 1028
Morewedge, Carey K. 186, 222, 731
Morgan, Carter 1051
Morgan, Samuel Carter 258
Morgan, Siân 74
Mormann, Milica 297
Morrin, Maureen 233, 1006, 1069
Morris, Joshua 1049
Morvinski, Coby 238, 373
Moulard, Julie Guidry 264, 509
Mourali, Mehdi 1061, 1070
Mourey, James A. 777
Moya, Maria Eugenia Fernández 785
Mukherjee, Ashesh 778, 1013, 1050
Mukherjee, Sourjo 1031
Mukherjee, Sudipta 1050, 1050
Mukhopadhyay, Anirban 36, 228
Mulier, Lana 1050
Muller, Brigitte 1041
Munz, Kurt P. 270
Murphy, Andrew 588
Murphy, Mary C. 74
Murray, Jeff 1008
Murray, Kyle B 1020
- N**
- Naderi, Iman 330, 1050
Nagpal, Anish 1060
Nardini, Gia 373
Nave, Gideon 276
Nayakankuppam, Dhananjay 479, 727, 1059
Nelson, Leif 1076
Nelson, Leif D. 276
Netemeyer, Richard 780
Netzer, Oded 52, 96, 302
Neville, Fergus G. 1060
Newman, and George E. 238
Newman, George E. 264
Ng, Sharon 525
Nicolaides, Christos 181
Nicolao, Leonardo 1022, 1048, 1051
Nielsen, Jesper 598, 872, 1069
Nielsen, Jesper H. 200
Niemiec, Christopher 1037
Nikolova, Hristina 140, 458
Nolte, Sven 1051
Nordgren, Loran F. 848
Northey, Gavin 928
Northington, William 1002
Norton, Michael 63, 79
Norton, Michael I. 123, 186, 228, 1006
Noseworthy, Theodore 1006
Noseworthy, Theodore J. 659
Novak, Thomas 164
Novak, Thomas P. 117
Nowlan, Luke 175, 1015, 1051
Nowlan, William 1040
Nowlis, Stephen M. 898
Nuñez, Sandra 200
Nyffenegger, Bettina 1037
- O**
- O'Brien, Ed 123, 782
O'Brien, Rourke 170
O'Donnell, Michael 276
O'Loughlin, Deirdre M. 785
Oh, Hyewon 1051
Olivola, Christopher 191, 217
Olivola, Christopher Y. 281, 281
Olson, Jenny G. 362, 634, 1006
Omeira, Mansour 787
Ong, L. Lin 1008
Ordabayeva, Nailya 140, 789, 1007
Ordenes, Francisco Villarroel 47
Orsingher, Chiara 791
Ostberg, Jacob 1005
Ostinelli, Massimiliano 1069
Ostinelli, Max 793
Otnes, Cele 500, 766, 1051
Otterbring, Tobias 1076
Otto, Ashley 795, 1051
Ourahmoune, Nacima 406
Ozanne, Lucie 1008
Ozcan, Timucin 799
Ozmen, Mujdat 1062

P

Packard, Grant 52, 1035
 Paik, Sung-Hee 1022
 Paik, Wendy 903
 Paley, Anna 85
 Paliawadana, Dayananda 926
 Pancer, Ethan 1051, 1076
 Panchal, Shirish 1052
 Pandelaere, Mario 1006, 1050, 1050
 Pang, Jun 801, 878, 1073
 Paolacci, Gabriele 164, 534
 Park, Hye Kyung 714
 Park, Jihye 1052, 1053
 Park, Jooyoung 1052, 1052
 Park, Kiwan 1037, 1053, 1053
 Park, Sungjun (Steven) 1052
 Park, Sunny 1057
 Park, Taehoon 803
 Park, Yookyung 1052
 Parker, Andrew M. 367
 Parker, Jeffrey R. 158, 200
 Patino-Echeverri, Dalia 553
 Patrick, Vanessa 1062, 1070
 Patrick, Vanessa M. 79, 175, 258, 993
 Paul, Iman 158, 200
 Paulson, Erika L. 805
 Pearson, John 1056
 Pechmann, Cornelia 1008
 Pechmann, Cornelia (Connie) 807
 Peck, Joann 47, 712, 818
 Pecot, Fabien 549
 Peleg, Gil 238
 Pelet, Jean-Eric 1053
 Pellandini-Simányi, Léna 809
 Pelsmacker, Patrick De 532
 Peng, Norman 1019, 1053
 Penner, Sara 1054, 1054
 Peracchio, Laura 1006, 1008
 Pereira, Beatriz 812
 Perfecto, Hannah 276
 Perkins, Andrew 801
 Perren, Rebeca 1054
 Peschel, Anne Odile 1054
 Petit, Olivia 1054
 Petsonk, Annie 654
 Pew, Ethan 281, 827
 Pham, Michel T. 25
 Phillips, Megan 1055
 Philp, Matthew 829
 Phipps, Marcus 1008
 Pierre-Yann, Dolbec 815
 Pieters, Rik 286
 Pino, Giovanni 498
 Pinto, Diego Costa 1022, 1048
 Pizzetti, Marta 423
 Pizzutti, Cristiane 1030, 1056, 1058, 1074
 Plank, Andreas 461
 Plassmann, Hilke 572, 1007
 Poehlman, T. Andrew 1065
 Pogacar, Ruth 313
 Polman, Evan 222, 768, 818
 Polyakova, Alexandra 791
 Polyportis, Athanasios 1055
 Ponchio, Mateus 1011
 Poncin, Ingrid 551
 Ponsonby-McCabe, Sharon 397
 Pontes, Nicolas 1055, 1055, 1076
 Pontes, Vivian 1055, 1076

Poole, Maxwell 1051, 1076
 Popovich, Deidre 822
 Pounders, Kathryn 824
 Powell, Ashleigh E. 1056
 Powell, Emily 1055, 1056
 Prado, Paulo Henrique 1027
 Prakash, Mona 1056
 Prasad, Ajnesh 833
 Prelec, Drazen 514
 Price, Linda 1007, 1008
 Price, Linda L. 117
 Prochaska, Judith J. 807
 Prokopec, Sonja 1061
 Pundak, Chen 1056
 Puntoni, Stefano 164
 Putnam-Farr, Eleanor 212
 Puzakova, Marina 350, 995
 Pyone, Jin Seok 1069

Q

Qin, Vivian 107

R

Radford, Scott 410
 Rafieian, Hoori 291
 Raggio, Randle D. 264
 Raghbir, Priya 297
 Raghunathan, Raj 1050
 Rahinel, Ryan 641, 795
 Rahmani, Wahid 826, 1040
 Rai, Dipankar 747
 Raimondo, Maria Antonietta 771
 Rajagopal, Priyali 530, 673
 Ramadan, Zahy 596
 Rank-Christman, Tracy 1076
 Rao, Hayagreeva 605
 Ratchford, Mark 827
 Rath, Suzanne 829
 Rathee, Shelly 831
 Ratner, Rebecca 123, 1009
 Ratner, Rebecca K. 362
 Rauf, Ateeq Abdul 833
 Read, Daniel 319
 Rech, Eduardo 1056
 Reczek, Rebecca Walker 1023
 Redden, Joseph 233
 Redden, Joseph P. 186
 Reghunathan, Aravind 465
 Reich, Brandon 842, 1047
 Reich, Taly 248, 307, 835, 839
 Reichelt, Valesca Persch 580
 Reid, Colbey Emerson 1006
 Reimann, Martin 200, 258, 1006, 1007, 1046, 1058
 Reinholtz, Nicholas 96, 170, 336
 Reynolds, Thomas 844
 Rha, Jong-Youn 1057
 Rick, Scott 812, 937, 1006
 Rickard, Bradley J. 1054
 Rifkin, Jacqueline 291
 Ringler, Christine 1021
 Risen, Jane L. 319
 Ritter, Ryan 228
 Robertson, Kirsten 1061, 1061
 Robitaille, Nicole 829
 Roche, Kévin 1065, 1066

Rocklage, Matthew D. 848
 Rodas, Maria 850
 Rodas, Maria A. 200, 851
 Rodriguez-Vila, Omar 158
 Roeder, Scott 1076
 Rojas-Gaviria, Pilar 1017
 Rokka, Joonas 1003, 1040
 Romero, Marisabel 297
 Romero-Canyas, Rainer 654
 Rosa, Jose A. 1048
 Rosario, Ana Babic 1013
 Rosenboim, Mosi 123
 Rosenzweig, Emily 112, 217
 Ross, Gretchen 852
 Roth, Yefim 1057
 Rothschild, David 336
 Roux, Caroline 85, 253, 1029, 1057, 1066
 Roy, Rajat 1057
 Rozin, Paul 307
 Rucker, Derek D. 324, 324, 848
 Rudd, Melanie 79, 175
 Ruiz, Veronica Martin 1048
 Ruppell, Roland 341
 Ruttan, Rachel 818
 Ruvio, Ayalla 1005
 Ruzeviciute, Ruta 313, 1077
 Ryoo, Yuhosua 854

S

Saad, Gad 1017
 Sääksjärvi, Maria 657
 Saccardo, Silvia 191, 191, 373
 Sadowski, Sebastian 856
 Saenger, Christina 858
 Sagfossen, Sofie 1003
 Sah, Sunita 319
 Sahay, Arvind 701
 Saini, Ritesh 571, 977
 Saintives, Camille 758
 Salerno, Anthony 253, 270, 356, 1009
 Salo, Jari 481
 Samanez-Larkin, Greg 367
 Sampaio, Claudio Hoffmann 580
 Samper, Adriana 146, 152, 270, 1063
 Sanglé-Ferrière, Marion 862
 Santini, Fernando de Oliveira 580
 Saridakis, Charalampos 926
 Savani, Krishna 206, 319, 585
 Savary, Jennifer 158, 200, 238, 1026
 Sayarh, Nada 1057
 Scaraboto, Daiane 1017
 Schau, Hope 762
 Schau, Hope J. 57
 Schau, Hope Jensen 117, 1007
 Schembri, Sharon 469
 Scherer, Fernanda 1058
 Scherr, Karen 233
 Schley, Dan R. 336
 Schlosser, Ann 140
 Schmidt, Liane 572
 Schmitt, Bernd 31, 1017
 Schneider, Gustavo 1077
 Schneider, Judith 1051
 Schoenmueller, Verena 302
 Scholz, Joachim 869
 Schöps, Jonathan D. 474
 Schouten, John 1003, 1005

1086 / Author Index

- Schreier, Martin 31
Schreiner, Nadine 1058
Schrift, Rom Y. 373
Schroeder, Juliana 25
Schultz, Ainslie 872
Schumacher, Anika 1058
Schwabe, Maria 874
Schwartz, Daniel 238, 876
Schwartz, Janet 36
Schwarz, Norbert 152, 966
Scopelliti, Irene 341
Scott, Maura 1006, 1006, 1008
Scott, Maura L. 206
Scott, Sydney 307
Scott, Sydney E. 212
Seaman, Kendra 367
Sekhon, Tejvir 1012
Sela, Aner 74, 248, 373
Sen, Sankar 206
Seok, Junhee 1058
Seregina, Anastasia 1005
Serial-Abi, Gülen 101
Setten, Eric 1022
Sevilla, Julio 253, 1006, 1009
Shah, Anuj 1009
Shah, Avni M. 1006
Shanks, Ilana 1076
Shankweiler, James 738
Shapira, Danny 238
Sharifonnasabi, Zahra 1058
Sharma, Eesha 85, 1009
Sharma, Varun 313
Shavitt, Sharon 324
Shehu, Edlira 270
Sheinin, Daniel 1012
Shen, Hao 687, 878, 1019
Shen, Luxi 196, 336, 879, 1075
Sheng, Feng 196
Sherry, John F. 57
Sheth, Jagdish 17
Shibly, Sirajul 1059
Shim, Yoonji 881
Shiu, Edward 1032
Shiv, Baba 42, 196
Shoham, Meyrav 884
Shrivastava, Sunaina 479, 1059
Shrum, L.J. 1074
Shukla, Paurav 1007
Si, Kao 885, 1059
Siddiqui, Rafay 74, 1072
Siddiqui, Rafay A. 888
Silverman, Jackie 1059
Simmons, Joseph 1027
Simmons, Joseph P. 276
Simonson, Itamar 302, 373, 583
Sinai, Olivier 1014
Singh, Surendra 985, 1013, 1069
Singh, Surendra N. 634
Sirrianni, Nancy 1021
Sirieix, Lucie 1025
Skarsten, Sondre 336
Slabbinck, Hendrik 1050
Slonim, Robert 609
Slot, Johanna 1029
Sluis, Helen van der 1063
Small, Deborah 68, 307, 1059
Smeets, Paul 79
Smidts, Ale 1007
Smith, Andrew 869
Smith, Cristalle 1044
Smith, Robert 186, 782
Smith, Rosanna 835
Smith, Rosanna K. 264, 839
So, Jane 890
Soares, André Escórcio 1026
Sobande, Francesca 773
Sobol, Kamila 892, 1057
Söderlund, Magnus 1003
Soltwisch, Brandon 1016
Som, Anirban 1059
Song, Eunyoung 1044
Song, Jiaqi 1059, 1060, 1060
Song, Peijian 1044, 1071
Song, Xiaobing 894
Soster, Robin 1021
Souissi, Fayrouz 1052
Soule, Catherine Armstrong 1012, 1012
Spiller, Stephen A. 1006
Spilski, Anja 896
Srinivasan, Raji 140
Srna, Shalena 68, 146
Staelin, Richard 107
Stahl, Florian 302, 1063
Stamatogiannakis, Antonios 545, 980, 1042
Stavros, Constantino 1056
Steffel, Mary 112, 319
Steinhart, Yael 884, 1056, 1077
Steinmetz, Janina 248
Stephen, Andrew T. 140
Stephenson, Brittney L. 898
Steul-Fischer, Martina 655
Stevens, Lorna 397
Stewart, Kristin 1054
Stieler, Maximilian 1060
Stillman, Paul E. 1060
Stillwell, David 276
Stone, Aaron 1068
Stoner, Jennifer L. 324, 900
Stough, Rusty 1060
Stovall, Tony 486
Streicher, Mathias 286
Strejcek, Brendan 607
Strelow, Enrique 1041
Strough, JoNell 367
Stuhler, Kristina 1061
Su, Lei 330, 1066
Suher, Jacob 901
Sullivan, Nicolette 1056
Summers, Christopher A. 1077
Sun, Daniel 1061
Sun, Sijie 977
Sundar, Aparna 903
Suri, Rajneesh 1015
Süssenbach, Sophie 1077
Sussman, Abigail 170
Sussman, Abigail B. 346, 1006
Svirsky, Daniel A. 319
Swain, Scott D. 712
Swanepoel, Samantha 1015
Szmigin, Isabelle T. 785
Szocs, Courtney 233, 901, 906, 1073
Szugalski, Stefan H. 1003
- ## T
- T, Aruna Divya 1019
Takar, Jennifer 1077
Talebi, Arash 1061
Talloen, Joachim 196
Tan, Teck Ming 481
Tang, Chuanyi 1061
Tanner, Emily C. 1008
Tanner, Robin 756
Tanner, Robin J. 243
Tao, Tao 101, 908
Teodorescu, Kinneret 1057
Terres, Mellina 1022, 1048
Tezer, Ali 85, 1029
Theotokis, Aristeidis 926
Thomas, Manoj 170
Thomas, Tabitha 1061, 1061
Thomas, Veronica L. 858
Thompson, Craig J. 6, 135
Thompson, Debora 1009
Thürridl, Carina 699, 1077
Thyne, Maree 1061, 1061
Tignor, Stefanie M. 910
Tillotson, Jack 1062
Tiltay, Muhammet Ali 1062
Ting, Ding Hooi 914
To, Ngoc (Rita) 258, 1062
To, Rita 1006
Tok, Dickson 563, 565
Tonietto, Gabriela 123
Torelli, Carlos J. 200, 324, 851
Torlak, Omer 1062
Tormala, Zakary 152, 181, 1019
Tormala, Zakary L. 42
Torres, Lez Trujillo 773
Toure-Tillery, Maferima 248
Townsend, Claudia 258, 1006
Tran, An 449
Trapido, Denis 807
Trendel, Olivier 91, 1065
Trijp, Hans C.M. van 622
Tripathi, Sanjeev 916
Trudel, Remi 191, 910, 959
Truong, Natalie 1034, 1062
Tsai, Claire 652, 918
Tsalis, George 1014
Tsang, Alex S L 725
Tu, Lingjiang Lora 922
Tu, Ping 1036
Tu, Yanping 146, 181, 228
Tully, Stephanie M. 85
Ture, Meltem 503
Tynan, Caroline 419
- ## U
- Ubel, Peter 576
Uhalde, Arianna 1063
Uhrich, Sebastian 924
Ulusoy, Emre 1063
University, Gita V. Johar Columbia 181
Unnava, Rao 1060
Upadhyaya, Shikha 1008
Urminsky, Oleg 96, 101, 129, 297, 336, 512, 982
Usrey, Bryan 926, 1028, 1063
Usta, Murat 158
Utochkin, Denis 415
Utz, Sonja 217, 1027

V

Valentini, Sara 791
 Valenzuela, Ana 1033, 1048
 Vallen, Beth 1008
 Valli, Veronica 1063
 Valsesia, Francesca 341
 VanBergen, Noah 930
 Veer, Ekant 624
 Velez, Caty 1064
 Velloso, Luciana 57
 Veludo-de-Oliveira, Tania 1001
 Ven, Niels Van De 217
 Venkatraman, Vinod 96, 367, 987
 Ventzislavov, Rossen 486
 Vermeir, Iris 1050
 Victor, Bart 827
 Vijayalakshmi, Akshaya 1064
 Villanova, Daniel 932
 Viswanathan, Madhu 1008
 Vohs, Kathleen D. 91, 258, 1006
 Vosgerau, Joachim 341
 Voyer, Ben 1025
 Voyer, Benjamin 862, 1043
 Vredeveld, Anna 1064
 Vu, Tiffany 937

W

Wadhwa, Monica 940, 943
 Wakefield, Kirk 297, 1051
 Wallace, Scott 346
 Wallace, Scott G. 946
 Wallendorf, Melanie 135
 Waller, Daniel 609
 Walsh, Darlene 1064
 Walsh, Gianfranco 874
 Walter, Maik 158
 Wan, Echo Wen 243, 243, 330, 350
 Wan, Fang 966, 1068, 1068
 Wang, Carmen 609
 Wang, Haizhong 1046
 Wang, Hsin-Yi 565
 Wang, Jing (Alice) 330
 Wang, Juan 951
 Wang, Liangyan 948, 1024, 1032, 1032
 Wang, Lili 350
 Wang, Lily 1007
 Wang, Qi 749
 Wang, Qin 948, 1064
 Wang, Qing 1030
 Wang, Quansheng 1044, 1071
 Wang, Ryan Tzushuo 968
 Wang, Shr-Chi 563
 Wang, Wangshuai 1065
 Wang, Xia 1017
 Wang, Xian 1070
 Wang, Xin 1064, 1071
 Wang, Xue 1065
 Wang, Yajin 68, 74, 1005
 Wang, Yijie 1032, 1077
 Wang, Yiru 1065
 Wang, Ze 753, 1017
 Ward, Adrian 1034, 1065
 Ward, Adrian F. 1030
 Ward, Morgan K. 1005
 Warlop, Luk 1023, 1023, 1033
 Warmath, Dee 780

Warren, Caleb 952, 1005
 Warren, Danielle 1076
 Warren, Nathan 1047
 Waytz, Adam 228
 Weathers, Danny 1065
 Weaver, Lisa 738
 Weaver, Todd 955
 Webb, Elizabeth C. 302
 Wegerer, Philipp 489
 Wegerer, Philipp K. 474
 Wei, Chuang 1071
 Wei, Sarah 101, 186
 Weinberg, Charles B. 1034
 Weingarten, Evan 297, 346
 Weiss, Liad 957
 Welles, Christoph 1031
 Werle, Carolina O.C. 1065, 1066
 Weseen, Sarah 1044
 West, Colin 63
 Whillans, Ashley 63, 79
 White, Katherine 881
 White, Tiffany 515
 Whitley, Sarah C. 222, 959
 Wiener, Hillary 961
 Wieser, Verena E. 1066
 Wiggins, Jennifer 1042, 1042, 1065
 Wijland, Roel 397
 Wilcox, Keith 356
 Williams, Elanor F. 112, 319
 Williams, Lawrence 63
 Williams, Patti 555
 Wilson, Anne 253
 Winkle, Jonathan 1056
 Winterich, Karen 1008
 Winterich, Karen P. 270, 324
 Wolny, Julia 1007
 Wong, Nancy 1011
 Wong, Vincent Chi 1066, 1066
 Woolley, Kaitlin 129, 319, 356
 Wu, Charlene C. 367
 Wu, Chi-Cheng 1027
 Wu, Eugenia 222, 555, 718
 Wu, Gavin Jiayun 738
 Wu, Kaiyang 243
 Wu, Ruomeng 962
 Wu, Yinghao 1066, 1067
 Wu, Yuechen 101, 356, 362
 Wyer, Robert 885
 Wyer, Robert S. 687, 723, 1065

X

Xiao, Chunqu 1064
 Xie, Chunyan 1007, 1067, 1067
 Xie, Jia lin 918
 Xie, Jieru 1067
 Xie, Yi 1067
 Xiong, Ji (Jill) 1068
 Xu, Alison Jing 324, 968
 Xu, Huimin 738
 Xu, Jialiang 966, 1068
 Xu, Lidan 175
 Xu, Minzhe 297
 Xu, Xiaobing 964
 Xue, Ke 1032, 1032

Y

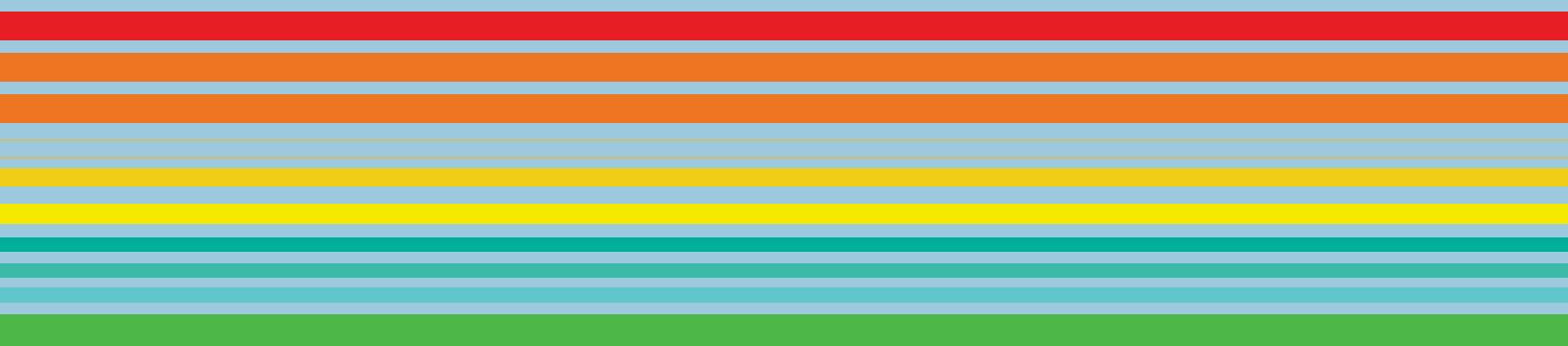
Yamim, Amanda 1065
 Yamim, Amanda Pruski 970
 Yan, Dengfeng 740
 Yan, Jun 1068
 Yang, Adelle 982
 Yang, Adelle X. 68, 362
 Yang, Chun-Ming 972, 1019, 1068, 1069
 Yang, Haiyang 980, 1042
 Yang, Li 1068
 Yang, Linyun W. 974
 Yang, Tzu-Yun 1069
 Yang, Xiaojing 175, 694, 976, 1006, 1035, 1036, 1069
 Yang, Yang 181
 Yang, Zheshuai 129
 Yang, Zhiyong 977
 Ye, Ning 1069
 Yeung, Catherine 206
 Yi, Jisu 1043
 Yi, John 1069
 Yi, Youjae 1043, 1052
 Yin, Chi Kin (Bennett) 243
 Yin, Bingqing (Miranda) 985
 Yin, Bingqing(Miranda) 1069
 Yoon, Carolyn 1007, 1020
 Yoon, Heekyung Cecilia 1037
 Yoon, Heeyoung 186
 Yoon, Kelly EunJung 807
 Yoon, Sangsuk 987
 Yorkston, Eric 1056
 You, Yanfen 1069
 Youn, Nara 1012, 1012, 1034, 1037
 Yu, Chao 1070
 Yu, Sik Chuen 1070
 Yuksel, Mujde 989

Z

Zamudio, Cesar 1048
 Zamudio, César 1065
 Zatz, Laura Y. 319
 Zaval, Lisa 367
 Zavala, Mariella C. 1070
 Zeng, Xianfang 1070
 Zerres, Alfred F. 582
 Zhang, Chun 1070
 Zhang, Jason 1046
 Zhang, Kuangjie 943
 Zhang, Meng 671
 Zhang, Weiwei 1028
 Zhang, Yan 129, 990
 Zhang, Ying 91
 Zhang, Yinlong 743, 894, 922, 1027, 1045
 Zhang, Yirang 1071
 Zhang, Yiwei 170
 Zhang, Yuan 1071
 Zhang, Yuli 995
 Zhang, Zhe 993, 1006, 1070
 Zhao, Xian 1071
 Zhao, Xiaohua 997
 Zhao, Xin 511, 1044, 1044
 Zhao, Yingnan 1071
 Zheng, Frank 1034
 Zheng, Xiaoying 1071
 Zheng, Yuhuang 966
 Zhong, Chenbo 1068

1088 / Author Index

Zhong, Chen-Bo	307	Zhu, Huawei	1036	Zimmermann, Laura	999
Zhou, Lingrui	146	Zhu, Luke	1068	Zor, Ozum	1072
Zhou, Xinyue	350	Zhu, Meng	243, 356	Zou, Lili Wenli	243
Zhu, Hong	1064	Zhu, Qichao	1071	Zwebner, Yonat	373



Association For Consumer Research

\$99.00
ISBN 978-0-915552-77-1
59900>

9 780915 552771

A white rectangular box containing the price, ISBN number, a barcode, and a smaller barcode with a greater-than sign.